agrimin

Investor Presentation

Diggers & Dealers
Mining Forum 2018

Important Notices and Disclaimers

Nature of Document

This presentation has been prepared as a summary only, and does not contain all information about Agrimin Limited's ("**Agrimin**" or "**the Company**") assets and liabilities, financial position and performance, profits and losses, prospects, and the rights and liabilities attaching to Agrimin's securities. This presentation includes information extracted from the Company's ASX Release entitled Pre-Feasibility Study Completed for Mackay SOP Project released on 7 May 2018. The Company's ASX Releases are available at www.asx.com.au. The securities issued by Agrimin are considered speculative and there is no guarantee that they will make a return on the capital invested, that dividends will be paid on the shares or that there will be an increase in the value of the shares in the future. Agrimin does not purport to give financial or investment advice. No account has been taken of the objectives, financial situation or needs of any recipient of this presentation. Recipients of this presentation should carefully consider whether the securities issued by Agrimin are an appropriate investment for them in light of their personal circumstances, including their financial and taxation position.

Forward-Looking Statements

This presentation may contain certain forward-looking statements which may not have been based solely on historical facts, but rather may be based on the Company's current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward-looking statements are subject to risks, uncertainties, assumptions and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Forward-looking information includes exchange rates; the proposed production plan; projected brine concentrations and recovery rates; uncertainties and risks regarding the estimated capital and operating costs; uncertainties and risks regarding the development timeline, including the need to obtain the necessary approvals. For a more detailed discussion of such risks and other factors, see the Company's Annual Reports, as well as the Company's other ASX Releases. Readers of this presentation should not place undue reliance on forward-looking information. No representation or warranty, express or implied, is made by the Company that the matters stated in this presentation will be achieved or prove to be correct. Recipients of this presentation must make their own investigations and inquiries regarding all assumptions, risks, uncertainties and contingencies which may affect the future operations of the Company or the Company's securities. The Company does not undertake any obligation to update or revise any forward-looking statements as a result of new information, estimates or opinions, future events or results, except as may be required under applicable securities laws.

Pre-Feasibility Study Parameters – Cautionary Statement

The Pre-Feasibility Study results, production target and forecast financial information referred to in this presentation are supported by the Pre-Feasibility Study mine plan which is based on the extraction of Mineral Resources that are classified as Indicated. There is no certainty that further exploration work and economic assessment will result in the eventual conversion of Mineral Resources to Ore Reserves or that the production target itself will be realised. The consideration of all JORC modifying factors is sufficiently progressed. Hydrogeological studies and process studies support material operating assumptions. Engineering studies support capital and operating cost estimates and are based on standard extraction and processing techniques. Non-binding discussions are underway with interested parties for off-take of planned production. Discussions with third party infrastructure providers are underway. A Native Title Agreement is in place to provide the necessary consents for development. Extensive environmental baseline studies have been completed and no social, environmental, legal or regulatory impediments to development have been identified. The Company has concluded it has a reasonable basis for providing the forward-looking statements included in this presentation and believes it has a reasonable basis to expect it will be able to fund the development of the Project upon successful delivery of key development milestones. The detailed reasons for these conclusions, and material assumptions on which the forecast financial information is based, are outlined in the Company's ASX Release entitled Pre-Feasibility Study Completed for Mackay SOP Project released on 7 May 2018. Additionally, the assumptions for the Mineral Resources are disclosed in the JORC Code (2012) Table 1 in the Company's ASX Release entitled Pre-Feasibility Study Completed for Mackay SOP Project released on 7 May 2018. The Mineral Resources underpinning the production target in this presentation have been prepared by a competent person in accordance with the requirements of the JORC Code (2012).

JORC Code (2012) Compliance Statement

The information in this presentation that relates to Mackay SOP Project is extracted from the Company's ASX Release entitled Pre-Feasibility Study Completed for Mackay SOP Project released on 7 May 2018. The information in this presentation that relates to exploration results and Mineral Resources is extracted from the Company's ASX Release entitled Pre-Feasibility Study Completed for Mackay SOP Project released on 7 May 2018. The Company's ASX Releases are available at www.asx.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the abovementioned ASX Releases, and that all material assumptions and technical parameters underpinning the estimates in the abovementioned ASX Releases continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings that are presented have not been materially modified from the abovementioned ASX Releases.

Agrimin Highlights

- **Major structural changes to <u>BOTH</u> supply and demand = opportunity for the establishment of a significant new seaborne supplier of SOP**

- Pre-Feasibility Study demonstrated the potential for the Mackay SOP Project to become the **largest and lowest cost seaborne supply**

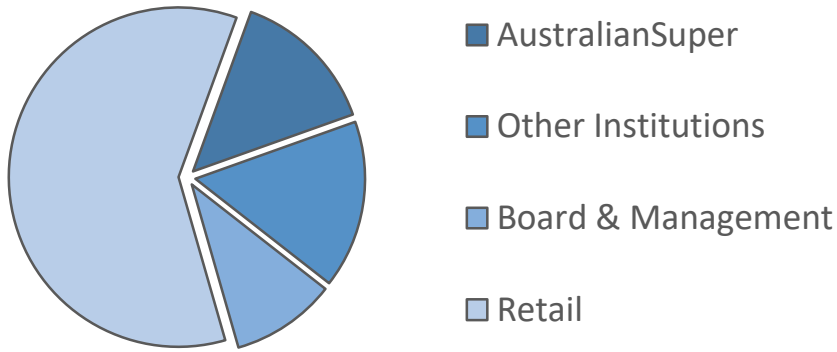
- **Definitive Feasibility Study is underway** with long-term field trials having commenced in August 2017

- **Off-take and financing discussions are advancing** with a strong level of interest from a range of parties

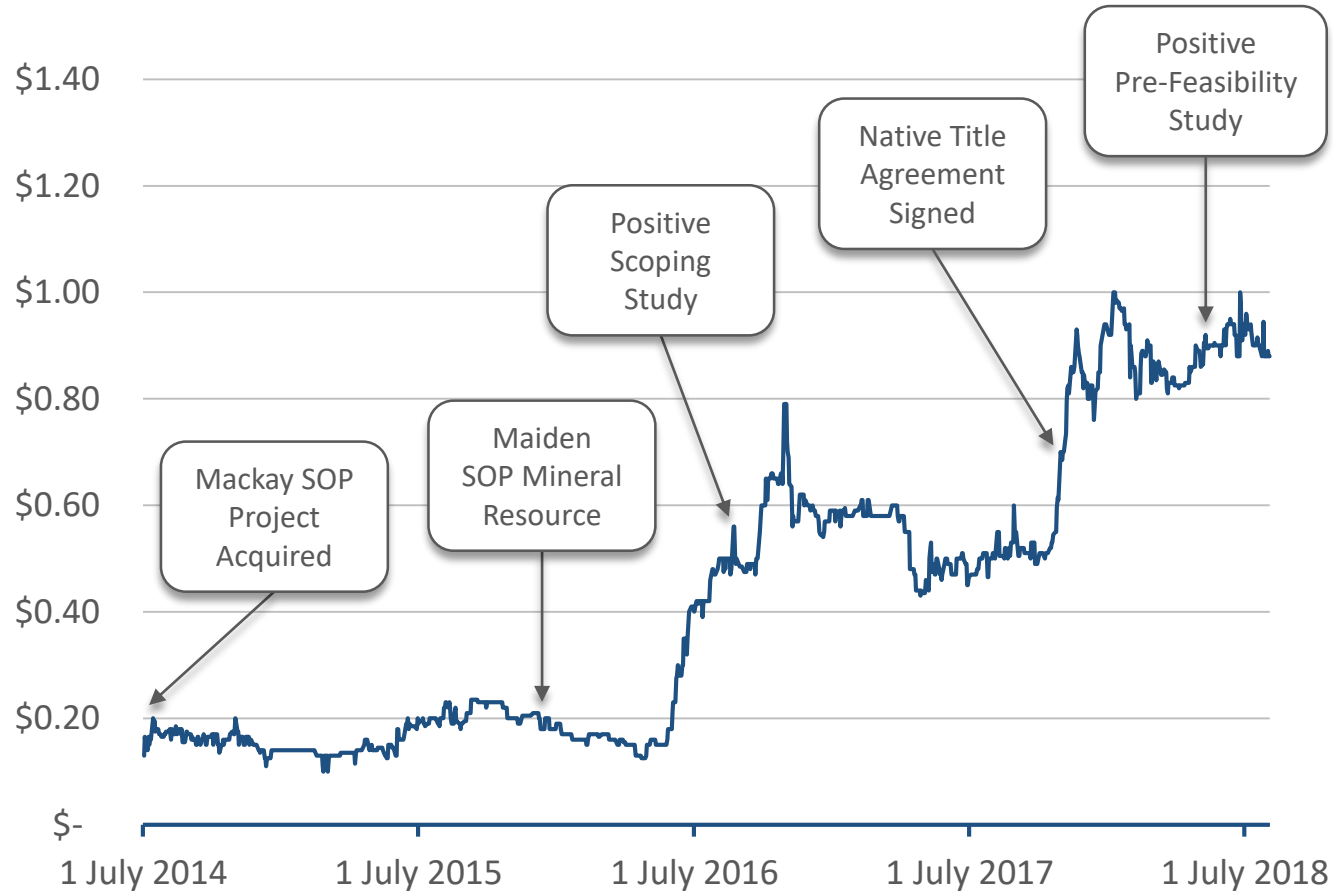
Corporate Overview

Capital Structure (as at 6 August 2018)	
ASX Code	AMN
Share Price	A$0.86
Shares	169.6M
Share Rights	8.0M
Market Capitalisation	A$145.9M
Cash	A$14.4M

Share Register



Share Price Chart



Mackay SOP Project

Western Australia

Project Overview

- Project is situated on the **world's largest undeveloped SOP bearing salt lake** and is **100% owned by Agrimin**
- Located **785km south of Wyndham Port** in Western Australia
- Pre-Feasibility Study completed in May 2018 and demonstrated the potential for **large-scale and low-cost SOP production**
- **Definitive Feasibility Study is underway** with long-term field trials having commenced in August 2017
- **Native Title Agreement signed** for the proposed full-scale development
- **Environmental studies are well advanced** to support the formal assessment process

Project Location & Proposed Infrastructure Corridor

Highly Attractive Project Economics

- Pre-Feasibility Study[1] indicates the Mackay SOP Project is a technically and financially robust development proposition
- SOP production target of **426,000tpa** at **AISC of US$256/t**
- **EBITDA of US$137M per year** at a SOP price of US$555/t
- Initial project life is **20 years**
- Pre-Feasibility Study was managed by Advisian, the consulting business line of WorleyParsons Group, and completed to an AACE Class 4 estimate standard

Pre-Feasibility Study Material Assumptions and Outcomes

Parameter	Value
Initial Operating Life	20 years
Annual SOP Production Rate	426,000t
Average SOP Price (FOB Wyndham)	US$555/t
Capital Cost (inc. US$53M Contingency)	US$409M
Total Cash Cost	US$222/t
All-In Sustaining Cost (AISC)	US$256/t
Annual EBITDA	**US$137M**
Annual NPAT	US$75M
Post-tax NPV_8	**US$453M**
Post-tax IRR	**20%**
Post-tax Payback Period	4.2 years

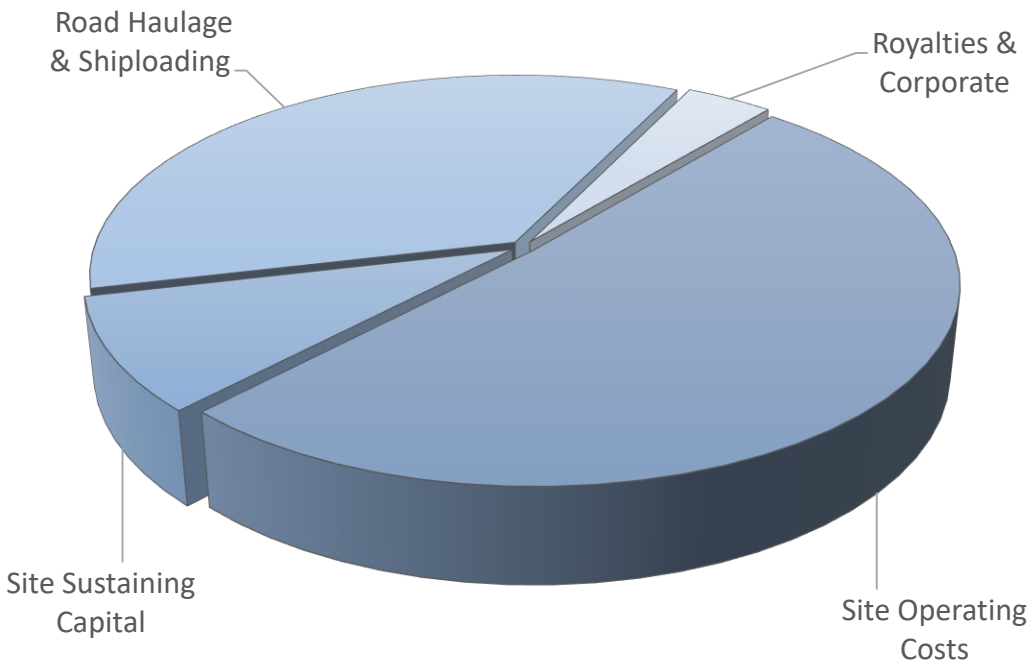
Notes:
- *Total cash cost and all-in sustaining cost include transportation and shiploading.*
- *Total cash cost is based on drying, compacting and sizing all SOP production.*
- *All-in sustaining cost includes corporate costs, sustaining capital and royalties.*
- *USD/AUD exchange rate of 0.75 has been used to convert Australian dollar amounts to US dollars.*
- *Capital and operating cost estimates have a ±25% level of accuracy.*

1. *Refer to the ASX Release on 7 May 2018 for full Pre-Feasibility Study details. All material assumptions underpinning the production target and forecast financial information derived from the production target still apply and have not materially changed.*

Operating Costs

- Agrimin's AISC of US$256/t will be in the **bottom quartile of the global cost curve**

All-In Sustaining Cost Breakdown



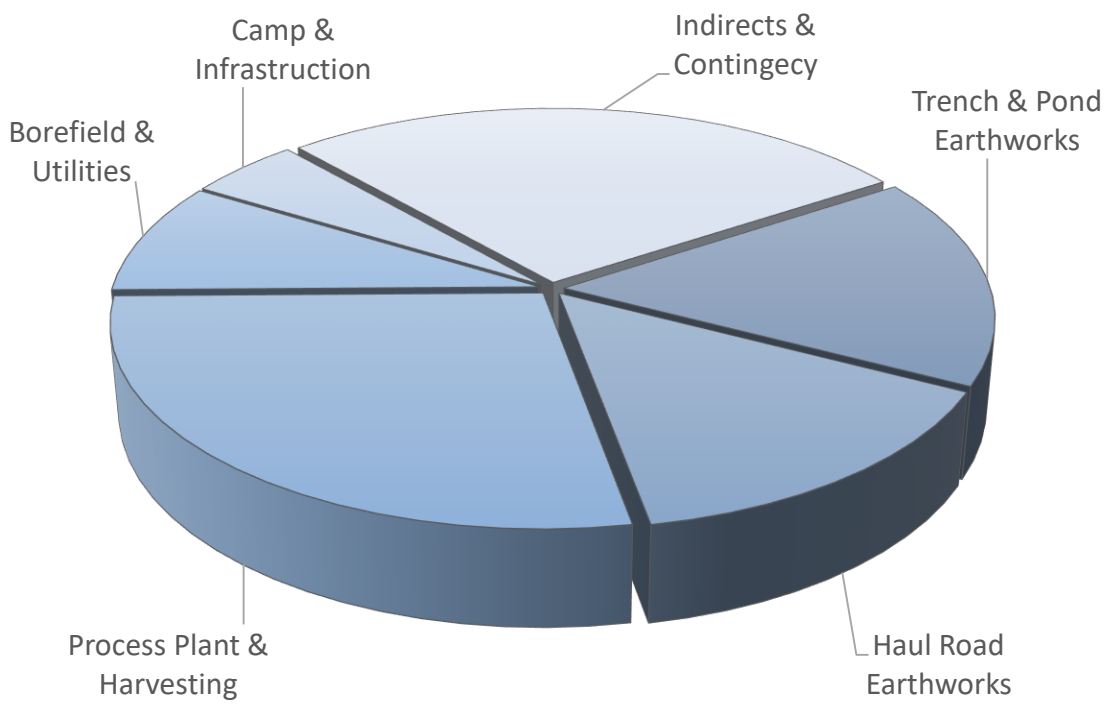
Operating Cost Estimates (±25%)

Parameter	US$/t
Labour	42.78
Electricity	47.22
Maintenance & Consumables	10.03
Gas & Diesel Fuel	12.60
Mobile Equipment	3.70
Camp Operations	8.99
Indirects	5.29
Road Haulage & Shiploading	91.88
Average Total Cash Cost	**222.48**
Government & Native Title Royalties	6.34
Corporate Overheads	3.52
Sustaining Capital	23.42
Average All-In Sustaining Cost (AISC)	**255.75**

Capital Costs

- Capital cost of US$409M has a **post-tax payback period of 4.2 years**

Capital Cost Breakdown



Capital Cost Estimates (±25%)

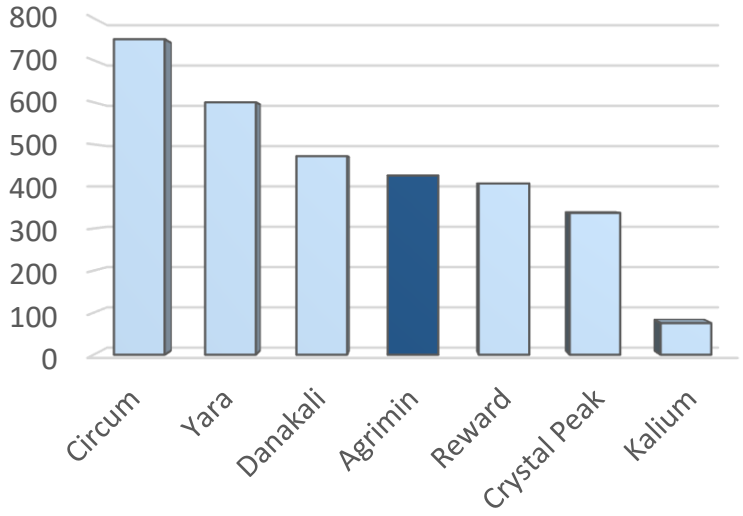
Parameter	US$M
Brine Field	28.0
Evaporation Pond System	52.6
Process Plant	80.1
Utilities & Equipment	42.6
Site Development	1.7
Off-Site Infrastructure	92.2
Total Directs	**297.1**
Construction Indirects	17.1
Spares	2.4
EPCM	28.5
Owner's Costs	10.7
Contingency	53.3
Total Capital Cost	**409.1**

SOP Greenfield Development Projects

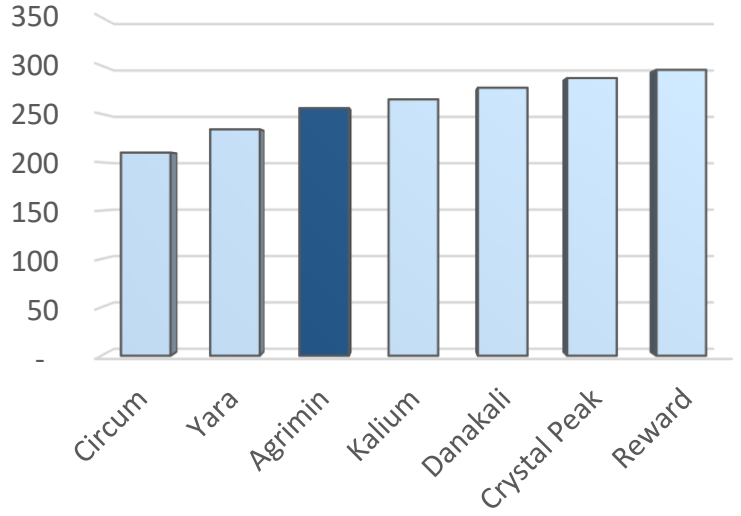
- Agrimin is **developing the world's largest and lowest cost greenfield SOP project outside of Ethiopia and Eritrea**

- Global opportunities to establish a new large-scale SOP supply base are largely limited to Eastern Africa and Western Australia

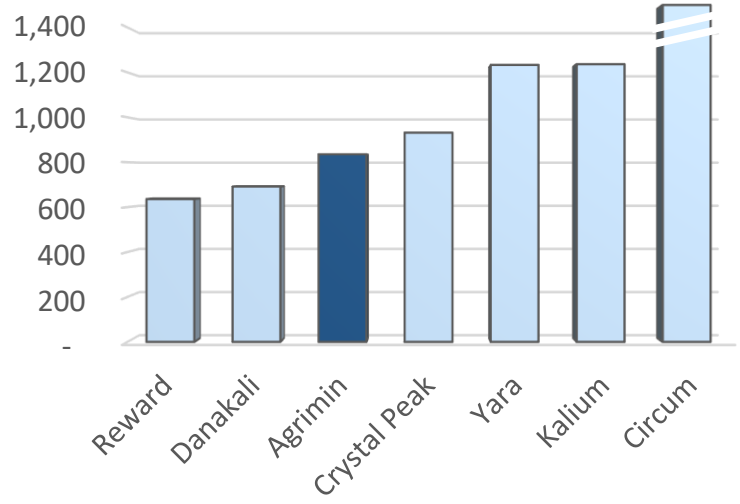
Production Rate ('000tpa)



All-In Sustaining Cost (US$/t FOB)



Capital Intensity (US$/t)



Source: Numbers presented are as reported in company feasibility studies.

Key Attributes that Support Large-Scale Production

- Potassium and Sulphate mineralisation is dissolved within the hypersaline groundwater (brine) in Lake Mackay

- Total Mineral Resource[1] of **26.1Mt of SOP** (drainable porosity) and **264.4Mt of SOP** (total porosity)

- Lake Mackay has the three technical attributes that allow for **large-scale** and **low-cost** SOP production:

  1. **Shallow and contiguous brine resources** suitable for sustainable extraction
  2. **Large on-lake area** suitable for unlined evaporation ponds
  3. **Brine chemistry** suitable for conventional processing techniques

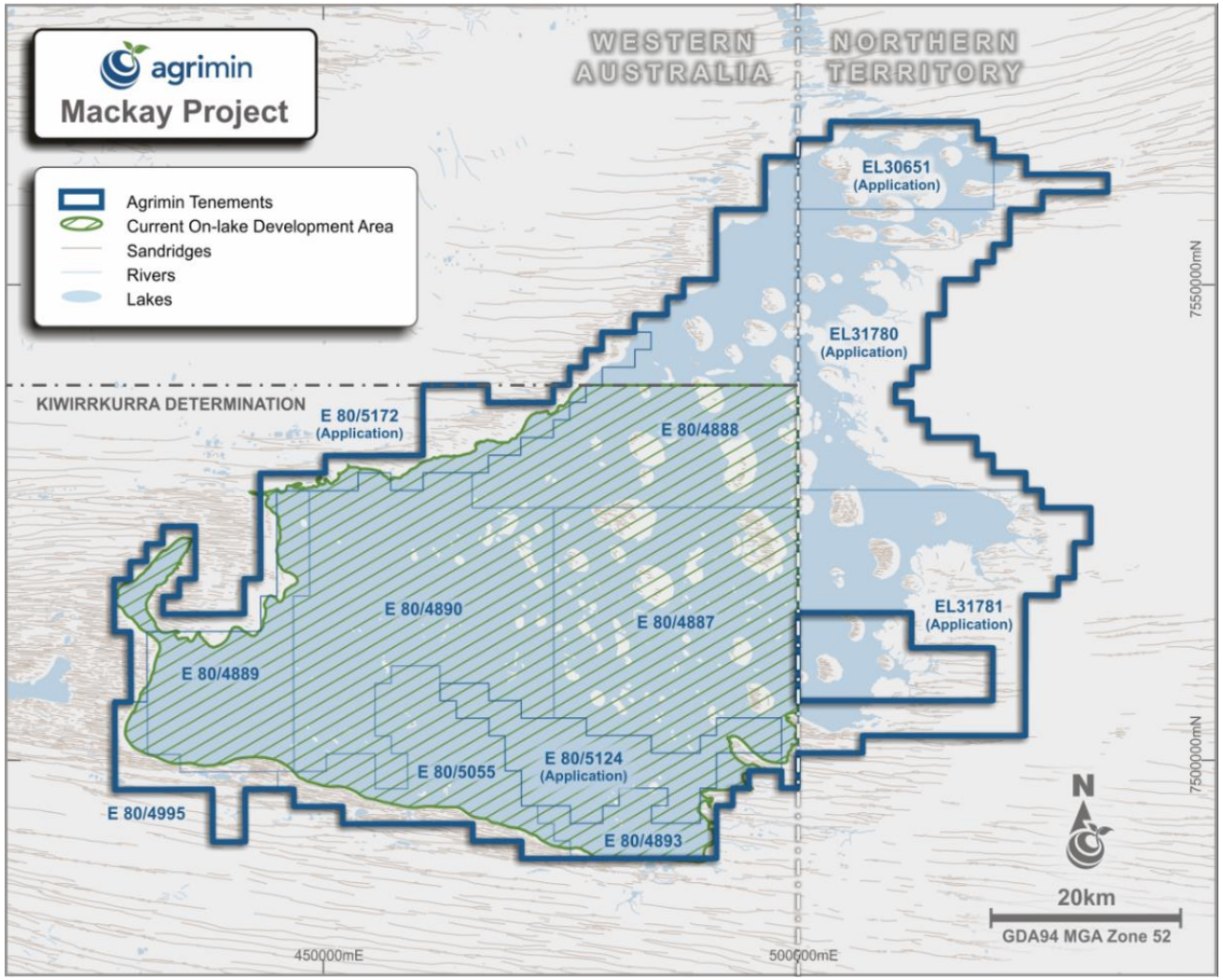
Shallow Brine Resources Across the Entire Deposit

1. *Refer to the ASX Release on 7 May 2018 for full Mineral Resource details. Mineral Resource comprises Indicated Mineral Resource of 10.0Mt and Inferred Mineral Resource of 16.1Mt.*

Project Scale has Growth Potential

- Mineral Resources are hosted within a single contiguous brine deposit across Lake Mackay
- Current proposed development covers only 70% of the overall project area, with potential to expand over time
- Deepest drill hole on Lake Mackay is 30m and potential **deeper aquifer units have never been tested**
- **Significant upside to grow the targeted production rate and/or project life**

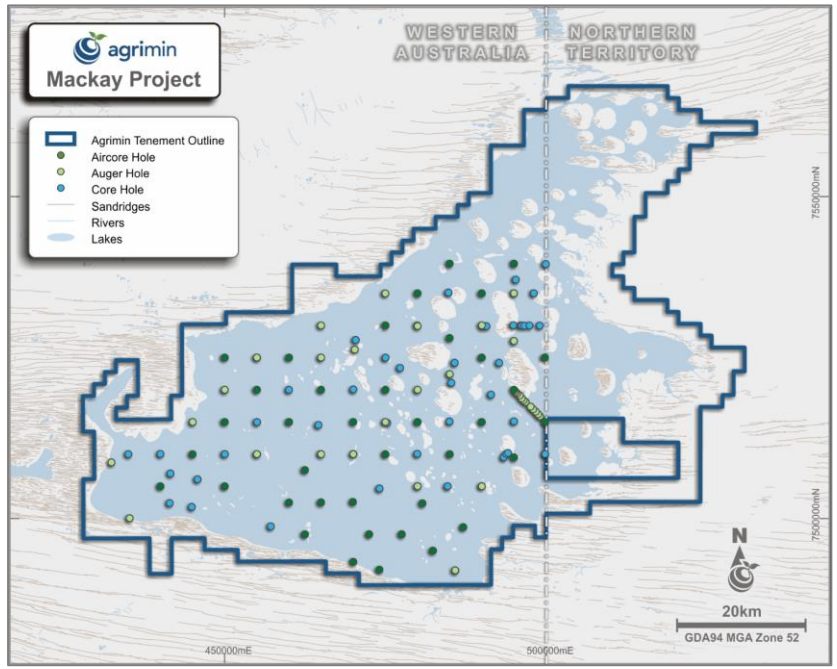
Project Tenement Map



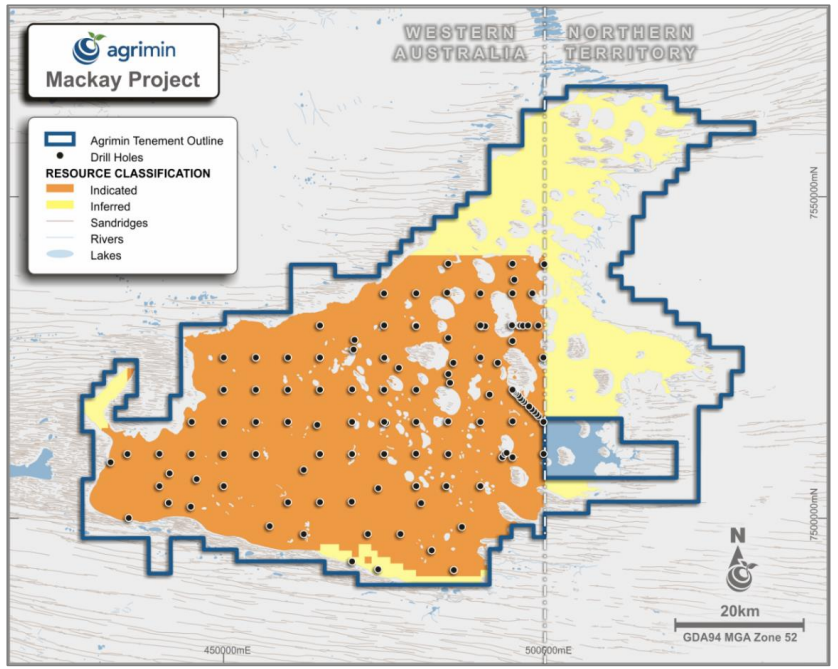
Mineral Resources[1]

- Shallow Mineral Resources **commence at an average of 0.4m beneath the ground surface across the entire deposit**
- 98 drill holes on a 5km grid provide a strong geological understanding of the deposit
- Long-term pumping tests up to 120 days provide a strong basis for the development of the hydrogeological model and mine plan

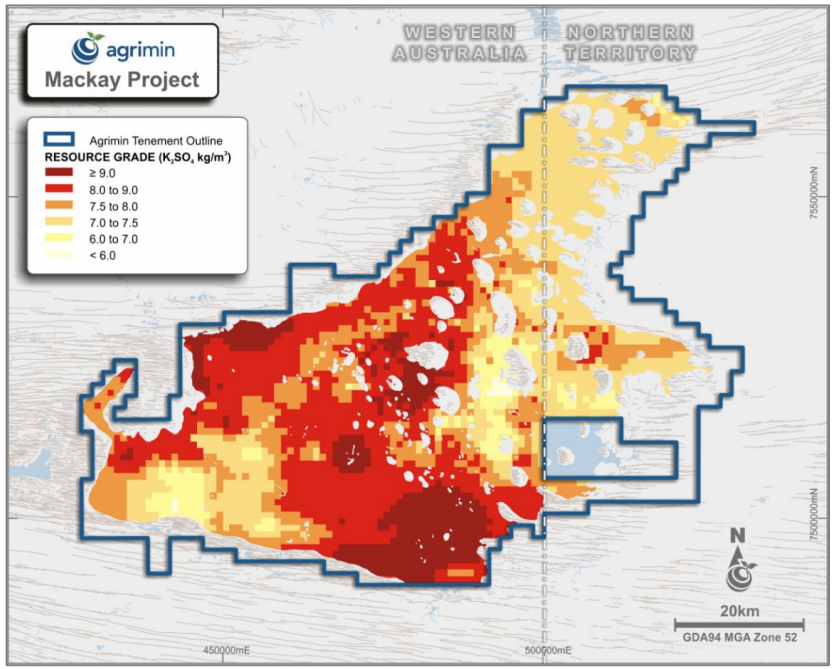
Drill Hole Locations



Resource Classification



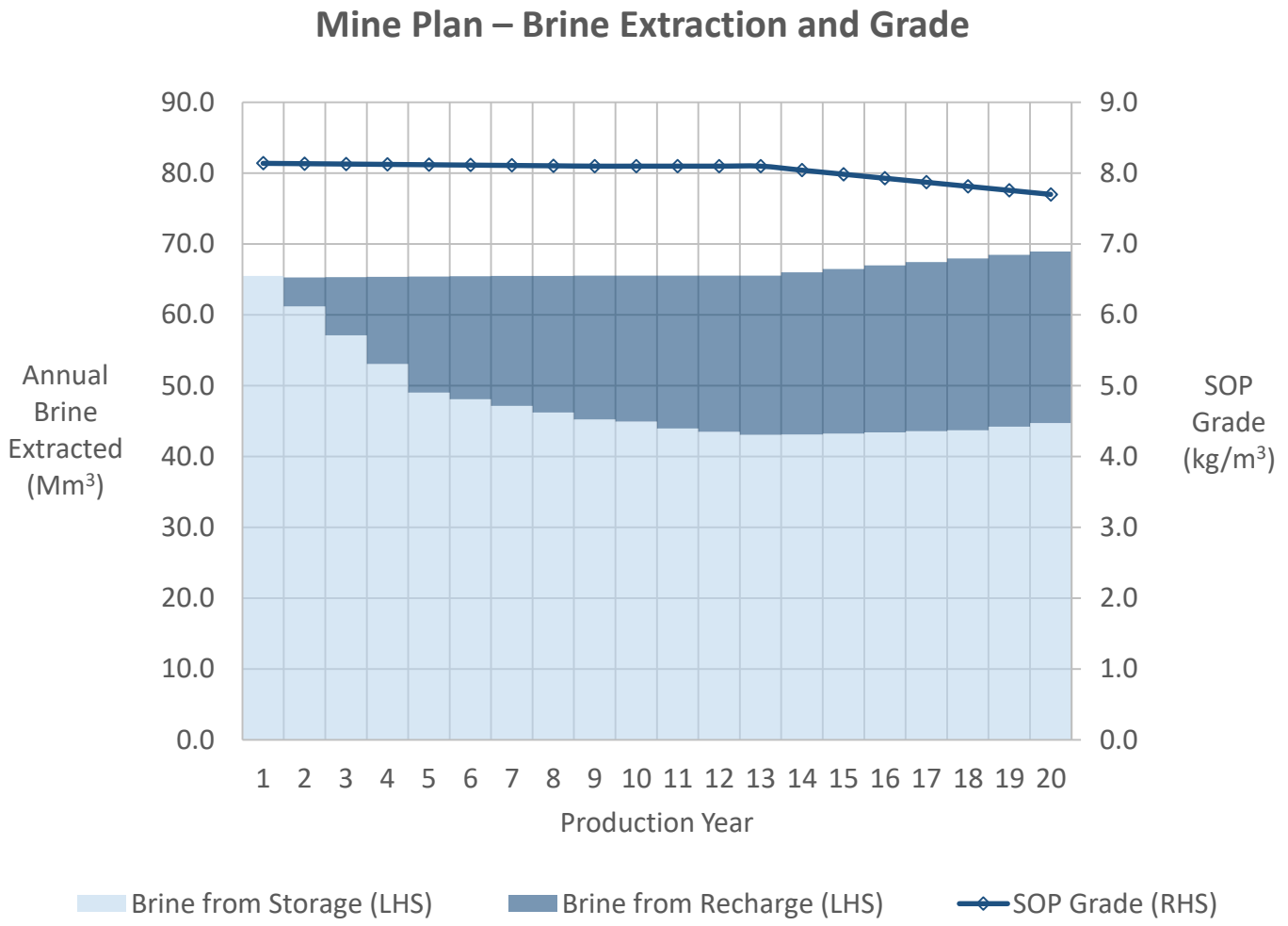
Resource Grade



1. *Refer to the ASX Release on 7 May 2018 for full Mineral Resource details. Mineral Resource comprises Indicated Mineral Resource of 10.0Mt and Inferred Mineral Resource of 16.1Mt.*

Mine Plan

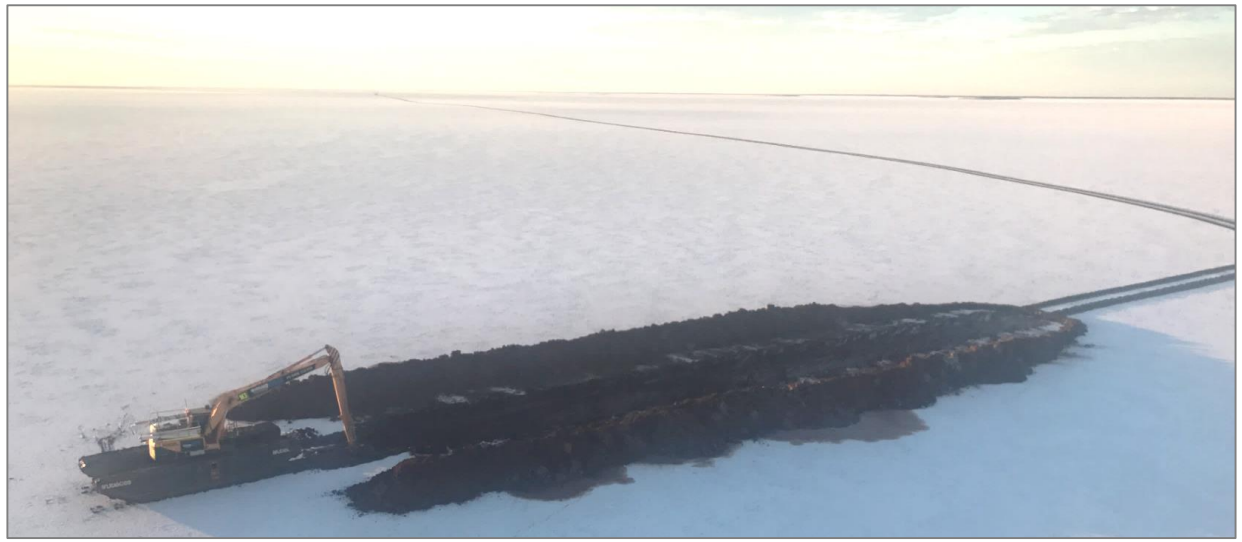
- Mine plan predicts an average **annual brine extraction rate of 66.3Mm^3 at 8.0kg/m^3 of SOP** over an initial 20 year period
- Mine Plan is based on a portion of the Indicated Mineral Resource to a **depth of only 3.0m**
- Over the 20 year life of the operation, the recharge water (rainfall) is anticipated to gradually dilute the SOP grade from 8.1 to 7.7kg/m^3
- The grade dilution will be offset by increasing the annual brine extraction rate from 65.5 to 68.9Mm^3 with additional trenches



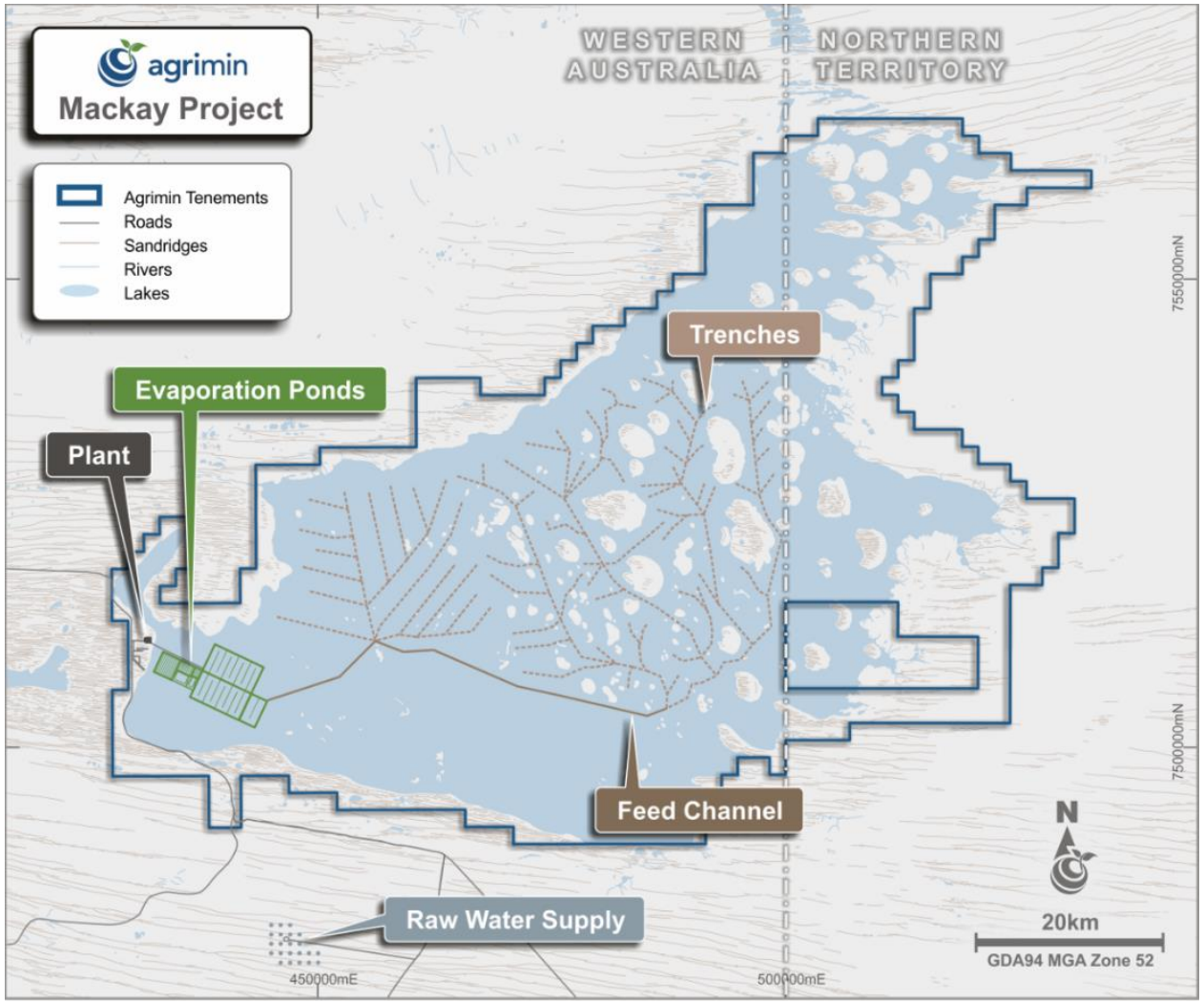
Near Surface Brine Provides Low Resource Risk

- Simple and low-cost extraction of Potassium-rich brine via a shallow on-lake trench system
- Trench design optimised to allow natural surface water movement to the feed channel

Pilot Trenching on Lake Mackay



Proposed Trench Layout (20 Years)

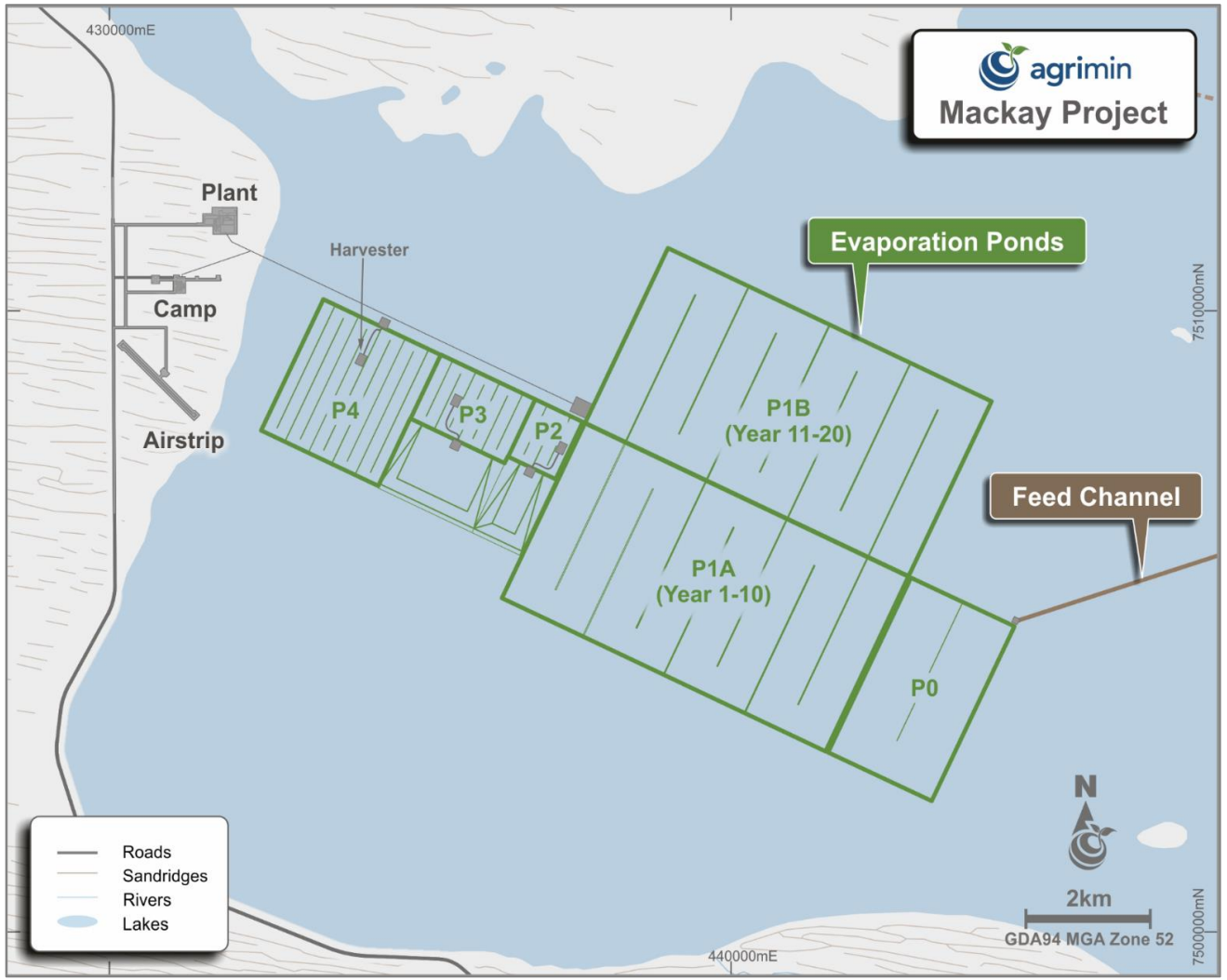


Large On-Lake Area Supports a Sustainable Operation

- Full-scale evaporation ponds will cover less than 2% of Lake Mackay over the project's initial 20 year life
- Unlined evaporation ponds to have a low capital cost and use of wet harvesters to provide operational efficiencies and a low operating costs

Pilot Evaporation Ponds on Lake Mackay

Proposed Evaporation Pond Layout (20 Years)

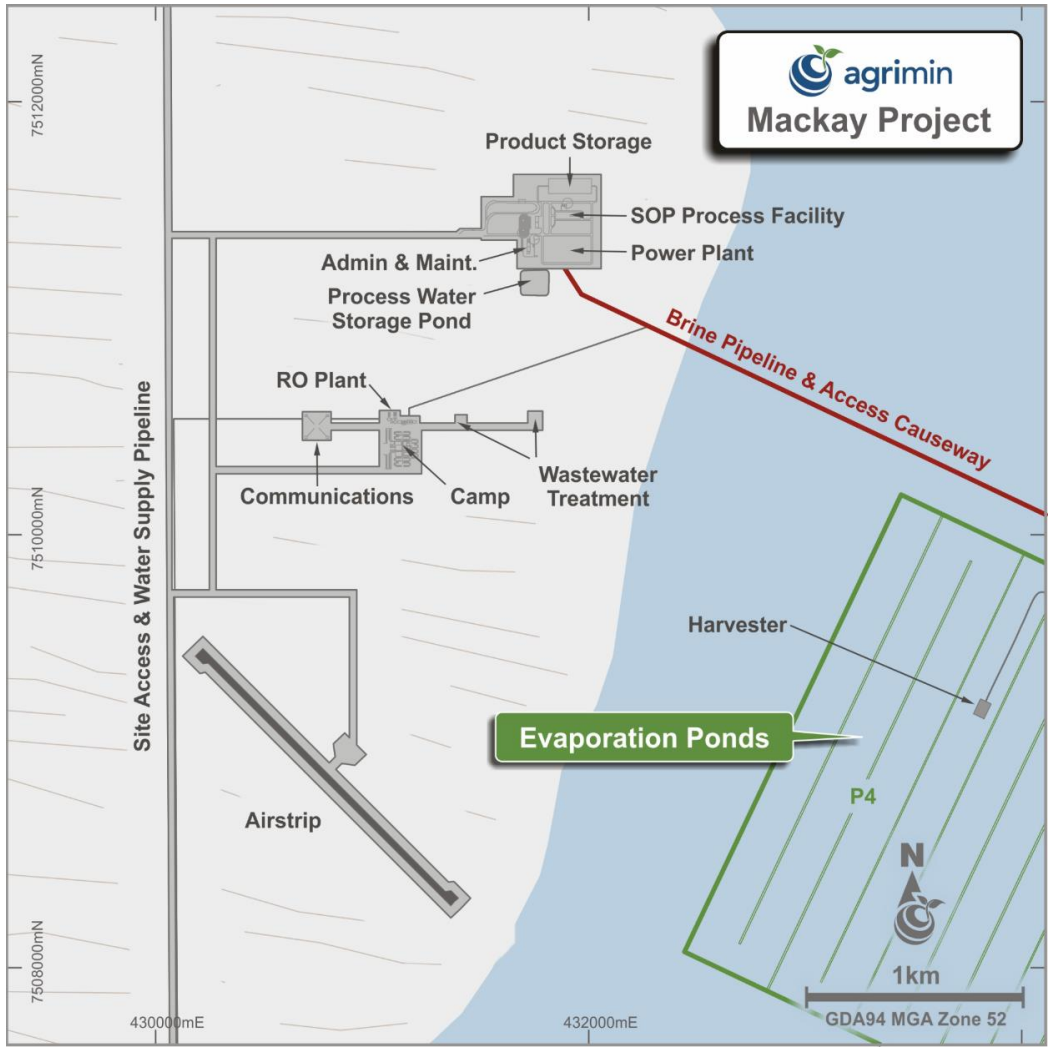


Significant Investment in New Regional Infrastructure

- Gas to be supplied via a pipeline connected to the Amadeus Gas Pipeline, proposed under a Build-Own-Operation (BOO) arrangement
- Process water to be supplied by a raw water borefield located to the south-east of the process plant

Current Agrimin Camp

Proposed Site Layout



Mine-to-Ship Logistics Chain

- Supply and demand fundamentals for SOP support the **establishment of reliable and large-scale seaborne supply**
- A **dedicated fleet of quad road trains** will be loaded via a load-out facility at the process plant
- Road trains will transport SOP product 980km north to a storage shed located at Wyndham Port
- SOP products will be loaded onto ships via rotaboxes using existing wharf facilities
- **Deepwater port at Wyndham is multi-user and under-utilised**

Proposed Quad Road Train Configuration

Wyndham Port

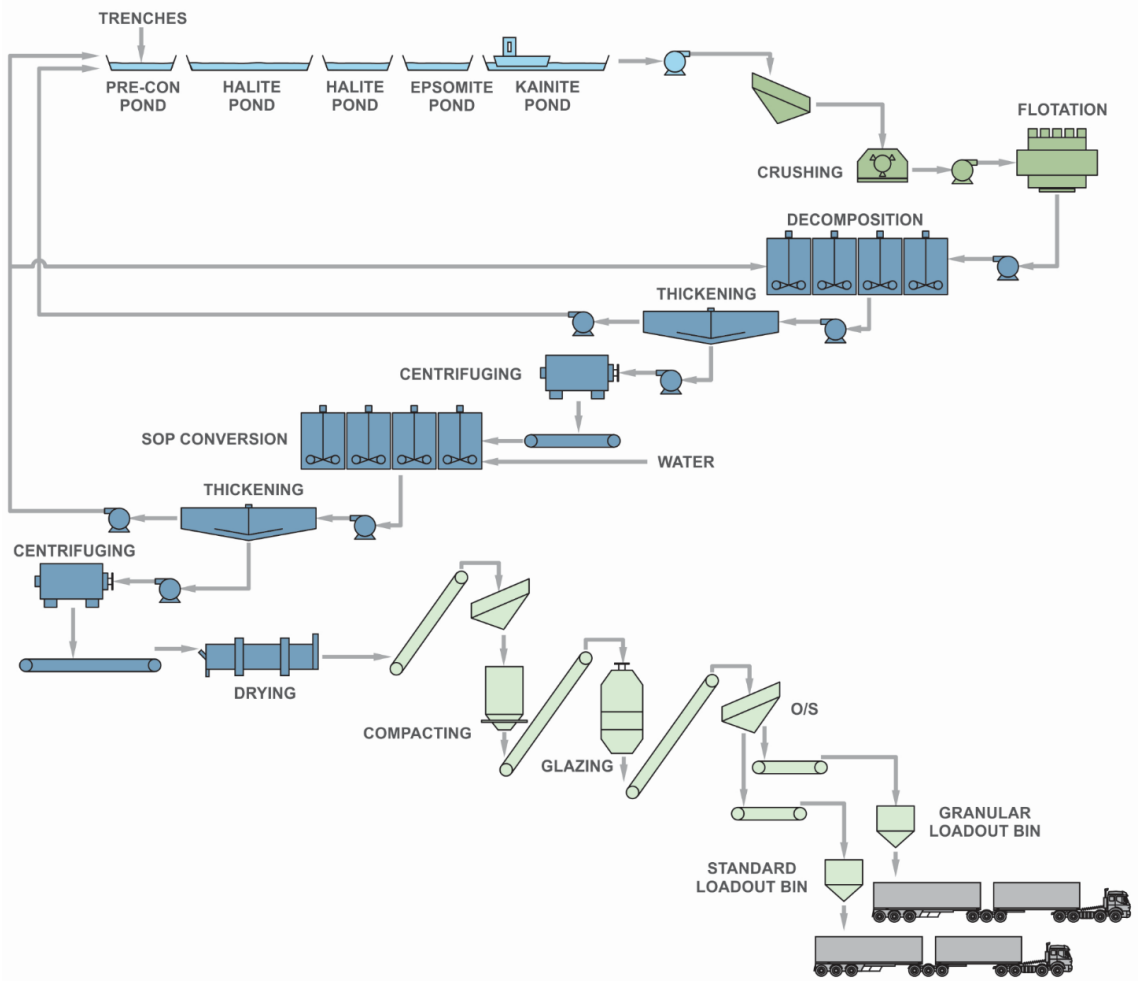
High Quality SOP Samples Produced

- Process testwork has **produced commercial grade SOP samples (>52% K_2O)** that exceed industry benchmark grades

- Saskatchewan Research Council has completed extensive testwork to validate the conventional SOP production flowsheet

SOP Samples Packaged for Distribution

Simplified Process Flow Diagram



Long-Term Field Work Underway

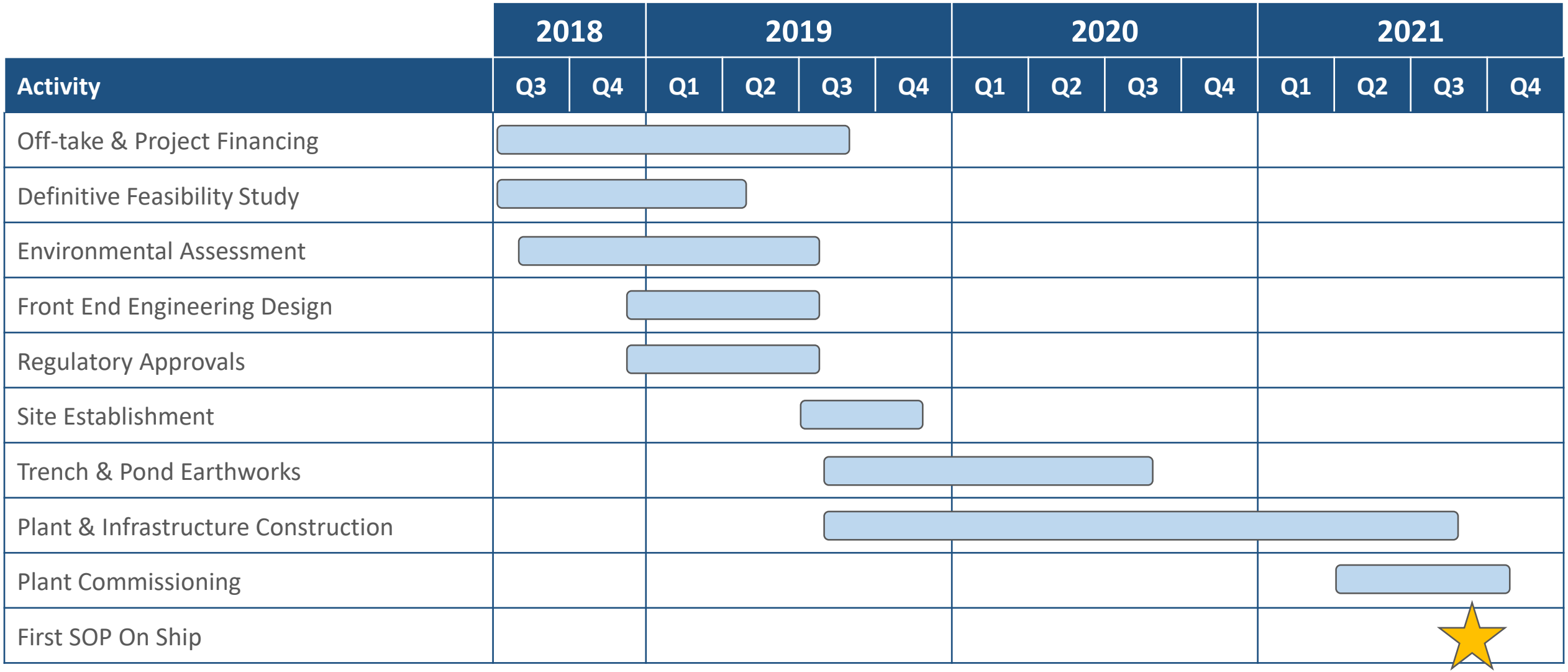
- Long-term field tests commenced in August 2017 and will continue throughout 2018 to support the Definitive Feasibility Study
- Pilot scale evaporation trials underway to test the full crystallisation process under site conditions
- Environmental and heritage surveys continue to support the approvals process with strong involvement from the local community

Trench Pump Testing

Pilot Evaporation Trial

Environmental Surveys

Indicative Project Delivery Schedule



A Catalyst for Regional Economic Development

- Agrimin's proposed **US$409M fertilizer operation at Lake Mackay** is the only advanced industrial development in this very remote part of Australia

- The Mackay SOP Project will **create substantial economic and public benefits** for Australia's central desert communities, and will stimulate further economic development

- The Mackay SOP Project will **create approximately 200 jobs** and will **create a significant new export business**

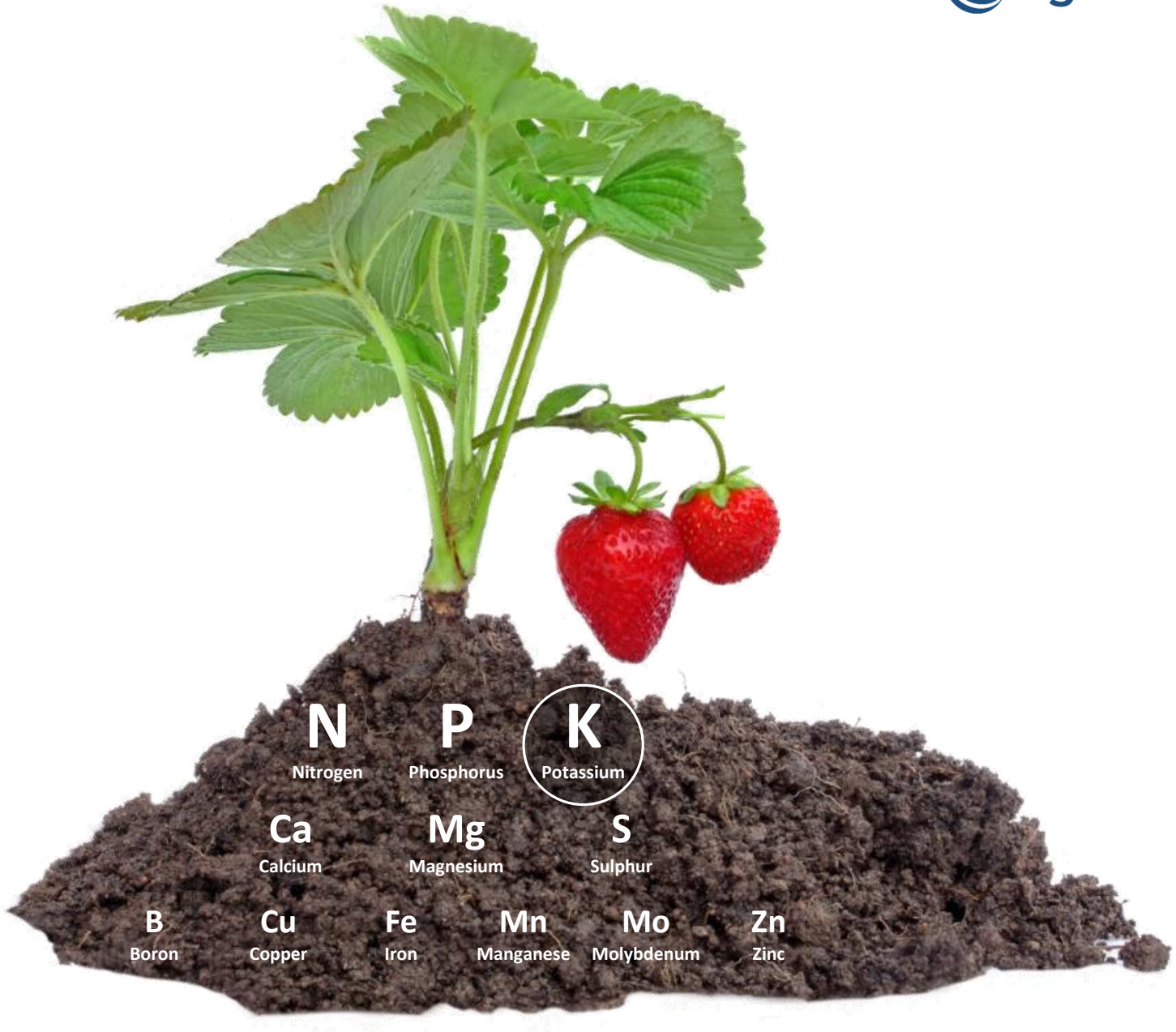
- **Australia is entirely reliant on imports for potash fertilizer** and the Mackay SOP Project has the strategic benefit of replacing imported potash for local farmers

Sulphate of Potash (SOP)

Specialty Fertilizer for Modern Agriculture

Overview of Fertilizers

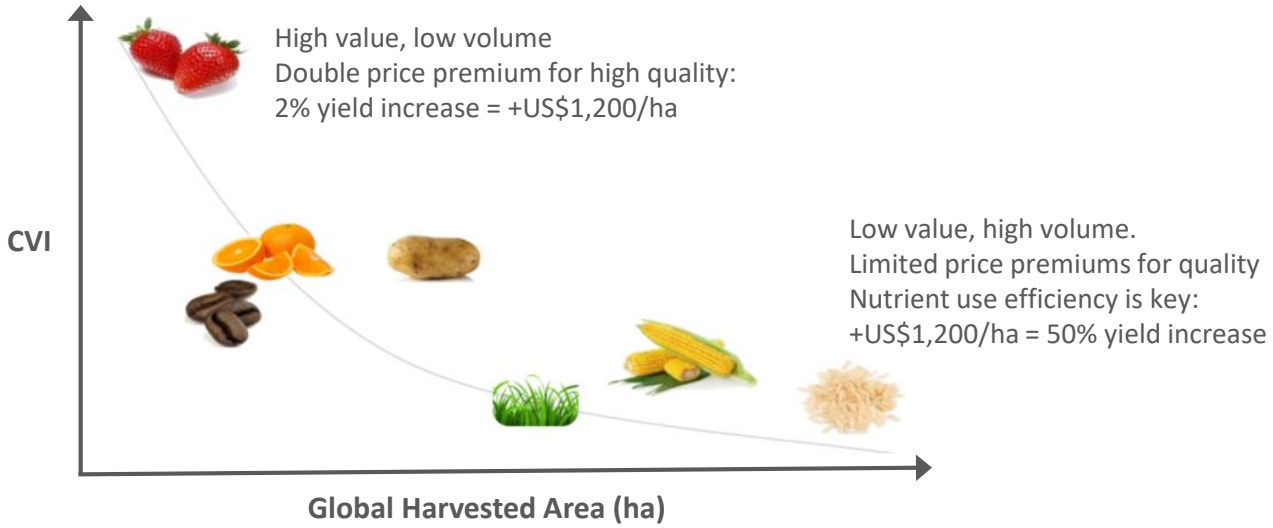
- Fertilizers provide **three macronutrients that every crop needs**:
  - **Nitrogen (N)** – the most important for healthy plant growth, such as leaf size, colour and yield
  - **Phosphorus (P)** – vital for photosynthesis and enhances stem durability
  - **Potassium (K)** – essential to increase a plants resistance to crop disease
- Main commodity fertilizers are currently over-supplied (i.e. urea, MAP, DAP, MOP)
- Global fertilizer producers are seeking to **improve margins through value-added products that suit changing food production practices**



Potash Overview

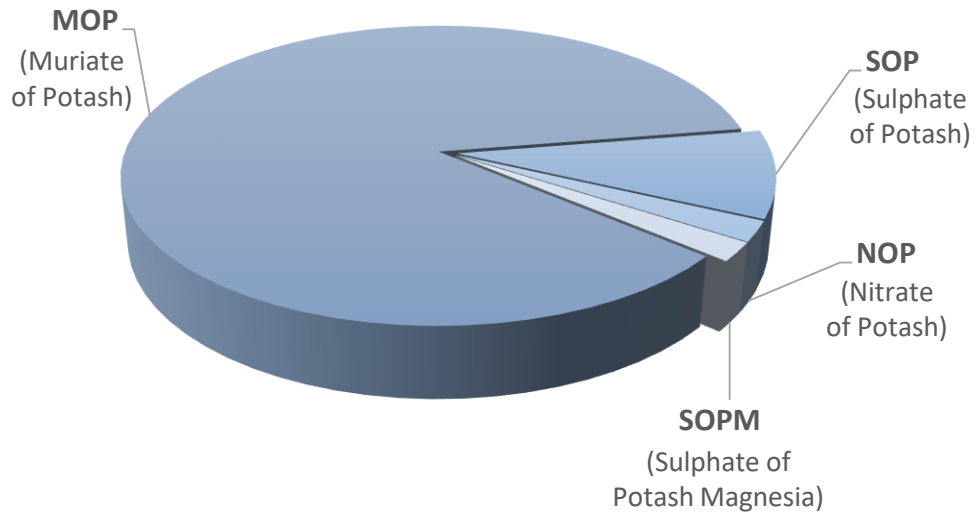
- **90% of all potash production is in the form of MOP (muriate of potash)** which contains 46% chloride
- **SOP is chloride-free** and **vital for cash crops, such as fruits and vegetables**. SOP improves nutritional value, taste and appearance of crops
- **Global SOP market is 7Mtpa and valued at approximately US$3.5Bn per year**, with over half of global supply-demand in China

Crop Value Index (CVI)



Source: Yara – IR Presentation, May 2016; CVI = Crop Revenue / Fertilizer Costs

Global Potash Production (70Mtpa)



Source: Fertecon Limited

Robust Outlook for SOP Prices

- **SOP demand in China has more than tripled since 2007 and was met with a tripling in supply… but future supply growth is not apparent**

- Long-term SOP prices will be supported by major structural trends:

1. Strong demand caused by:

   - **Increasing area under cultivation for fruits and vegetables**
     Rising middle class is demanding healthier and tastier diets

   - **Increasing SOP application rate**
     Industry is evolving to more advanced farming practices to minimise agricultural pollution and water usage

2. Constrained supply caused by:

   - **Increasing Mannheim production costs**
     Stricter controls on emissions and acid disposal is leading to the gradual idling and closure of Mannheim production

Strong China SOP Prices

- SOP prices in China have **increased by >30% in the last 2 years** due to **strong demand growth** and **rising production costs**

- Latest public price is **US$478/t for Powder SOP** and **US$502/t for Granular SOP** (52% K_2O, ex-works, north-west China)

- China's domestic salt lake production of SOP is located in far north-west and involves **>3,000km of in-land freight to reach fruit and vegetable farms** in the south and east of China

- Exports of China SOP are subject to a tariff of RMB600/t (approximately US$95/t)

Source: BAIINFO

SOP Demand has Experienced Major Structural Change

Traditional Farmer

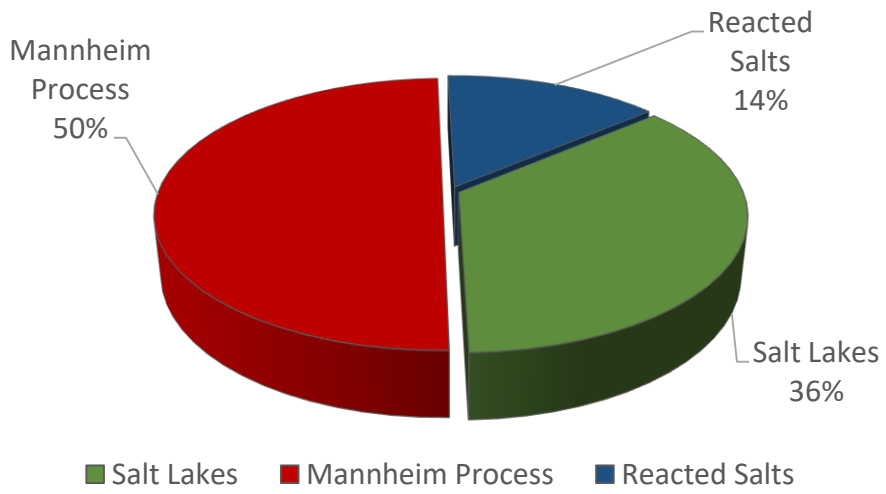
Evolving Farmer

Source: Yara, Google Earth

SOP Supply has also Experienced Major Structural Change

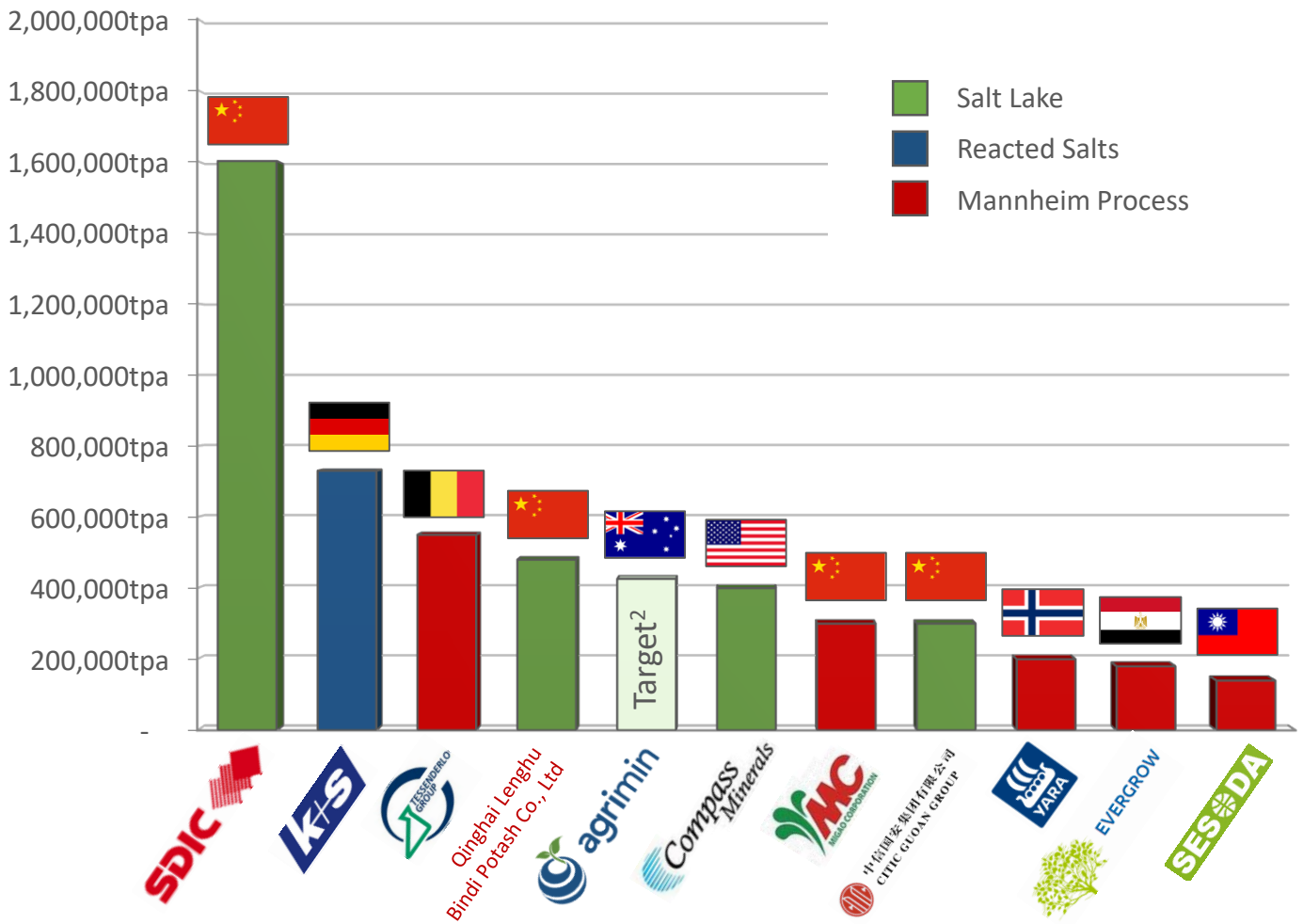
- **3 major salt lake projects have been built in China in the last 10 years to meet the increased SOP demand**:
  - CITIC Guoan Group at Xitai Jinair salt lake (2012)
  - Bindi Potash at Kunteyi salt lake (2012)
  - SDIC Luobupo at Lop Nur salt lake (2008)

Global SOP Production Sources (7Mtpa)



Source: Integer Research

2018 Forecast SOP Production of Major Producers[1]

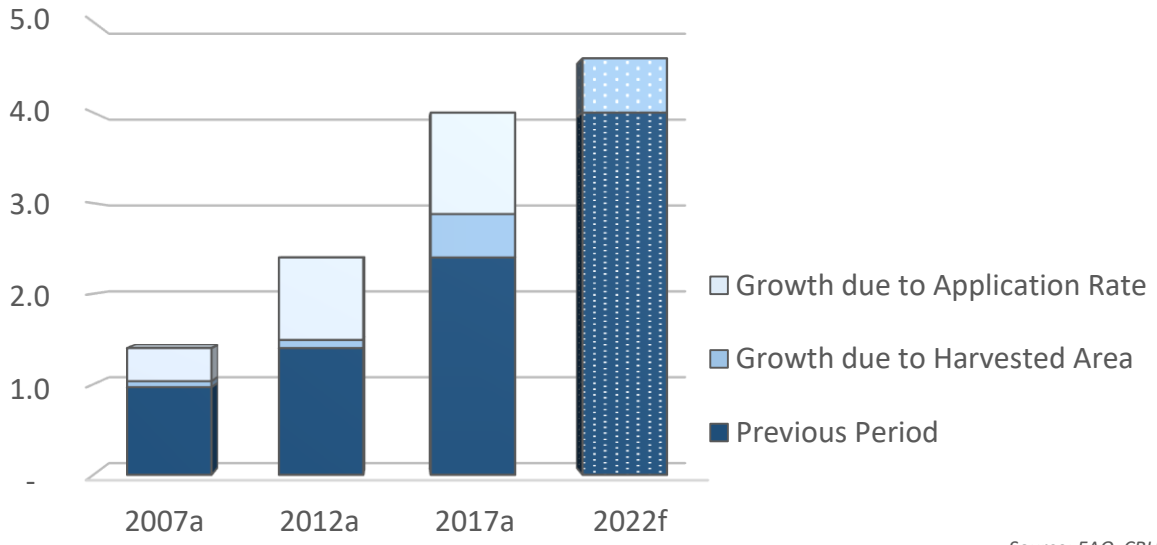


1. *Graph compiled from information sourced from company reports and research undertaken by Agrimin.*
2. *Agrimin production target is shown for comparison purposes and is not planned to commence in 2021.*

An Emerging SOP Supply Gap in China

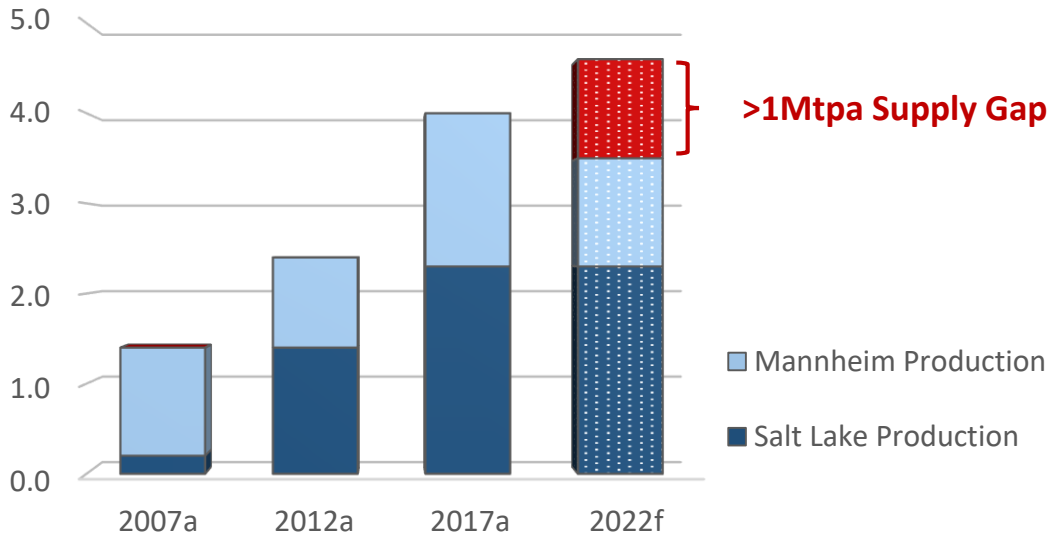
- **China's demand for SOP has grown from 1.2Mtpa in 2007 to 4.0Mtpa in 2017**. China now provides over 50% of current global demand
- This demand growth has been met by increased domestic production of SOP from new salt lake operations in China
- For the first time in recent history there are currently **no announced salt lake developments or expansions in China**
- In addition, **existing Mannheim production is being idled or permanently closed** due to environmental clean-up efforts in China

Chinese Domestic SOP Demand (Mtpa)



Source: FAO, CRU

Chinese Domestic SOP Supply (Mtpa)



Source: CRU, Fertecon

Tightening Environmental Controls are Impacting SOP

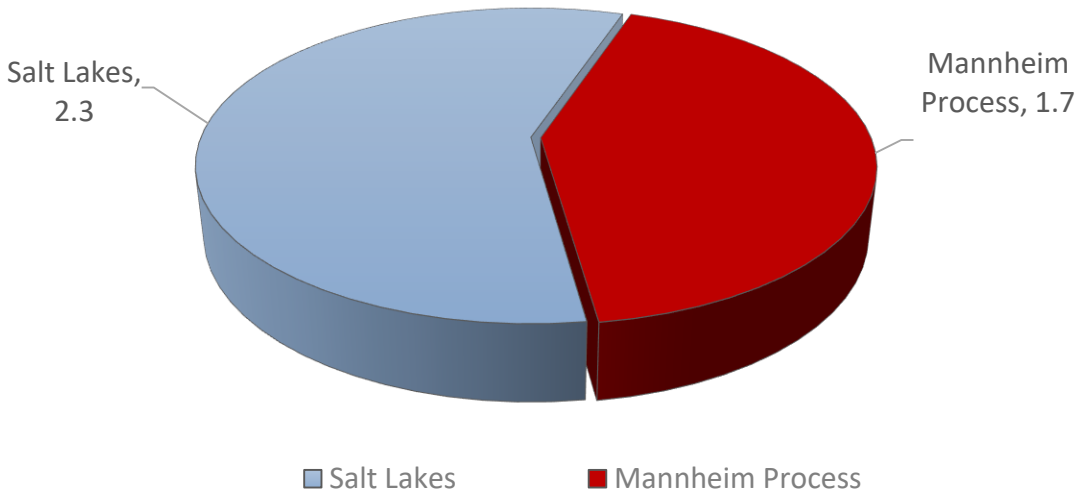
- There is approximately 3.2Mtpa of SOP Mannheim capacity throughout China, which **produced a total of 1.7Mtpa in 2017**
- **Stricter environmental controls** across China have reduced Mannheim production rates and increased conversion costs due to **restrictions on hydrochloric acid output and power generation**
- This has resulted in **closures of approximately 540,000tpa of SOP Mannheim capacity between 2014 to 2017** and continuing inspections are likely to cause further closures
- **Mannheim conversion costs are rising** and this production method is **unlikely to fill the future supply gap**

- More than 40% of China's SOP supply comes from the conversion of MOP to SOP using the Mannheim Process

Mannheim Process:

MOP + Sulphuric Acid = 1.0t SOP + 1.2t Hydrochloric Acid

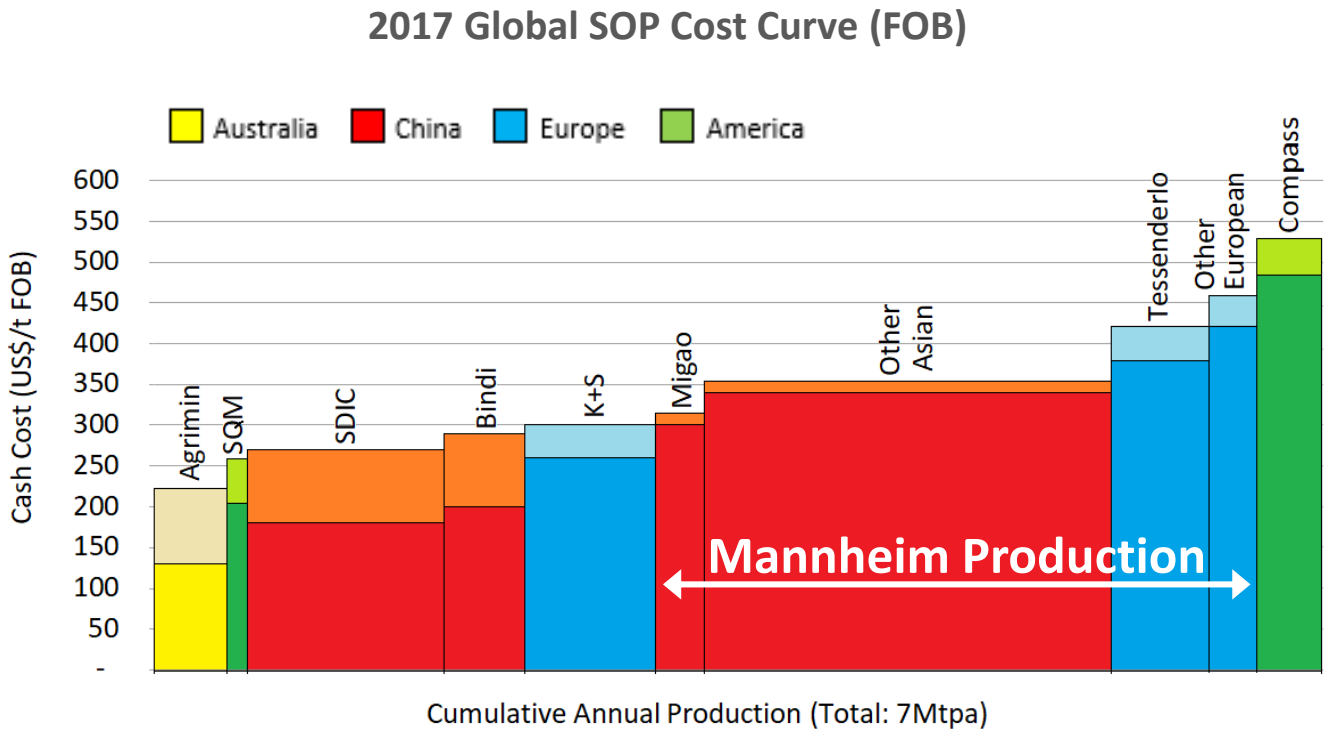
China SOP Production Sources (4Mtpa)



Source: CRU

Compelling Investment Case for New Seaborne SOP Supply

- Agrimin is aiming to become the **largest and lowest cost supplier of seaborne SOP**
- Major industry opportunity to **replace high-cost Mannheim production in China**
- Australia has the advantages of **low geopolitical risk** and being **strategically located** for supplying the growing markets of Asia
- In the last 10 years there has been a shift towards **environmentally friendly SOP production** from salt lakes



1. *Dark bars represent site costs and light bars represent in-land transportation cost to the nearest port.*
2. *Graph compiled from information sourced from company reports and market research.*

Office Contact:

2C Loch Street

Nedlands, Western Australia 6009

Australia

T: +61 8 9389 5363

E: admin@agrimin.com.au

W: www.agrimin.com.au

Investor Relations Contact:

Mark Savich

Chief Executive Officer

M: +61 402 746 757

E: msavich@agrimin.com.au

Media Contact:

Michael Vaughan

Fivemark Partners

M: +61 422 602 720

E: michael.vaughan@fivemark.com.au

Appendix 1. Key People

Board of Directors

Mark Savich | Chief Executive Officer

Financial analyst (CFA) with 14 years of experience in the resources industry based in Western Australia. Experienced in project evaluation and the financing of resource projects.

Brad Sampson | Non-Executive Chairperson

Mining Engineer with 30 years of management and board experience in the international resources industry. Has led the financing and development of a major greenfields resource project.

Alec Pismiris | Non-Executive Director / Company Secretary

Finance professional with 30 years experience in the resources industry and has participated in the acquisition and financing of numerous resource projects. Has served as a director and company secretary for many ASX listed companies.

Key Corporate Personnel

Rhys Bradley | Chief Commercial Officer

Chartered Accountant with 11 years of experience in the resources industry based in Perth and London. Experienced in capital markets, financial modelling and marketing.

Key Technical Personnel

Tom Lyons | General Manager

Geologist with experience in a range of commodities including industrial minerals, metals and bulks. Significant experience working throughout a number of diverse jurisdictions, including throughout Western Australia.

Michael Hartley | Project Manager & Principal Hydrogeologist

Hydrogeologist with 17 years experience in hydrogeological assessments of resources projects around the globe. Recently Chief Hydrogeologist and Senior Project Manager for ICL Group's SOP Project in Ethiopia.

Laurie Mann | Study Manager

Process Engineer with over 40 years of experience in project development, execution and operation. This includes registered manager for the Shark Bay Solar Salt Operation and most recently as project manager responsible for the feasibility study and commissioning of the Deflector Gold Mine in Western Australia.

Gerry Bradley | Sustainability Manager

Ecologist with 18 years experience associated with the resources industry both in Australia and overseas. Broad base of experience from project development through to operations, care and maintenance and closure. Recently responsible for coordination of environmental studies for Vimy Resources and BC Iron.

Don Larmour | Consulting Process Engineer

Chemical Engineer based in Saskatchewan with over 35 years of in-depth potash experience. Has expertise in potash processing, from crushing to flotation, crystallization, drying, compaction, pan granulation and product transport. His experience ranges from operations to design and engineering.

Appendix 2. Mineral Resources Statement (JORC Code 2012)

Mineral Resource – April 2018 (*Total Porosity*)

Category	State	Depth (mbgs)	Volume (Mm^3)	Average Total Porosity	SOP Grade (kg/m^3)	Contained SOP (Mt)
Indicated	WA	0.40 – 11.25	24,182	46.1%	8.3	92.2
Inferred	WA	0.40 – 11.25	2,627	46.0%	8.2	9.9
	NT	0.40 – 11.25	5,802	46.0%	7.4	19.8
	WA	11.25 – 30.00	29,744	45.5%	7.3	107.9
	NT	11.25 – 30.00	10,555	45.2%	8.0	34.7
Total	**WA & NT**	**0.40 – 30.00**	**72,909**	**45.5%**	**8.0**	**264.4**

Mineral Resource – April 2018 (*Specific Yield*)

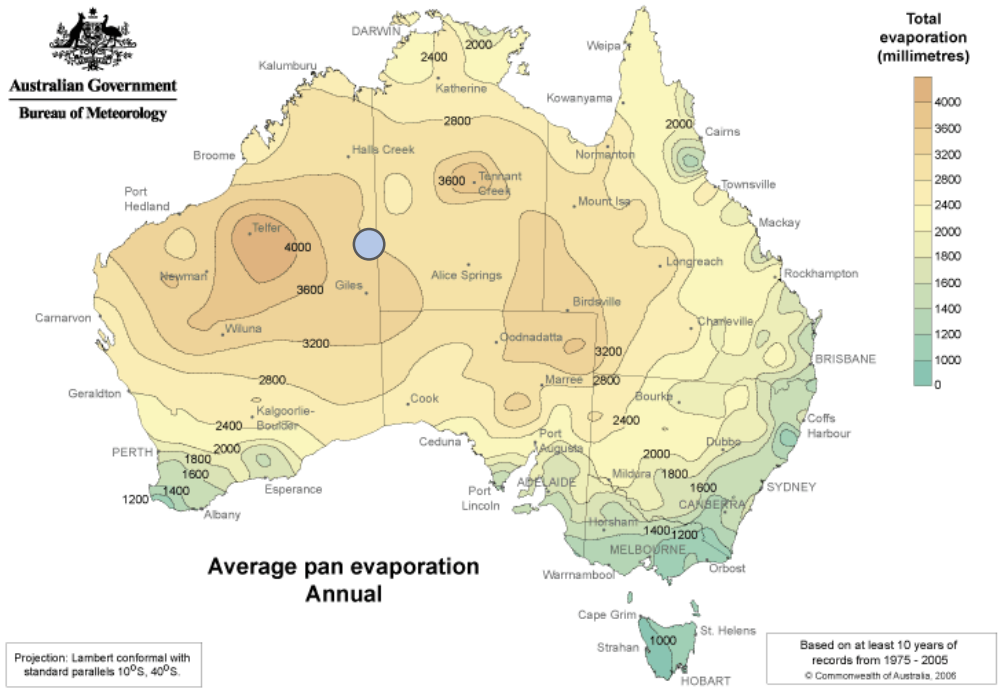
Category	State	Depth (mbgs)	Volume (Mm^3)	Average Specific Yield	SOP Grade (kg/m^3)	Contained SOP (Mt)
Indicated	WA	0.40 – 11.25	24,182	5.0%	8.3	10.0
Inferred	WA	0.40 – 11.25	2,627	5.4%	8.2	1.2
	NT	0.40 – 11.25	5,802	5.2%	7.4	2.2
	WA	11.25 – 30.00	29,744	4.0%	7.3	9.6
	NT	11.25 – 30.00	10,555	4.1%	8.0	3.2
Total	**WA & NT**	**0.40 – 30.00**	**72,909**	**4.5%**	**8.0**	**26.1**

1. *Mineral Resource below 11.25m depth and Mineral Resource outside of the Kiwirrkurra determination area are classified as Inferred.*
2. *Water table is estimated to commence at approximately 40cm below ground surface. The average depth of drilling was 24.7m, however the estimation extends to 30.0m where drilling reached this depth.*
3. *Potassium content can be converted to SOP using a conversion factor of 2.23 (i.e. SOP contains 44.87% Potassium).*
4. *Information that relates to the Mineral Resource has been extracted from the Company's ASX Release entitled Pre-Feasibility Study Completed for Mackay SOP Project released on 7 May 2018.*

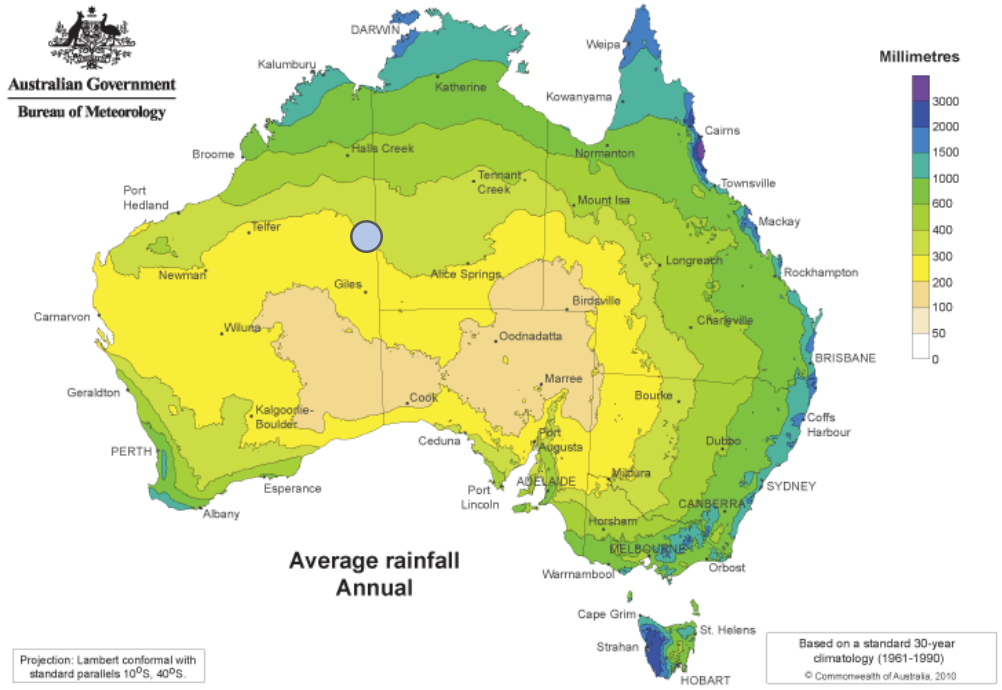
Appendix 3. Climate

- Arid climate of Lake Mackay is excellent for solar evaporation of brines
- Project is located in the highest solar radiation zone in the country with an evaporation rate of between 3,200mm to 3,400mm per year
- Project area has an average rainfall of 280mm per year

Average Annual Evaporation Map



Average Annual Rainfall Map



Source: Australian Bureau of Meteorology