

15 OCT 2021

ASX: TMG

## ASX ANNOUNCEMENT

# RRS-Mining News Conference Presentation

Trigg Mining Limited (**ASX: TMG**) (**Trigg** or the **Company**) is pleased to release a copy of the presentation to be provided by Ms Keren Paterson to delegates at the Resources Rising Stars and MiningNews.net "Boom in a Room" Investor Conference in Perth, Western Australia commencing at 9:15 am AWST today.

This announcement was authorised to be given to ASX by the Board of Directors of Trigg Mining Limited.

A handwritten signature in black ink that reads 'Keren Paterson'.

**Keren Paterson**  
Managing Director & CEO  
Trigg Mining Limited

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ASX : TMG

#mining4farmers

# Lake Throssell

## Potential Top 10 Global Sulphate of Potash Producer

Boom in a Room Investor Conference

15 October 2021



*Trigg Mining: Building mines communities can be proud of*

# DISCLOSURES AND DISCLAIMERS

## Cautionary Statement

This presentation (**Presentation**) is for informational purposes only and is not a prospectus, disclosure document or offer document under the Corporations Act 2001 (Cth) (**Corporations Act**) or any other law. This Presentation does not constitute, and is not to be construed as, an offer to issue or sell, or a solicitation of an offer or an invitation to subscribe for, buy or sell securities in Trigg Mining Limited ACN 168 269 752 (ASX:TMG) (**Trigg** or the **Company**). The Scoping Study referred to in this Presentation is based on the Scoping Study released by Trigg to ASX on 05 October 2021 titled "Positive Scoping Study for Lake Throssell Sulphate of Potash Project following Mineral Resource Upgrade"(Scoping Study Announcement).

The Company advises the Scoping Study referred to in this Presentation has been undertaken to determine the potential viability of the Lake Throssell Sulphate of Potash Project (the **Project**) in Western Australia. The Scoping Study is a preliminary assessment based on low accuracy technical and economic assessments ( $\pm 25\text{-}35\%$  Class 5). It is insufficient to support the estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised. Further exploration and evaluation work and appropriate studies are required before the Company will be able to estimate any Ore Reserves or to provide any assurance of an economic development case.

The Scoping Study is based on the material assumptions outlined in the Scoping Study announcement. These include assumptions about the availability of funding. While the Company considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

The Inferred and Indicated Mineral Resource estimate underpinning the production target was prepared by a competent person in accordance the JORC Code (2012). Over the payback period 82% of the production target is sourced from Indicated and 18% from Inferred Drainable Mineral Resources. Over the life of mine 70% of the production target is derived from Indicated Drainable Resources and 41% of the Total Drainable Mineral Resource estimate is scheduled over the life of mine. The inclusion of the Inferred Drainable Mineral Resource in the production target does not impact technical or financial viability. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Measured or Indicated Mineral Resources or that the Production Target or preliminary economic assessment will be realised.

To achieve the range of outcomes indicated in the Study, funding for capital and working capital requirements in the order of \$412 million will likely be required. Investors should note that there is no certainty that the Company will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Trigg's existing shares. It is also possible that Trigg could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the Project. If it does, this could materially reduce Trigg's proportionate ownership of the Project.

The Project will need environmental approvals and the grant of a mining lease. Although the Company currently sees no impediment to acquiring these, there is no guarantee that the Company will be able to obtain these or obtain them within the timeframe proposed in the Project development schedule.

The Scoping Study results contained in this Presentation relate solely to the Project and does not include Exploration Targets or Mineral Resources defined elsewhere. The Company has concluded it has a reasonable basis for providing the forward-looking statements included in this Presentation.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study and this Presentation is not and should not be considered as, an offer or invitation to acquire securities in TMG.





# DISCLOSURES AND DISCLAIMERS cont.

## Forward Looking Statements

This Presentation contains 'forward-looking statements' that are based on TMG's expectations, estimates and projections as of the date on which the statements were made. These forward-looking statements include, among other things, statements with respect to prefeasibility and definitive feasibility studies, TMG's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this Presentation are cautioned that such statements are only predictions, and that TMG's actual future results or performance may be materially different. Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause TMG's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information. Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to the risk factors set out in the Scoping Study Announcement. Except where required by law or the ASX Listing Rules, the Company doesn't not intend to update or revise the forward-looking statements in this Presentation in the future.

## Key Assumptions

Average LOM AUD/USD exchange rate of 0.73, SOP Price of US\$550/t LOM and 8% discount rate. All dollar values are in Australian dollars (A\$ or AUD) unless otherwise stated. Figures, amounts, percentages, estimates, calculations of value and other factors used in his presentation are subject to the effect of rounding.

## Competent Person Statement

The Mineral Resource Estimate was first announced, together with a Competent Person's Statement from Mr Adam Lloyd of Aquifer Resources Pty Ltd, on 05 October 2021 in the announcement titled "Positive Scoping Study for Lake Throssell Sulphate of Potash Project following Mineral Resource Upgrade". The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources, Exploration Target or Ore Reserves that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements; and that the information in the announcement relating to exploration results is based upon, and fairly represents the information and supporting documentation prepared by the named Competent Persons.

## Production Targets and Financial Forecasts

The production target was first announced on 05 October 2021 in the announcement titled "Positive Scoping Study for Lake Throssell Sulphate of Potash Project following Mineral Resource Upgrade". The Company confirms that it is not aware of any new information or data that materially affects the assumptions underpinning the production target or the forecast financial information derived from the production target.





# CORPORATE OVERVIEW

## Board of Directors



**Keren Paterson**  
Managing Director & CEO



**Mike Ralston**  
Non Executive Chairperson



**Rod Baxter**  
Non Executive Director



**Bill Bent**  
Non Executive Director

## Management Team

Chief Operating Officer	Tony Chamberlain
Principal Hydrogeologist	Adam Lloyd, Aquifer Resources
Study Manager	Chris Williams

## Capital Structure

Ordinary Shares (TMG)	116,630,728
Share Price (14/10/21)	\$0.083
Market Capitalisation	\$9.7 million
Cash (30/06/21)	\$4.1 million
Debt	Nil
Enterprise Value	\$5.6 million

## Top 10 Shareholders

Michael Ralston & Sharon Ralston <Ralston Family>	4.9%
Susetta Holdings Pty Ltd	4.7%
Julian Stephens <One Way>	4.2%
KP Consulting Group <SSB>	2.8%
John Richard Small	2.6%
Kenneth William Vidler	1.9%
William Bent <Bent Family>	1.8%
Puresteel Holdings Pty Ltd <Rattigan Super Fund>	1.6%
Silverfox Holdings <Silverfox Family>	1.4%
Rock Cod Investments	1.4%
<b>Total</b>	<b>27.3%</b>



# TIER 1 PROJECT AND LOCATION

## LARGE, HIGH-GRADE DEPOSIT

- Total Drainable Mineral Resource<sup>1</sup> - 14.4Mt @ 10.4kg/m<sup>3</sup> K<sub>2</sub>SO<sub>4</sub> or SOP
- Including Indicated Drainable Resource - 4.2Mt @ 10.6kg/m<sup>3</sup> K<sub>2</sub>SO<sub>4</sub>
- Further upside potential with additional Exploration Target

## EXCELLENT TRANSPORT LOGISTICS

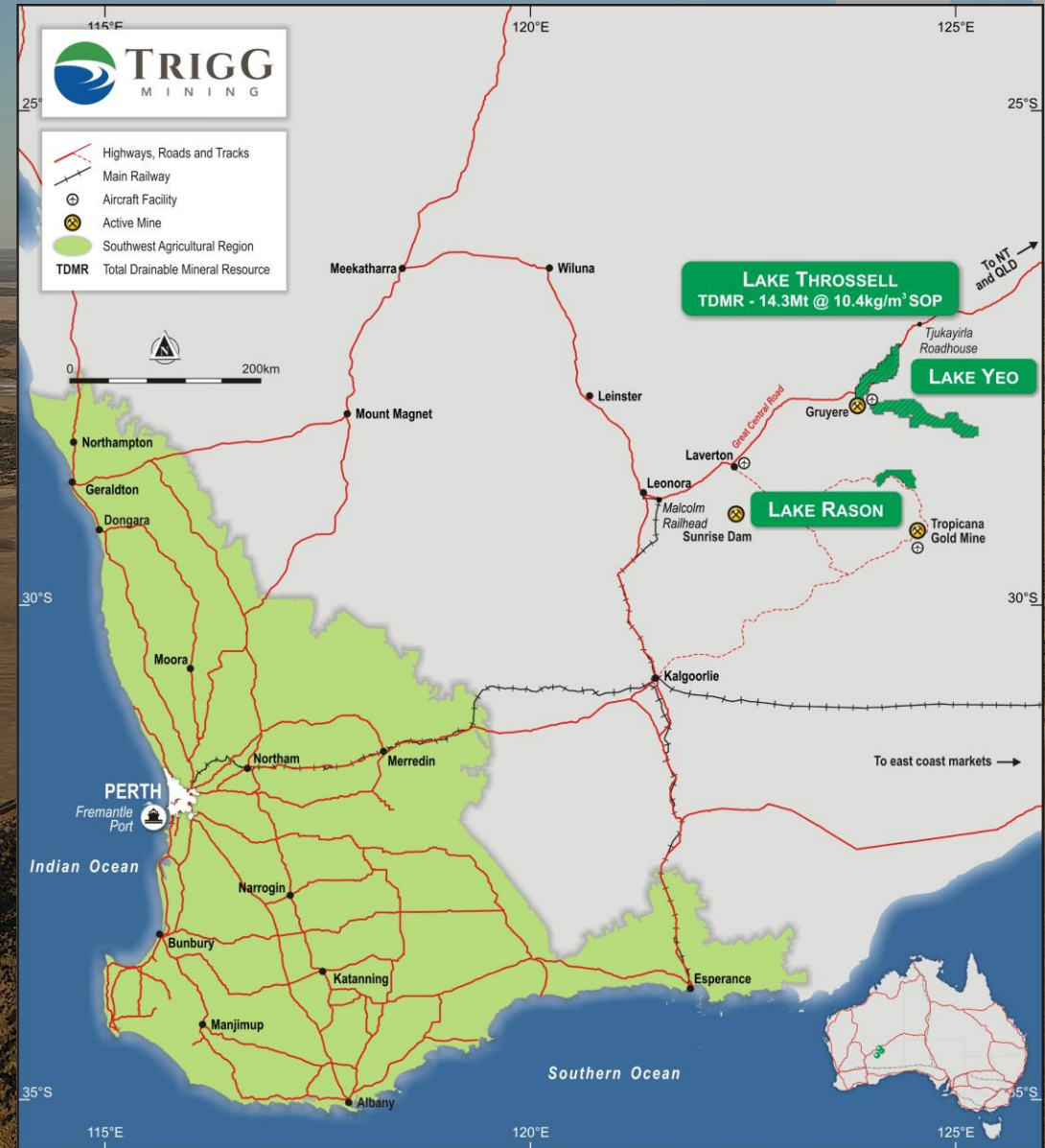
- 350km to Leonora on bitumen<sup>2</sup>, then
- 900km rail to Fremantle, WA

## TRULY SUSTAINABLE MINING

- Solar evaporation of saline brine (no open pit or rock waste dump)
- Producing a natural mineral fertiliser essential for global food production

1. See Appendix A

2. Trigg anticipates the sealing of the Laverton to Lake Throssell section of the Outback Way Highway upgrade, currently underway, will be completed prior to first production.





# SCOPING STUDY

## KEY ASSUMPTIONS

	Units	Value
<b>Key Financial Assumptions</b>		
Average LOM exchange rate	AUD/USD	0.73
SOP price	(US\$/t, FOB)	550
	(A\$/t, FOB)	753
Discount rate	%	8
<b>Key Physical Assumptions</b>		
Nameplate Production Target	ktpa SOP	245
Initial Life of Mine (LOM)	Years	21
LOM Production Target (41% of Total drainable Mineral Resource)	Mt	5.9Mt @ 10.4kg/m <sup>3</sup> SOP
Trench network	km	110
Bores	number	22-112
Overall recovery	%	82
Indicated to Inferred Resource (payback)	ratio	82:18
Indicated to Inferred Resource (LOM)	ratio	70:30



# SCOPING STUDY HIGHLIGHTS

THE LAKE THROSSELL  
SULPHATE OF POTASH  
PROJECT

Nameplate  
Production  
**245ktpa**

Initial Life of  
Mine  
**21 years**

EBITDA  
**\$97M**  
annually

CAPEX  
**\$378M**  
(incl. \$70M  
contingency)

C1 Cash Cost  
**\$341/t SOP**  
(US\$249/t)

AISC  
**\$372/t**  
(US\$272/t)

NPV  
**\$364M**

IRR  
**18%**

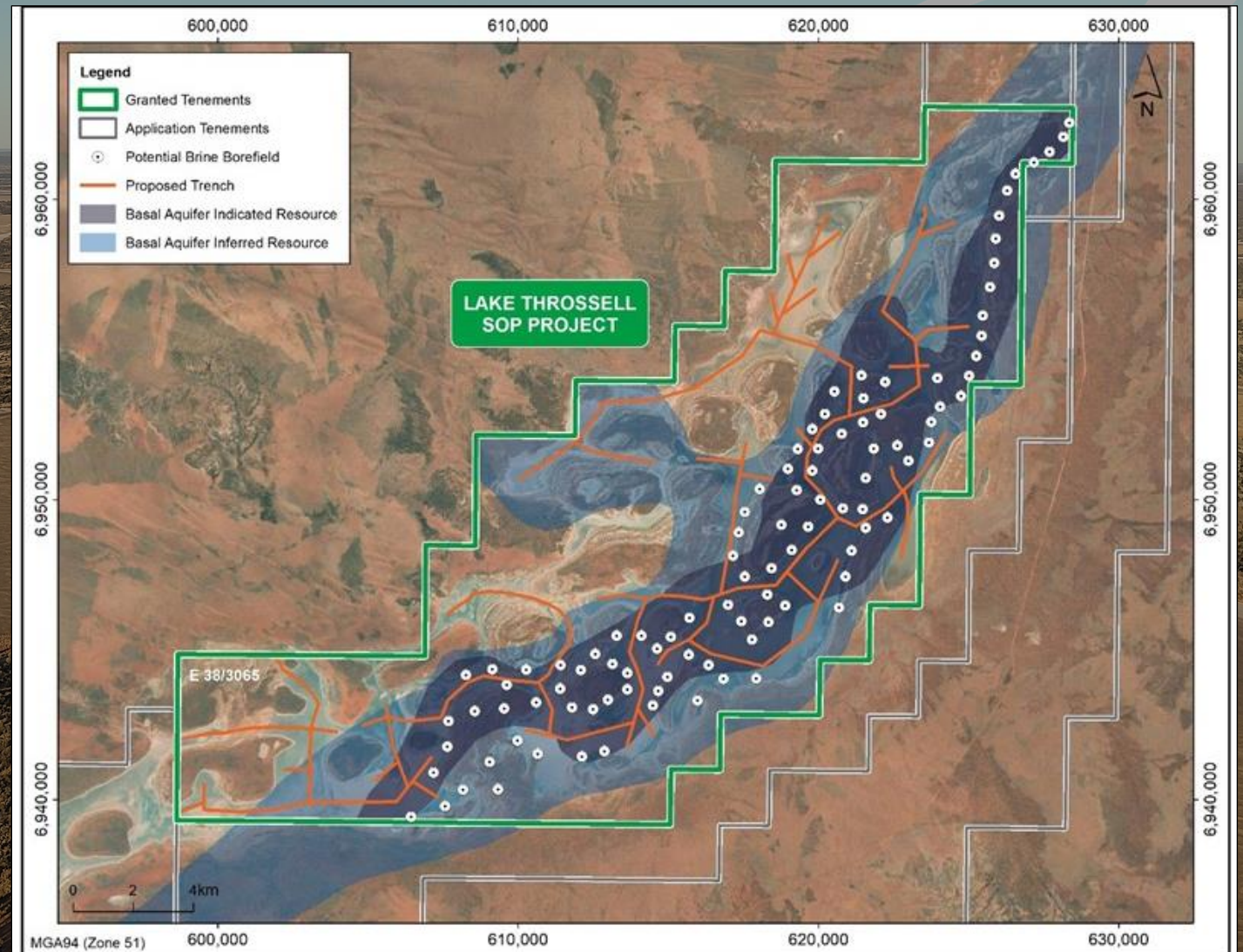
Payback  
**4.5-years**

Potential Global **Top 10** &  
**Lowest Cost Quartile** Producer



# PRODUCTION FROM TRENCHES AND BORES

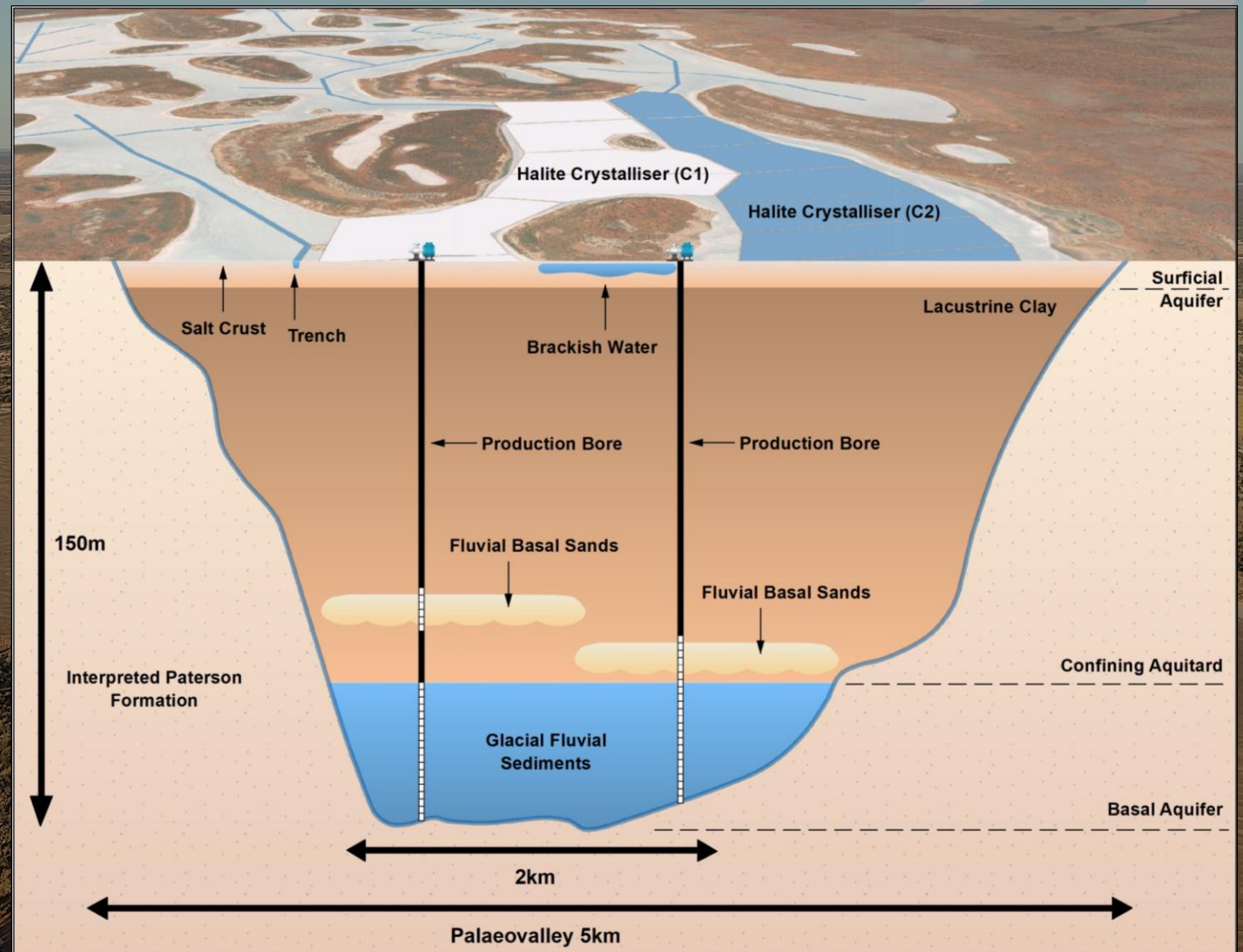
- Trenches - 110km
- Bores - initially 22, increasing to 112 over the mine life





# CROSS SECTION

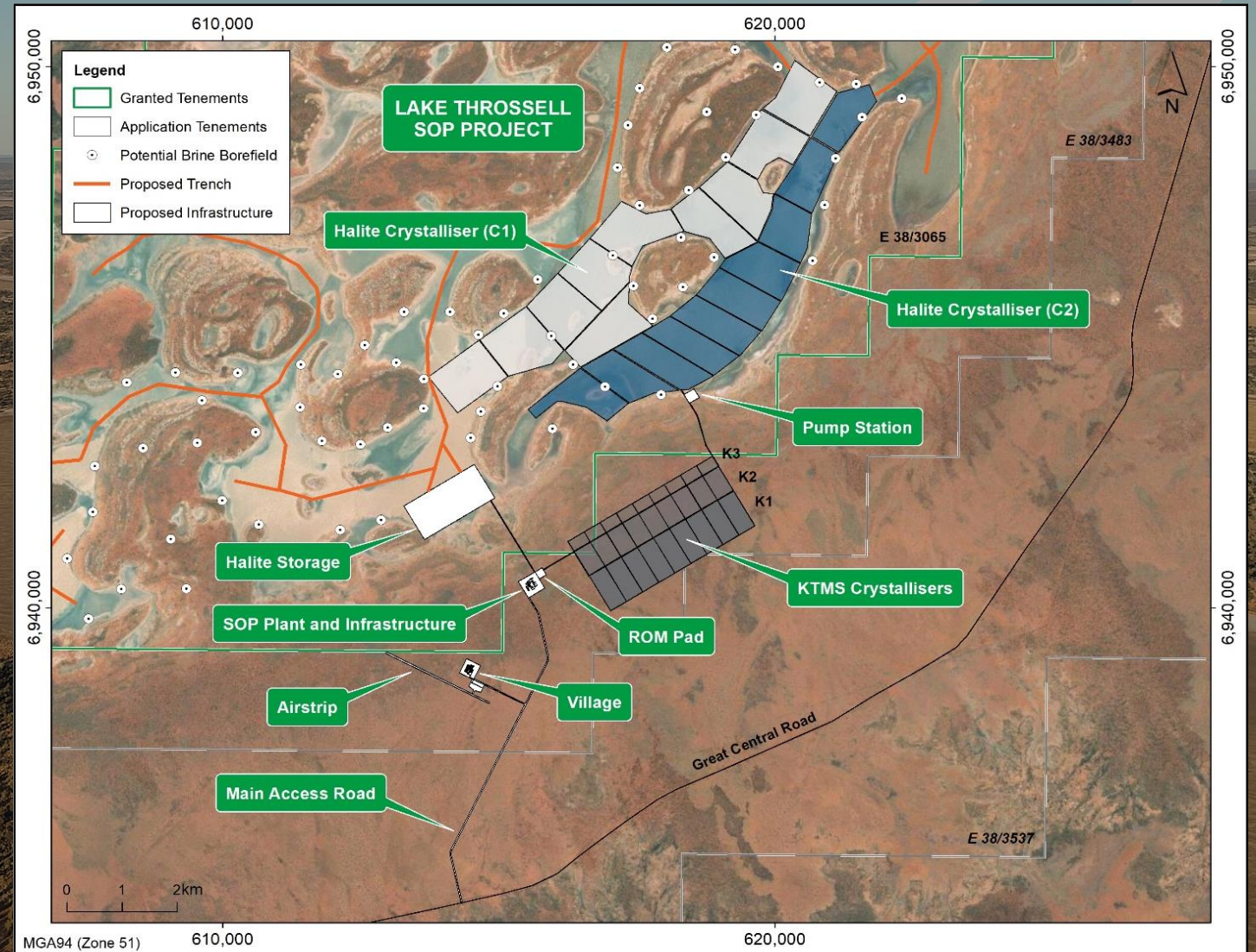
- 5km wide palaeovalley
- ~36km long
- Up to 150m in depth





# SITE LAYOUT

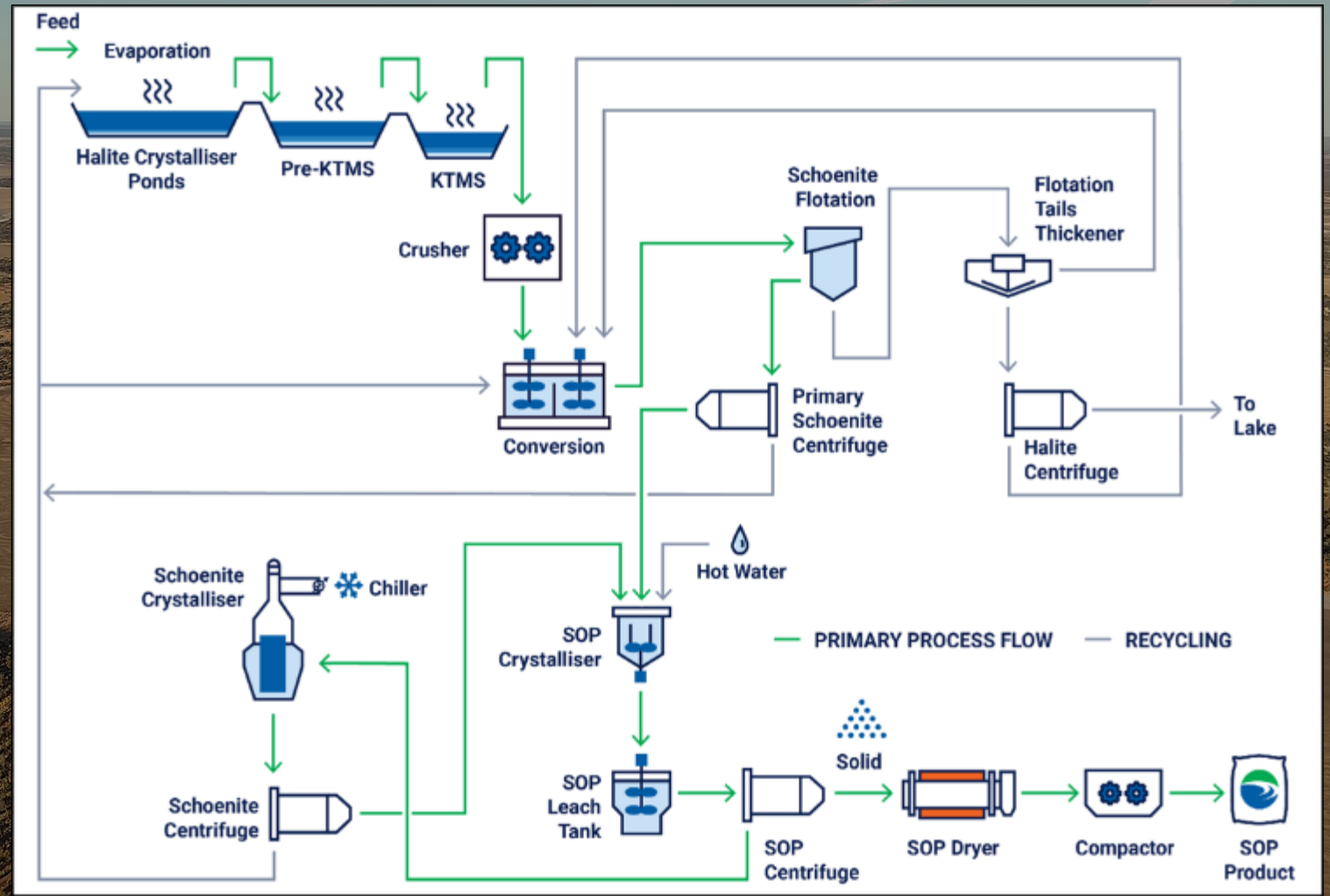
COMBINATION OF ON AND OFF-  
LAKE EVAPORATION PONDS  
MINIMISE ENVIRONMENTAL  
FOOTPRINT





# PROCESS FLOWSHEET

USING COMMERCIALLY PROVEN TECHNOLOGY





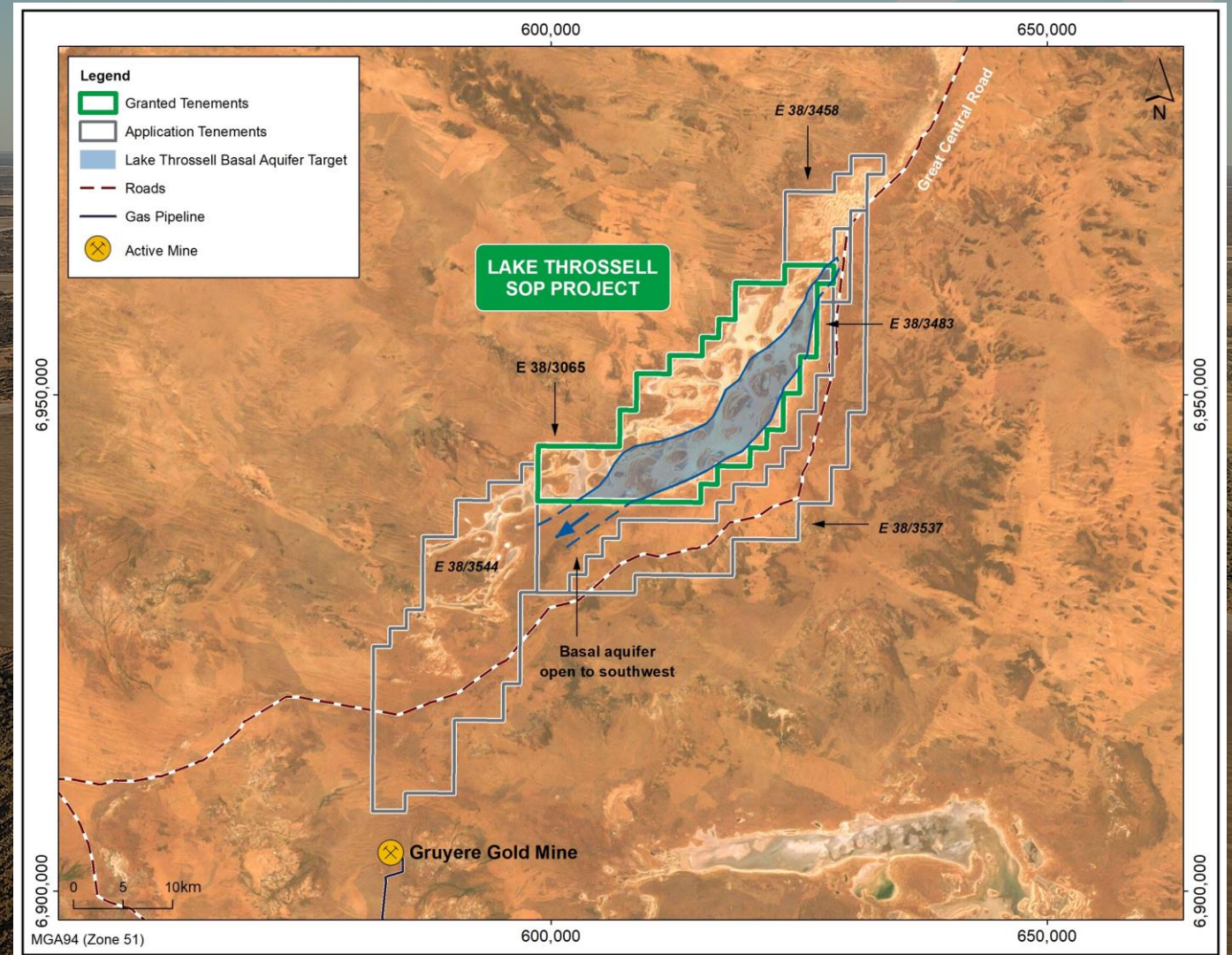
# LAKE THROSSELL EXPLORATION

TOTAL CURRENT MINERAL RESOURCE ESTIMATE<sup>3</sup> OF 14.4Mt @ 10.4kg/m<sup>3</sup> K<sub>2</sub>SO<sub>4</sub> (or SOP)

PLUS AN EXPLORATION TARGET OF 2.6 – 9.4Mt @ 9.5 – 10.3kg/m<sup>3</sup> K<sub>2</sub>SO<sub>4</sub>.

The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration in these areas to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource.

3. See Appendix B

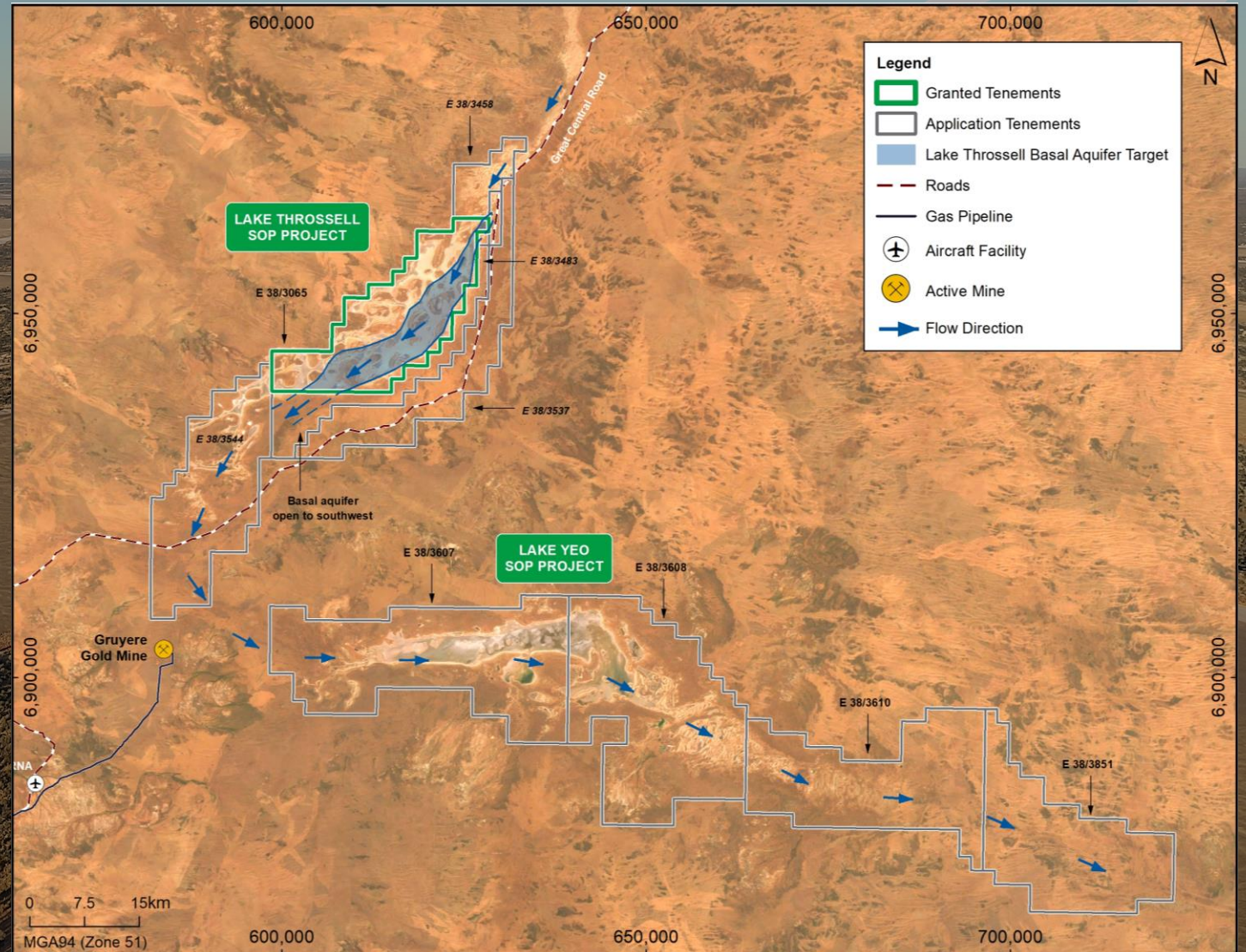




# LAKE YEO EXPLORATION

## POTENTIAL LAKE THROSSELL REPEAT

- From 35km to the south of Lake Throssell in the same interpreted palaeovalley
- Tenement Applications cover 1,915km<sup>2</sup> including more than 200km<sup>2</sup> of playa lake and almost 130km of strike





# WHY SULPHATE OF POTASH?

SOP (Potassium Sulphate,  $K_2SO_4$ ) is an essential fertiliser for high-value, chloride sensitive crops such as fruit, vegetables, avocados, coffee beans, grapes, tree nuts, cocoa, anything grown under glass and in arid and acidic soils.

## **Vs. MURIATE OF POTASH (MOP)**

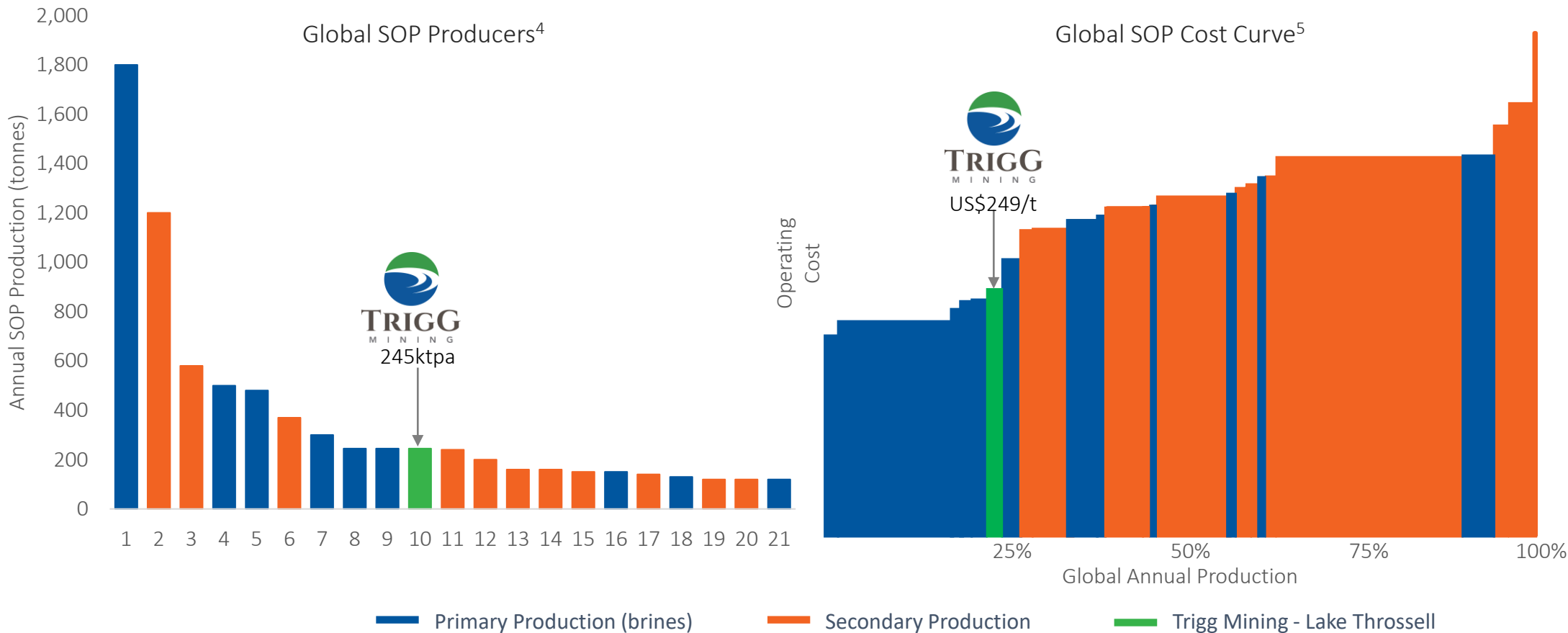
Muriate of Potash (Potassium Chloride) is a cheaper, more abundant source of potash, BUT it contains almost 50% chloride which is detrimental to chloride-sensitive crops and arid soils. It also contains no sulphur.





# LAKE THROSSELL, A WORLD-CLASS ASSET

Potential Top-10 producer, and lowest-cost quartile



Secondary production: Mannheim process – MOP (KCl) + sulphuric acid ( $H_2SO_4$ ), heated to  $\sim 800^\circ C$ . Produces Hydrochloric acid (HCl) + SOP ( $K_2SO_4$ ). Mannheim product is needed to meet global demand, creating an industry price floor well-above the cost of brine sources.

4. Global 2025 forecast production rates, showing Lake Throssell SOP Project (Source: CRU July 2021, Trigg analysis)

5. Global 2024 SOP Industry FOB cost curve (Source: CRU July 2021, Trigg analysis)



# RAPIDLY RISING PRICES

SCOPING STUDY - USD550/t

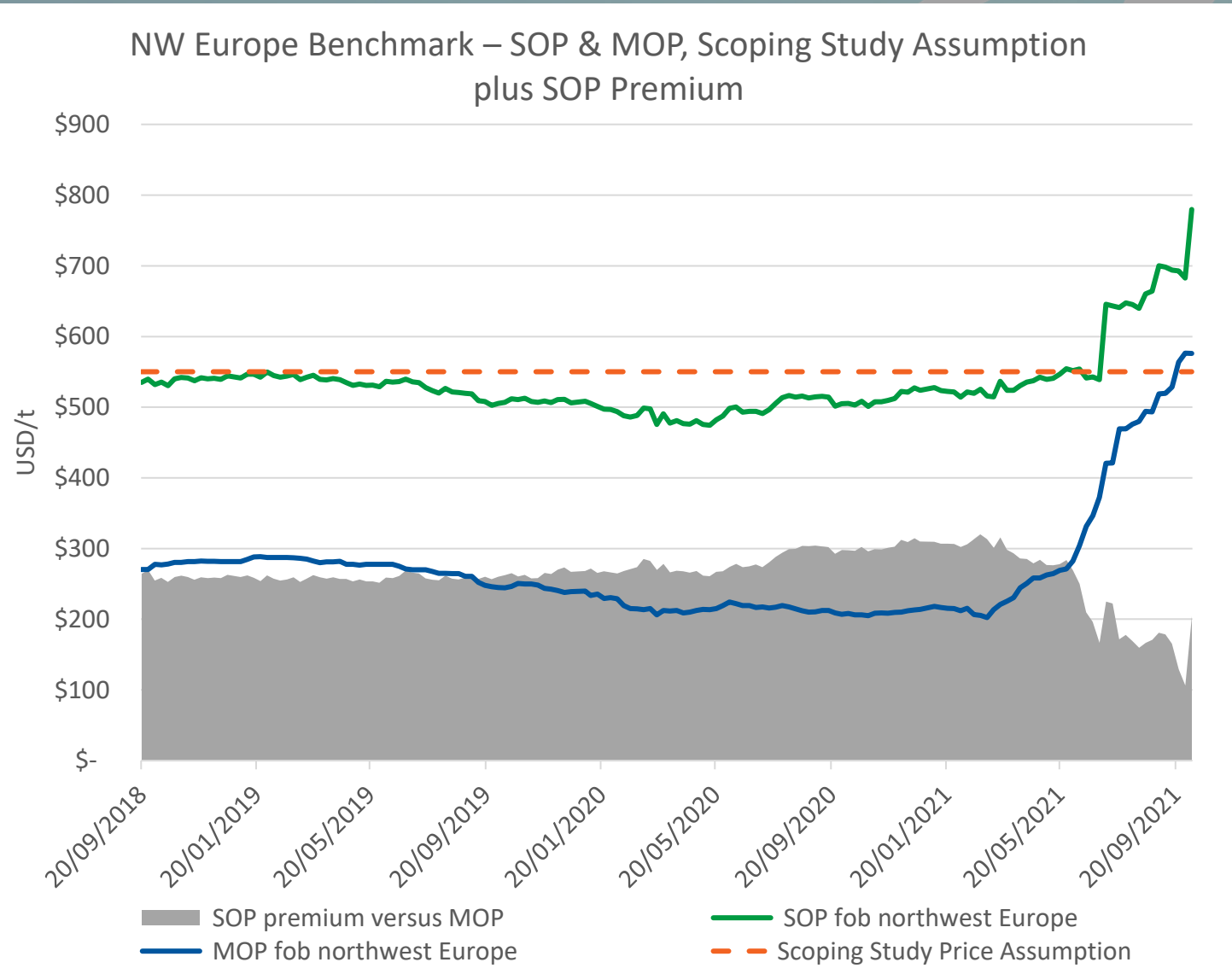
CURRENT PRICE - USD780/t (+42%)

SCOPING STUDY NPV SENSITIVITY -  
+\$144M / 10% increase in price<sup>6</sup>

## PRICE RISE DUE TO

- Surging crop prices
- Supply side constraints
- Mannheim input costs

6. See ASX Release Positive Scoping Study on Lake Throssell and MRE Upgrade dated 05/10/2021

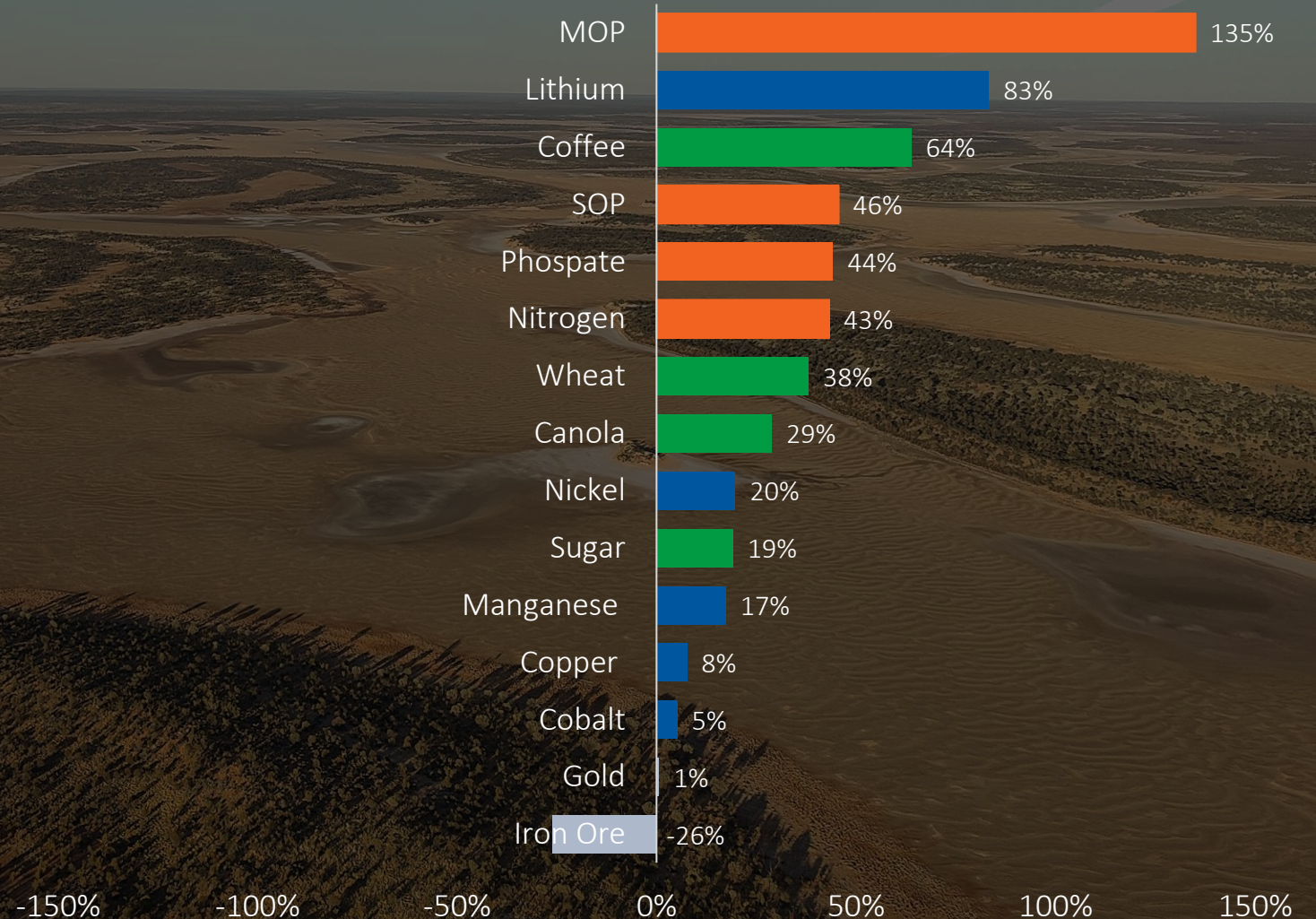


Source: Argus Media – Potash



# IS THE NEXT COMMODITY BOOM FERTILISERS AND AGRICULTURE?

6-month Change in Commodity Prices



Sources: See Appendix B for a detailed list of sources



# THE TRIGG MINING INVESTMENT CASE



Lake Throssell set to become a Top 10 Global, lowest-cost quartile SOP producer



Outstanding economics for a multi-decade operation (initial mine life of 21 years)



Located in a world class mining jurisdiction



Australian-made premium, natural potassium fertiliser



Significant Exploration Potential – extend mine life



Global mega-trends driving global demand growth



✓ Scoping Study  
Pre-Feasibility underway





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# APPENDIX A – TOTAL MINERAL RESOURCE ESTIMATE

Aquifer	Mineral Resource Category	Volume (10 <sup>6</sup> m <sup>3</sup> )	Total Porosity (%)	Brine Volume (10 <sup>6</sup> m <sup>3</sup> )	Specific Yield (%)	Drainable Brine Volume (10 <sup>6</sup> m <sup>3</sup> )	K Grade (mg/L)	K Mass (Mt)	SO <sub>4</sub> Grade (mg/L)	SO <sub>4</sub> Mass (Mt)	Equivalent SOP Grade (K <sub>2</sub> SO <sub>4</sub> ) (kg/m <sup>3</sup> )	Drainable Brine SOP Mass (Mt)	Total Brine SOP Mass (Mt)
<b>LAKE THROSSELL MINERAL RESOURCE</b>													
Surficial	Indicated	1,008	0.40	403	0.17	170	4,985	0.8	22,125	3.8	11.1	1.9	4.5
Basal	Indicated	1,150	0.29	329	0.19	225	4,605	1.0	24,420	5.5	10.3	2.3	3.4
<b>Total Indicated Resource</b>		<b>2,159</b>		<b>732</b>		<b>395</b>	<b>4,770</b>	<b>1.9</b>	<b>23,430</b>	<b>9.3</b>	<b>10.6</b>	<b>4.2</b>	<b>7.9</b>
Surficial	Inferred	3,074	0.43	1,313	0.10	310	4,605	1.4	21,910	6.8	10.3	3.2	13.5
Confining Layer	Inferred	8,793	0.45	3,957	0.04	350	4,595	1.6	23,140	8.1	10.2	3.6	40.6
Basal	Inferred	3,524	0.40	1,394	0.09	330	4,675	1.5	22,920	7.6	10.4	3.4	14.5
<b>Total Inferred Resource</b>		<b>15,391</b>		<b>6,664</b>		<b>990</b>	<b>4,625</b>	<b>4.5</b>	<b>22,680</b>	<b>22.5</b>	<b>10.3</b>	<b>10.2</b>	<b>68.6</b>
<b>Total</b>		<b>17,550</b>		<b>7,396</b>		<b>1,385</b>	<b>4,666</b>	<b>6.4</b>	<b>22,894</b>	<b>31.8</b>	<b>10.4</b>	<b>14.4</b>	<b>76.5</b>
<b>LAKE RASON INFERRED MINERAL RESOURCE</b>													
Surficial	Inferred	3,060	0.4	1220	0.1	306	2,290	0.70	21,400	6.55	5.10	1.56	6.23
Crete	Inferred	5,020	0.38	1910	0.07	351	2,330	0.82	20,900	7.34	5.20	1.83	9.91
Mixed	Inferred	230	0.3	70	0.1	23	2,390	0.05	21,900	0.50	5.32	0.12	0.36
Basal Sand	Inferred	1,020	0.3	310	0.21	214	2,390	0.51	22,600	4.84	5.33	1.14	1.63
Saprolite	Inferred	2,800	0.2	560	0.03	84	2,210	0.19	21,000	1.76	4.92	0.41	2.76
Saprock	Inferred	9,310	0.1	930	0.02	186	2,050	0.38	21,000	3.91	4.57	0.85	4.25
<b>Total</b>		<b>21,400</b>		<b>4,990</b>		<b>1,160</b>	<b>2,280</b>	<b>2.65</b>	<b>21,400</b>	<b>24.89</b>	<b>5.08</b>	<b>5.91</b>	<b>25.2</b>
<b>TOTAL MINERAL RESOURCE</b>		<b>38,950</b>		<b>12,386</b>		<b>2,545</b>	<b>3,579</b>	<b>9.1</b>	<b>22,213</b>	<b>56.7</b>	<b>8.0</b>	<b>20.3</b>	<b>101.7</b>
<b>LAKE THROSSELL EXPLORATION TARGET (in addition)</b>													
Lower Estimate		5,807				288	4,081	1.2			9.1	2.6	
Upper Estimate		10,925				945	4,466	4.2			10.0	9.4	

**Note:** Errors may be present due to rounding, approximately 1.2Mt of Drainable SOP Mass is present in Exploration Licence Application E38/3437. Approximately 2.86Mt of the Drainable SOP Mass is present in Exploration Licence Applications E38/3544, E38/3483, E38/3458, and E38/3537. Total porosity and total brine SOP mass is provided to compare the total SOP tonnes with the drainable Resources. As can be seen, the total brine volume of 102.53Mt is significantly higher than reported drainable brine volume of 20.2Mt. The drainable brine volume represents the amount of SOP that can be abstracted from the deposit under normal pumping conditions. For economic production, the drainable brine volume is the most important volume because only a proportion of the total brine present can be typically abstracted from the deposit. The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration in these areas to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Mineral Resource Estimate was first announced, together with a Competent Person's Statement from Mr Adam Lloyd of Aquifer Resources Pty Ltd, on 05 October 2021 in the announcement titled "Positive Scoping Study for Lake Throssell Sulphate of Potash Project following Mineral Resource Upgrade".



# APPENDIX B – INFORMATION SOURCES

## PRODUCTION RATES AND COMMODITY PRICE SOURCES

Company	Source Type	Source Date	Title of Source
Australian Potash Limited	ASX Announcement	23/03/2017	Scoping Study Confirms Exceptional Economics of APC's 100% owned Lake Wells Potash Project in WA
Australian Potash Limited	ASX Announcement	28/08/2019	Australian Potash Ltd Announces Definitive Feasibility Study Outstanding Outcome Over 30 Year Mine Life
Australian Potash Limited	ASX Announcement	20/04/2021	Front End Engineering Design Positions K-Brite™ at the Premium End of the Global SOP Market
Agrimin Limited	ASX Announcement	23/08/2016	Positive Scoping Study for the Mackay SOP Project
Agrimin Limited	ASX Announcement	07/05/2018	Pre-Feasibility Study Completed for Mackay SOP Project
Agrimin Limited	ASX Announcement	21/07/2020	Targeting the World's Lowest Cost SOP Production
SO4 Limited	ASX Announcement	13/06/2019	Exceptional Economics of Commercial Scale Development at Lake Way
SO4 Limited	ASX Announcement	11/10/2019	Outstanding Bankable Feasibility Study Results for Lake Way
Reward Minerals Ltd	ASX Announcement	02/04/2015	Reward Delivers Significant Scoping Study Results for the LD Potash Project
Reward Minerals Ltd	ASX Announcement	13/04/2018	Pre-Feasibility Study Update
Kalium Lakes Limited	ASX Announcement	03/10/2017	Pre-Feasibility Study with Maiden Ore Reserve Confirms Low Cost, Long Life and High Margin Beyondie SOP Project
Kalium Lakes Limited	ASX Announcement	18/09/2018	Bankable Feasibility Study Complete with Exceptional Financial Outcomes
Kalium Lakes Limited	ASX Announcement	04/03/2019	Lower Operating Cost and Increased Production For BSOPP
Kalium Lakes Limited	ASX Announcement	21/05/2020	Project Update and A\$61 million Equity Raising
Kalium Lakes Limited	ASX Announcement	18/08/2021	Feasibility Study Complete for New Base Case Production Increase to 120ktpa at Beyondie SOP Project
Department of Agriculture (Australia)	Public Webpage	13/10/2021	World Agricultural Spot Prices for Sugar, Canola wheat
London Metal Exchange	Public Webpage	13/10/2021	Metals spot price for Gold, Cobalt, Copper, Nickel
Trading Economics – Commodities	Public Webpage	13/10/2021	Global Commodity spot prices for iron ore, coffee, lithium, manganese

Note: USD capital and operating cost amounts were converted to AUD using the FX rate quoted in the respective study. If no FX rate was provided, a spot rate of 0.76 was used as per June 2021. Kalium Lakes Limited's FEED, Project Update and Feasibility Study operating cost figures have not been quoted in their respective ASX announcements (only all in sustaining cost (AISC)) and therefore are not included.