



05 October 2021

ASX ANNOUNCEMENT

ASX: TMG

Positive Scoping Study for Lake Throssell Sulphate of Potash Project following Mineral Resource Upgrade

Trigg Mining Limited (ASX:TMG) (**Trigg** or the **Company**) is pleased to announce the completion of a Scoping Study on its flagship 100%-owned Lake Throssell Sulphate of Potash (SOP) Project (**Project**) underpinned by the upgrade of a portion of the total drainable Mineral Resource to the Indicated category. The Project, located in the Eastern Goldfields of Western Australia, will comprise the harvesting of brine water from subterranean aquifers, evaporation ponds, processing plant and supporting infrastructure to produce a naturally forming potassium-rich salt, potassium sulphate (or sulphate of potash) used globally as a fertiliser and in other industrial purposes.

The Company sees this positive Scoping Study as an important milestone in the evaluation of the Lake Throssell SOP Project and has approved the immediate commencement of a Pre-Feasibility Study.

Scoping Study – Cautionary Statement

The Company advises the Scoping Study referred to in this announcement 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 (± 25 -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 Study is based on the material assumptions outlined in this release. These include assumptions about the availability of funding. While the Company considers all 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 Study results contained in this announcement relate solely to the Project and do not include Exploration Targets or Mineral Resources defined elsewhere.

This announcement contains a series of forward-looking statements. Generally, the words "expect," "potential", "intend," "estimate," "will" and similar expressions identify forward-looking statements. By their very nature forward-looking statements are subject to known and unknown risks and uncertainties that may cause actual results, performance or achievements, to differ materially from those expressed or implied in any forward-looking statements, which are not guarantees of future performance. Statements in this release regarding Trigg's business or proposed business, which are not historical facts, are forward-looking statements that involve risks and uncertainties, such as Mineral Resource estimates, market prices of metals, capital and operating costs, changes in project parameters as plans continue to be evaluated, continued availability of capital and financing and general economic, market or business conditions, and statements that describe Trigg's future plans, objectives or goals, including words to the effect that Trigg or management expects a stated condition or result to occur. Forward-looking statements are necessarily based on estimates and assumptions that, while considered reasonable by Trigg, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements. Investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date they are made. Trigg has concluded it has a reasonable basis for providing these forward-looking statements and believes it has reasonable basis to expect it will be able to fund development of the project. However, a number of factors could cause actual results or expectations to differ materially from the results expressed or implied in the forward-looking statements.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of this Study. Please refer to Appendix A for further details.



Figure 1: Lake Throssell Sulphate of Potash Project

Key Highlights of the Lake Throssell SOP Project Scoping Study:

Indicated Mineral Resource expanded

- Following the positive outcomes of the groundwater model, a review of the drill logs and reinterpretation of the resource block model has led to the reclassification of the highly permeable mineralised domains within the basal aquifer to Indicated status for a total drainable Indicated Mineral Resource estimate of 4.2Mt of SOP at 4,770mg/L potassium (K) (or 10.6kg/m³ K₂SO₄)
- Total drainable Mineral Resource now stands at 14.4Mt at 4,665mg/L potassium (or 10.4 kg/m³ K₂SO₄)

Long mine life and scale

- Annual nameplate Production Target of 245ktpa SOP over an initial Life-of-Mine (LOM) of 21 years
- Approximately 82% of the payback period is from Indicated Mineral Resources and 70% over the LOM

Low operating costs, robust financials

- A LOM average cash operating cost of \$341/t SOP and an all-in sustaining cost of \$372/t SOP
- An initial capital cost of \$378M, including a \$70M contingency with an accuracy of ±25-35%
- Lake Throssell will generate an average EBITDA of \$97 million per annum at a US\$550/t SOP price
- Robust financials confirm Lake Throssell as a potential Tier-1 global SOP Project

Low risk and commercially proven flowsheet

- Simple network of trenches and bores, solar evaporation and a process plant uses proven technology

Next Steps

- Work to immediately commence on a Pre-Feasibility Study and
- Continuation of environmental baseline surveys and Project Referral to the EPA planned for 2022

Management Comment

Trigg Mining Managing Director Keren Paterson said: *“The completion of a Scoping Study is a huge milestone for the Trigg team, for our shareholders and for those who have supported us since we listed on the two years ago. The Scoping Study outcomes strongly vindicate our long-held belief that Lake Throssell is a potential company-maker – a high-quality, long-life asset which can transform Trigg into a modern, sustainable Australian SOP producer with a Top 10 globally competitive Project.*

“The key attributes of the Project are clearly highlighted in this Study – the scale and quality of the Resource, its Tier-1 location, proximity to infrastructure and ability to support a multi-decade operation which can also deliver a number of exceptional ESG outcomes. Apart from the social and economic benefits it will provide, the Project utilises solar evaporation to produce a natural fertiliser essential for global food security.”

“This is a defining moment for Trigg and provides investors with a clear picture of the economic potential of Lake Throssell as a long-life, low-cost Project that can ultimately provide dividends to shareholders.

“Our methodical and focused approach to developing the Project will continue as we leverage the key learnings from the new potash industry currently being developed in Western Australia.

“We are very excited about the opportunities in front of us and we are looking forward to progressing the Project to the next stage with a Pre-Feasibility Study.”

Lake Throssell Sulphate of Potash Scoping Study

Introduction

The Lake Throssell SOP Project Scoping Study was supervised by an experienced in-house team and carried out by external experts. CPC Project Design Pty Ltd provided capital and operating cost estimates to a ± 25 -35% Class 5 standard, Hatch Engineering provided the process flowsheet and equipment sizings, Aquifer Resources provided the Mineral Resource estimate and solute transport model to determine the production target. Financial modelling, benchmarking and funding analysis was provided by Euclase Capital.

The Scoping Study results confirm the potential for the Lake Throssell SOP Project to be a low-cost, long-life producer of natural sulphate of potash for food production.

Project Concept

The potential development of the Lake Throssell SOP Project comprises the following concepts:

- The establishment of a trenching and bore network to supply up to 29GLpa of potassium-rich brine per annum to the evaporation ponds for 21 years
- 2,150Ha of evaporation ponds and a processing plant to produce 245ktpa of SOP
- Supply of 2.5GLpa of process water
- Construction of supporting infrastructure including:
 - 10MW power station consuming trucked LNG plus a 5MW solar farm
 - 120-room accommodation village
 - Airstrip, offices administration buildings, gate house, warehousing, workshops and general facilities
 - Mine access road and site access tracks
- Compaction of the product to a granular form and bagged in 1t bulk bags prior to packing in sea containers for transportation
- Transport 350km via road from Lake Throssell to the Malcom railhead at Leonora prior to loading on to rail and transport 950km to the container port at Fremantle.

Key Project Metrics

A summary of the key physical assumptions for the Lake Throssell SOP Project and the financial model outputs are provided in Table 1.

A flat exchange rate of AUD:USD of 0.73 (spot rate as at 1 September 2021) and all currency is in Australian dollars (\$) unless otherwise stated. A flat SOP price of US\$550/t (Free-on-board (FOB)) has been assumed across the Project life. The SOP price used represents a consensus view of market analysts' long-term price and a report undertaken by industry marketing leaders CRU International Limited (**CRU**). Sensitivity analysis on key variables including SOP price, exchange rate, production target, royalty rate, discount rate, operating and capital cost estimates is provided in the Economic Analysis section of this release.

Table 1: Key assumptions, production target and financial model outputs

Key Assumptions & Financial Metrics	Units	Value
Key Financial Assumptions		
Average LOM exchange rate	AUD/USD	0.73
SOP price	(US\$/t, FOB)	550
	(A\$/t, FOB)	753
Discount rate	%	8
Key Physical Assumptions		
LOM Production Target	Mt	5.9Mt @ 10.4kg/m ³ SOP
Life of Mine (LOM)	Years	21
Brine abstraction		
Trench network	km	110
Bores	number	22-112
Overall recovery	%	82
Annual Production Target	ktpa SOP	245
Capital Cost		
Total direct costs	\$M	269
Total indirect costs	\$M	40
Contingency and growth	\$M	70
Total Capital Cost	\$M	378
Pre-production working capital	\$M	34
Total Funding Requirement	\$M	412
Operating Cost		
C1 Cash Operating Cost	\$/t SOP	341
Sustaining Capital, royalties, Native Title compensation and closure costs	\$/t SOP	31
All-in Sustaining Cost (AISC)	\$/t SOP	372
Financial Metrics		
Average Annual LOM Revenue	\$Mpa	180
Average Annual EBITDA (including royalty and NT compensation)	\$Mpa	97
NPV ₈ (pre-tax)	\$M	364
IRR (pre-tax)	%	18
Payback from first SOP production	years	4.5

Conclusion and Recommendations

The Lake Throssell Scoping Study confirms that the development of a 245ktpa SOP Project is technically and commercially feasible. Given the results delivered by the Scoping Study the Board of Trigg Mining has approved the Company proceeding to the Pre-feasibility stage.

Project Description

The Lake Throssell SOP Project is 100%-owned and operated by Trigg and lies approximately 180km north-east of Laverton, situated on a granted Exploration Licence (E38/3065) and Exploration Licence Applications (E38/3458, E38/3483, E38/3537 and E38/3544) covering an area of 1,084km². Figure 2 shows the Project location and tenure.

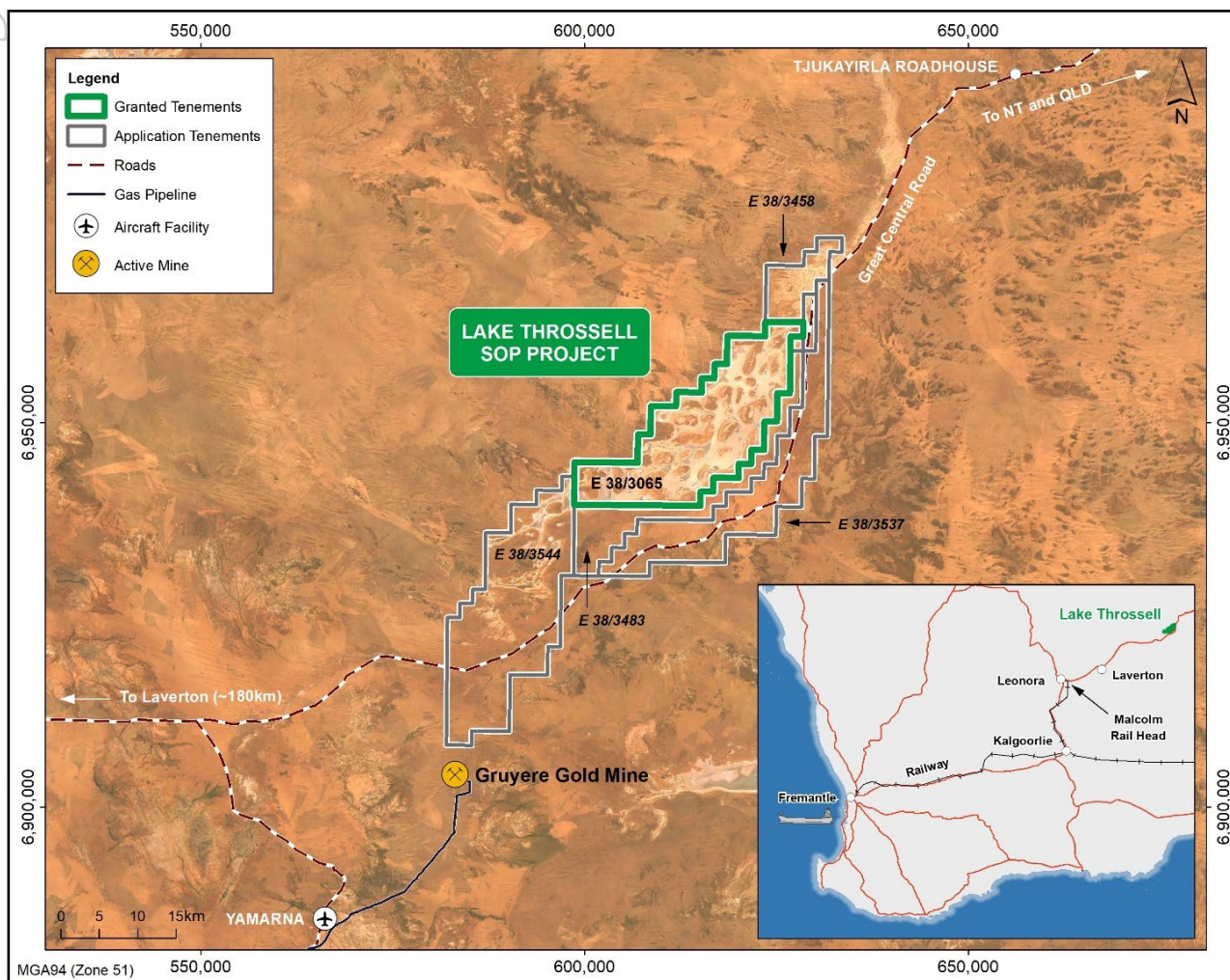


Figure 2: Project location of the Lake Throssell Sulphate of Potash Project

The Project comprises two distinct aquifer zones – surficial and basal – with the surficial aquifer representing the upper 25 metres of the palaeovalley and the basal aquifer located at or near the base of the palaeovalley with a basement depth of approximately 100-150 metres.

In Years 1 to 6 the brine will mostly be sourced from the surficial aquifer using a network of trenches across the lake surface. The cost of brine extraction from for this period is lower than the overall LOM costs. Approximately 80% of SOP production for the first five years of operation is sourced from the surficial aquifer. Bores will be progressively installed to supplement brine feed as the flowrate from the surficial aquifer declines.

An annual Production Target of 245ktpa of granulated SOP product will be placed in sea containers and transported to the Port of Fremantle for export. Wherever possible the Company intends to prioritise sales for domestic use, but for the purpose of estimating the operating cost for this study it is assumed 100% of the product is transported to Fremantle.

The Project will generate approximately 125 permanent direct jobs (114 site-based) and up to 250 site construction jobs over an estimated two-year construction phase.

Geology

Lake Throssell is an extensive palaeovalley system up to 5km wide and approximately 70km in length in the Project area. Within the palaeovalley there are two main mineralised domains. The upper surficial aquifer is typically 25 metres in depth, inclusive of the lake surface. The surficial aquifer lies on top of a thick sequence of stiff lacustrine clay, which acts as a confining layer that hydraulically separates the surficial aquifer from the basal aquifer sediments, in a sequence known as the palaeovalley. The basal aquifers consist of Pliocene to Eocene fluvial sediments, Permian glacial fluvial sediments and weathered basement or saprolite of the Paterson Formation. The basal aquifer is considered to be up to 50 metres in thickness in places.

A typical cross-section of the Lake Throssell palaeovalley is shown in Figure 3.

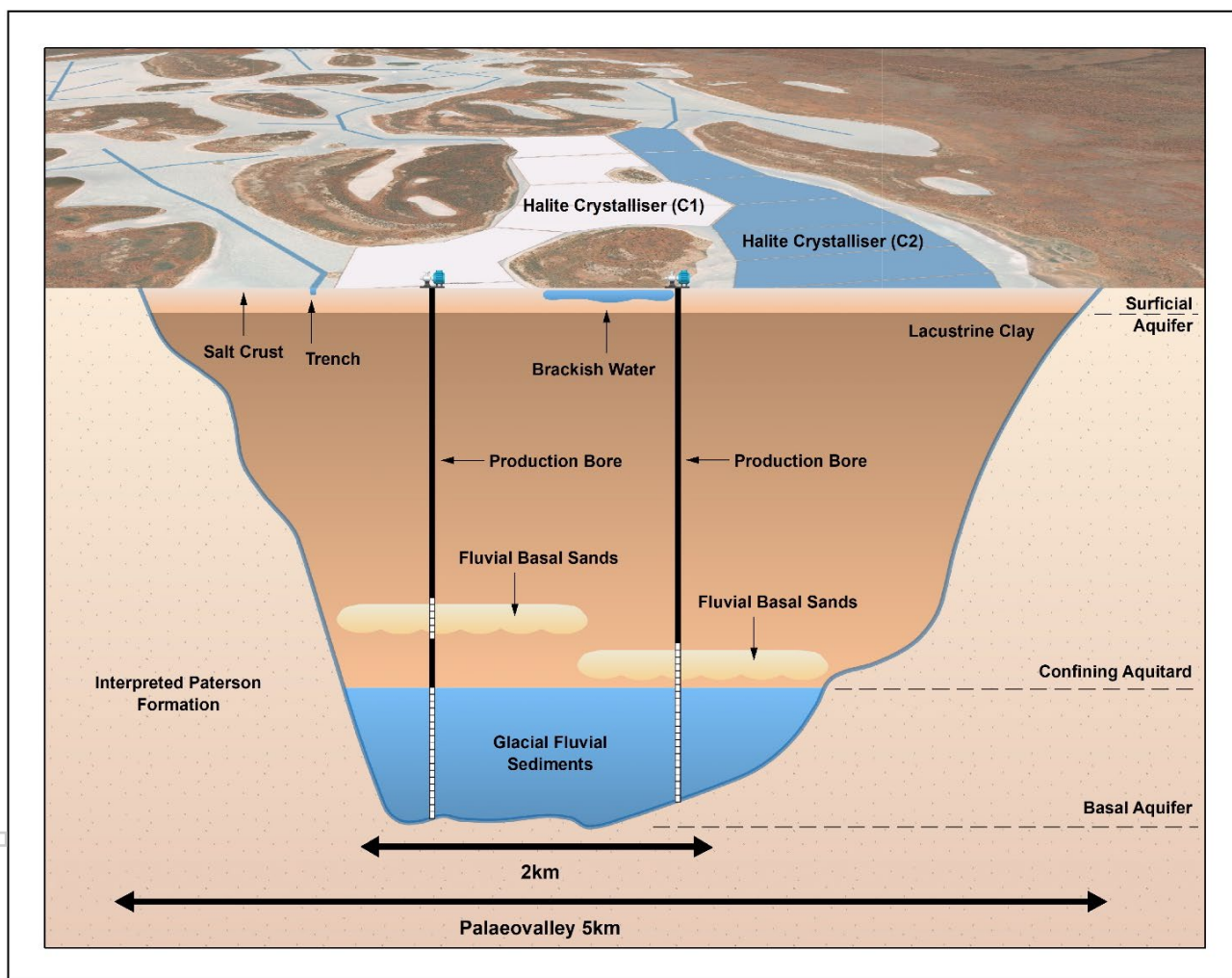


Figure 3: Typical geological cross section of the Lake Throssell palaeovalley

Mineral Resource Estimate

The updated Mineral Resource estimate for the Lake Throssell Potash Project is presented in Table 2 and has been reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, (JORC Code 2012). The report is attached as Appendix C and contain the JORC Table 1.

The basis of the updated Mineral Resource estimate has resulted from a review of the drill logs and reinterpretation of the resource block model of the highly permeable mineralised domains within the basal aquifer following the positive outcomes from the groundwater model as part of this study. The modelling has confirmed the hydrogeological continuity and abstraction potential of the central portion of the basal aquifer and permits the estimation of an Indicated Mineral Resource. Ordinary kriging was used to estimate the grade and volume of the reclassified Indicated Mineral Resource within the basal aquifer. No cut off grade has been applied to the estimate, which is consistent with other brine projects. Figure 5 shows the upgrade Indicated mineralised domain within the basal aquifer. Drill holes spacing is present in Figure 4.

The Indicated Mineral Resource estimate for the basal aquifer is 2.3Mt of drainable SOP at 4,605mg/L potassium (or 10.3kg/m³ K₂SO₄). Overall the total Mineral Resource has increased since the last estimate (see ASX release 26 July 2021) by 0.1Mt to 14.4Mt of drainable SOP at 4,665mg/L potassium (or 10.4kg/m³ K₂SO₄).

The Exploration Target, in addition to the Mineral Resource estimate, remains 2.6 – 9.4 Mt of drainable SOP at 4,261 – 4,616mg/L potassium (or 9.5 – 10.3kg/m³ SOP). 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.

Table 2: Lake Throssell Mineral Resource July 2021^{1, 2, 3}

Resource Domain	Mineral Resource Category	Drainable Brine Volume (10 ⁶ m ³)	Potassium (K) Grade (mg/L)	Potassium (K) Mass (Mt)	Sulphate (SO ₄) Mass (Mt)	Equiv. SOP Grade (K ₂ SO ₄) (kg/m ³)	Drainable Brine SOP Mass (Mt)	Total Brine SOP Mass (Mt)
LAKE THROSSELL MINERAL RESOURCE								
Surficial Aquifer	Indicated	170	4,985	0.9	3.8	11.1	1.9	4.5
Basal Aquifer	Indicated	225	4,605	1.0	5.5	10.3	2.3	3.4
Total Indicated Resource		395	4,770	1.9	9.3	10.6	4.2	7.9
Surficial Aquifer	Inferred	310	4,605	1.4	6.8	10.3	3.2	13.5
Confining Layer	Inferred	350	4,595	1.6	8.1	10.2	3.6	40.6
Basal Aquifer	Inferred	330	4,675	1.5	7.6	10.4	3.4	14.5
Total Inferred Resource		990	4,625	4.5	22.5	10.3	10.2	68.6
TOTAL MINERAL RESOURCE		1,385	4,665	6.4	31.8	10.4	14.4	76.4
LAKE THROSSELL EXPLORATION TARGET (in addition)								
Lower Estimate		288	4,261	1.2		9.5	2.6	
Upper Estimate		945	4,616	4.2		10.3	9.4	

¹ The Lake Throssell Mineral Resource estimate was prepared by Aquifer Resources

² Errors may be present due to rounding. Approximately 2.90Mt of the Inferred Drainable SOP Mass is present in Exploration Licence Applications E38/3544, E38/3483, E38/3458, and E38/3537.

³ 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 is supported by numerous exploration programs during the period December 2019 to July 2021 (see Figure 4), including:

- 200 line-kilometres of gravity surveys with 1,040 stations;
- 16 lake surface hand auger drill holes;
- 26 heli-supported rotary drill holes;

- 54 air-core drill holes, on and off-lake;
- 355 brine assay samples from 96 drill holes for a total of 5,720m of drilling;
- 62 Particle Size Distribution (PSD) analyses to determine drainable porosity;
- 18 Lexan-tube core samples taken from the lake sediments;
- Two 10-day pumping tests on 100m trial trenches; and
- 7 short-term pumping tests on test pits.

The relative uniformity of the deposit is represented by the expanse of the playa and palaeovalley as well as the high level of uniformity in the brine assays where 98% of the air-core assay results returned grades in excess of 4,000mg/L K (8.9kg/m³ K₂SO₄).

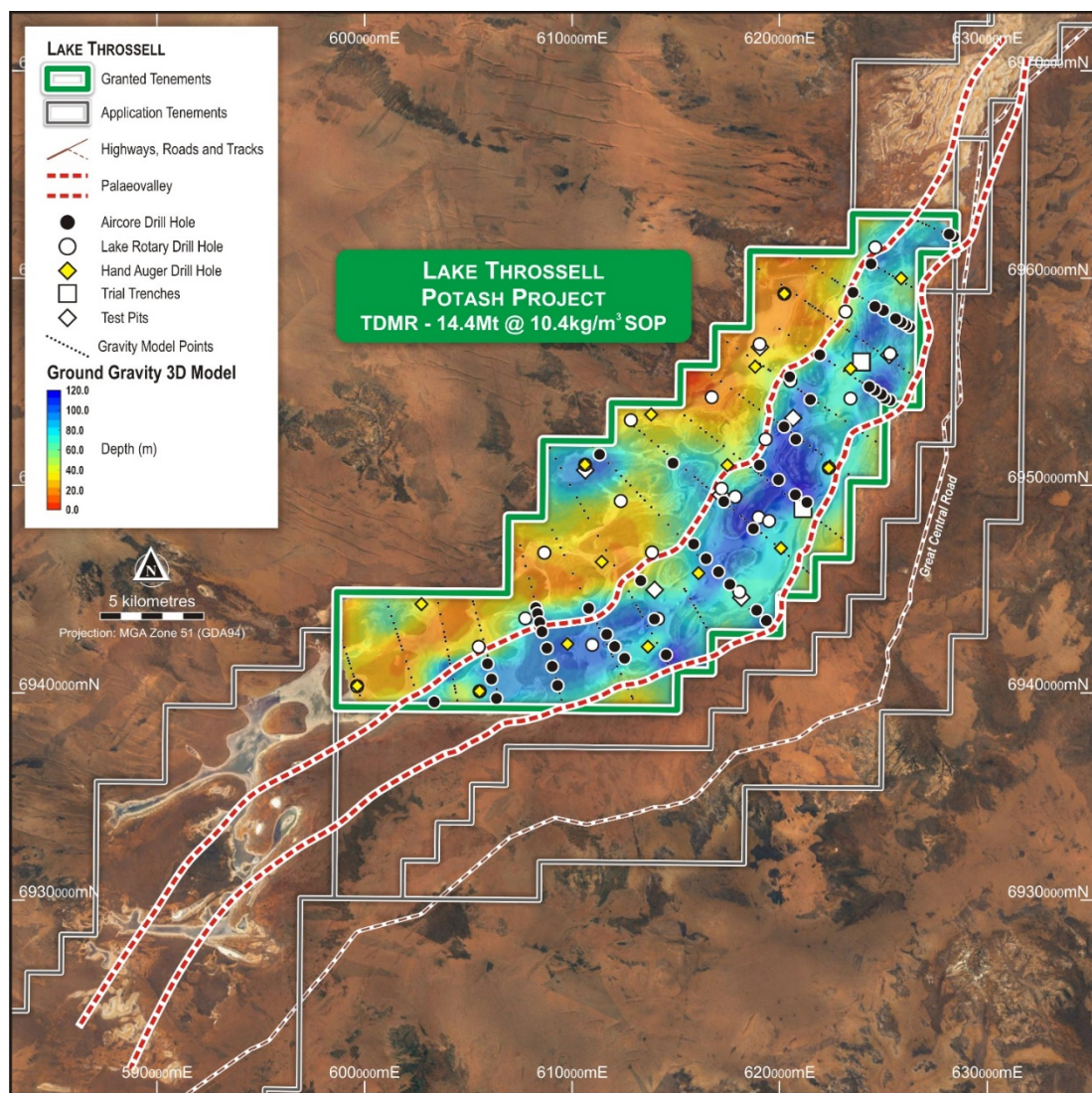


Figure 4: Lake Throssell drill collar map

Brine Extraction and Mine Schedule

Mining of a brine resource occurs via pumping of the brine from groundwater aquifers to the halite crystallisers. Brine will be pumped via two methods – from trenches excavated into the lake surface and from production bores targeting the deeper basal aquifer.

Solute transport groundwater modelling has been completed to simulate abstraction and potassium grade of the trenches and production bores. The model is considered to be sufficiently accurate for this Study to

determine the production target and change of abstraction rates over time using reasonable aquifer parameters.

The trench model uses the results from the trench pumping tests as a guide to the average aquifer properties of the surficial aquifer (refer to ASX announcement released on 7 July 2021). The basal aquifer uses the geology from the resource model with aquifer properties based on desktop and publicly available data from locally similar projects within the region. The groundwater model is a solute transport model and simulates brine potassium grade change over time from each abstraction point. The initial brine grades in the model were imported from the resource block model. The model does not include any recharge and the islands have been assigned zero grade, which are outside of the resource model; therefore, abstraction is purely from groundwater storage, reflecting the Mineral Resource.

The results from the groundwater modelling enabled a mine plan to be developed by Aquifer Resources to determine the Production Target of 245ktpa SOP for the Scoping Study and is discussed in detail in Appendix C.

Installation of test production bores and test pumping is required to facilitate conversion to Ore Reserves and validation of the mine plan using more refined groundwater models.

The Project proposes to construct a network of surficial trenches totalling 110km in length across Lake Throssell. Figure 5 shows an indicative layout of the trench network. These trenches will flow by gravity to two collection sumps where brine will be pumped into the halite crystalliser feed channel.

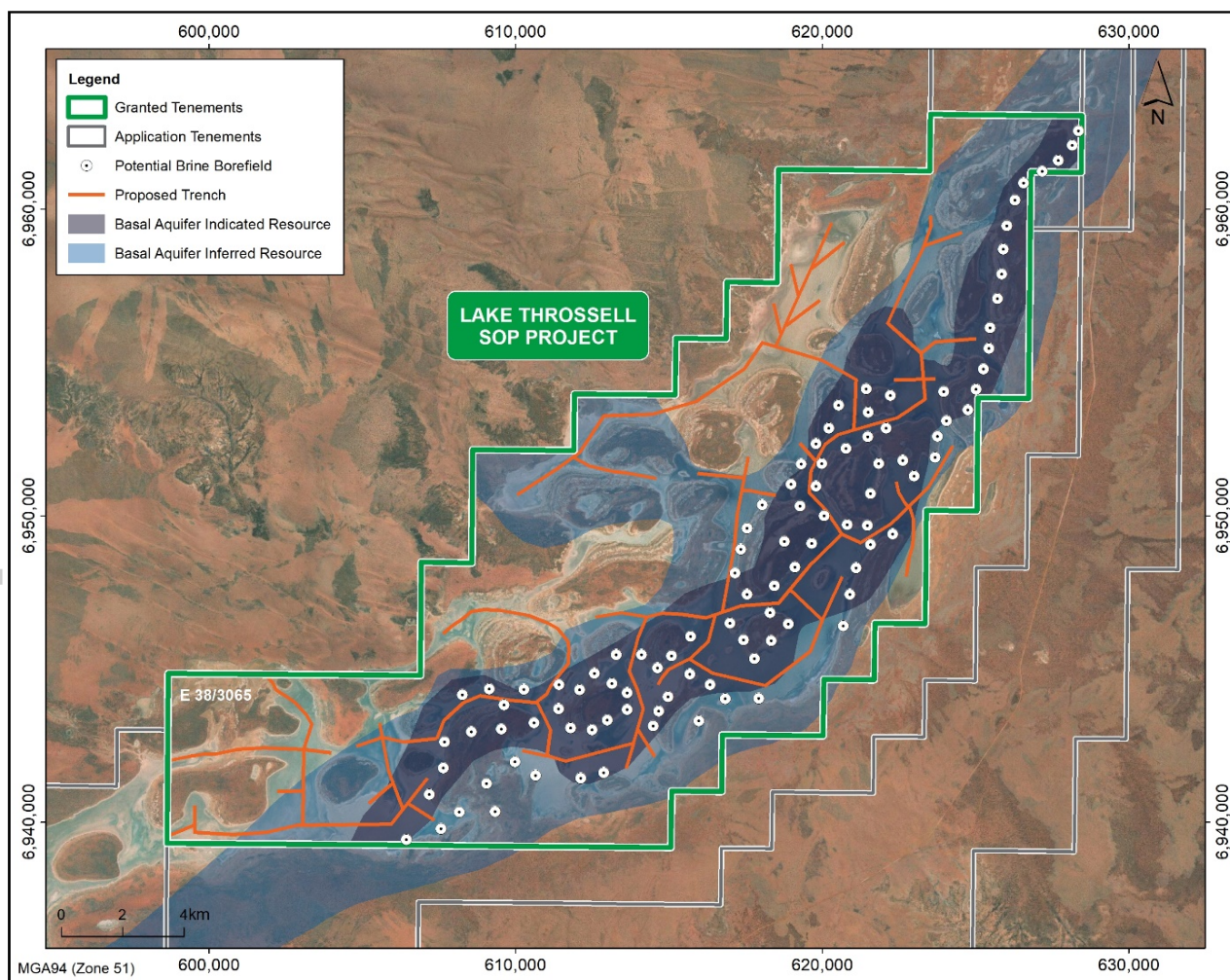


Figure 5: Proposed trench network and bore locations

During the initial payback period there will be limited number of bores with the majority of the brine sourced from the trench network. Figure 5 shows the outer boundary of the Inferred and Indicated Mineral Resources within the basal aquifer block model. Production bores are progressively installed as the flowrate from the trench network steadily declines as the water table is lowered.

Brine is continually sourced from the surficial aquifer over the 21 year mine life and still has capacity beyond that period. The number of bores will increase from 22 in Year 1 to 112 bores in Year 18 to support the annual production. The Project has been based on an initial 21-year life-of-mine (LOM) with 5.87Mt of SOP extracted from the aquifer, which is equivalent to 41% of the drainable Mineral Resource of 14.4Mt of SOP over this period. Figure 5 shows the indicative location of proposed bores from Aquifer Resources, which are located on the accessible islands and shorelines above the basal aquifer target.

Figure 5 also shows the basal aquifer is open to the southwest and northeast and forms part of the Exploration Target discussed later in the announcement. With further resource definition this may increase the production rate and/or extend the mine life beyond 21 years. Figure 6 shows the breakdown of brine feed obtained from the trench network and bores with the annual production. There is an initial ramp-up period derived from the McNulty Type 2 ramp-up curve. In Year 1, the pond system will be constructed, and an initial salt floor grown in Year 2. First SOP production occurs in Year 3, coinciding with first salt harvest as shown by the mine schedule in Figure 6. From Year 5 onwards, the plant will operate at full nameplate production target of 245ktpa of SOP.

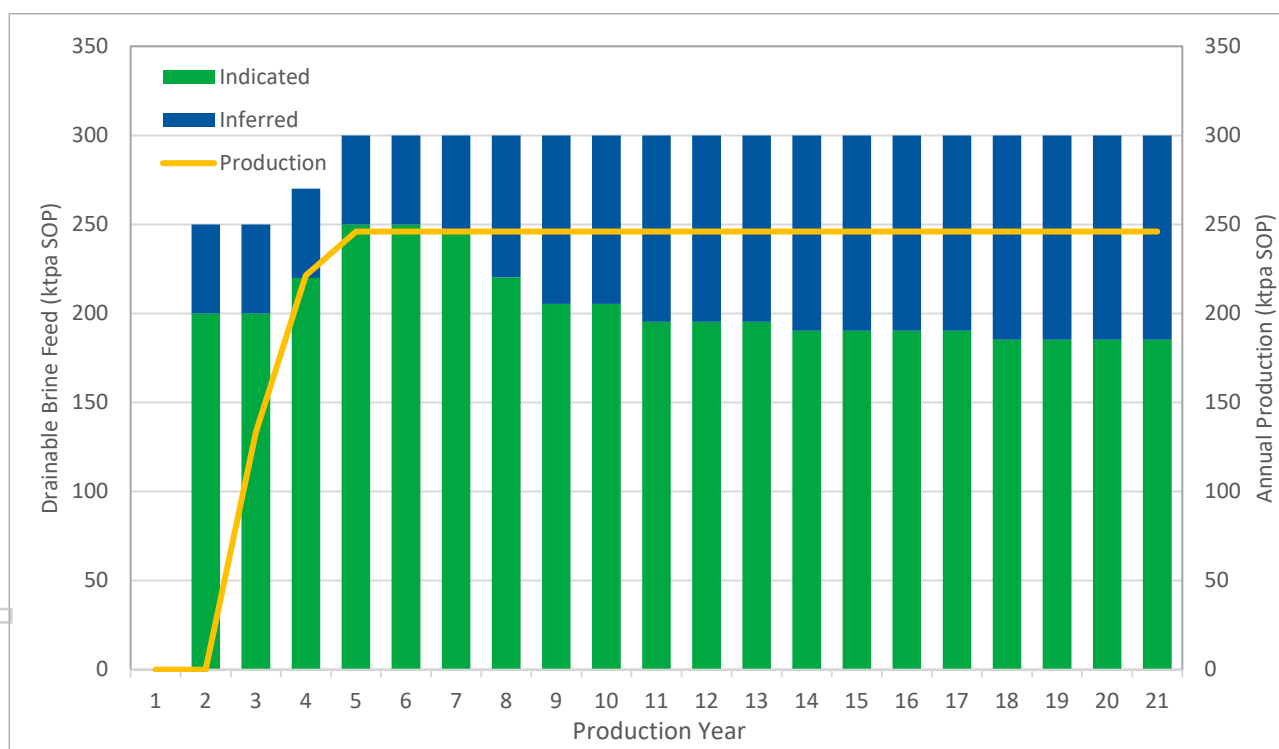


Figure 6: Indicated and Inferred brine feed (ktpa SOP) with annual production

Crystallisation and SOP Process Plant

Production from hypersaline brine hosted SOP is typically undertaken through the sustainable abstraction of mineralised brine water, concentration using solar evaporation ponds and then purification as illustrated in Figure 7.

The evaporation rate at the Lake Throssell SOP Project is estimated to be approximately 3,200mm per year.

Crystallisation

Hatch developed the process design for the Project utilising a typical solar evaporation production pathway.

Brine will be pumped from the collection sumps and channels on Lake Throssell to the first stage of the solar pond system. The pond system consists of two parallel trains of 10 cells per train of preconcentration (**Halite Ponds**), followed by 9 parallel trains of three Kainite Type Mixed Salt (**KTMS**) ponds placed in series. There is a total of 2,150Ha of evaporative area required for the Project.

The brine initially enters the Halite Ponds where the evaporation of water results in the crystallisation of halite (NaCl)¹. At a specified brine concentration, the brine is pumped to the next stage of the ponds where additional evaporation occurs and other salts such as epsomite (MgSO_4)² along with halite precipitate. This process is repeated for each pond stage. The make-up of the precipitated salts is different in each stage of the ponds. The height of the embankments for the Halite Ponds are increased every 8-10 years to increase the storage volume of halite. The cost associated with these civil earthworks has been included in the sustaining capital schedule within the operating cost estimate.

At the KTMS crystalliser ponds, consisting of kainite³, leonite⁴, halite, carnallite⁵, and hexahydrite⁶, feed brine is mixed with SOP recycle brine that is returned from the process plant to improve the $\text{K}:\text{SO}_4$ ratio which will improve the overall potassium recovery. Brine remaining after the final solar production pond is intended to be returned to Lake Throssell.

Precipitated salts are harvested from the final evaporation pond stages and are blended on the run-of-mine (ROM) pad to provide an homogenous feed to the processing plant.

It is planned for the pond system to be commissioned 12-18 months ahead of first production to grow an initial salt floor to support heavy mobile equipment and first KTMS for commissioning.

SOP Process Plant

The purification plant converts harvested KTMS from the solar ponds to an intermediate product (schoenite⁷) in conversion tanks, and then separates the schoenite from halite using flotation.

After the flotation step, the schoenite concentrate is decomposed using hot water and recrystallised to potassium sulphate (K_2SO_4 or SOP). The SOP crystals are then dewatered and dried in a fluid bed dryer, compacted, screened and loaded into bags for shipment. The mother liquor from the SOP crystalliser is treated by cooling the liquor to recover additional schoenite, while excess mother liquor is pumped back to the solar ponds to maximise potassium recovery. A schematic of the flowsheet is shown in Figure 7.

This process is typical of other SOP plants and uses commercially proven technology.

¹ Otherwise known as table salt

² Otherwise known as Epsom salt

³ Kainite, a hydrated potassium magnesium sulphate chloride double salt, $\text{KMgSO}_4\text{Cl}\cdot 3\text{H}_2\text{O}$

⁴ Leonite, a hydrated potassium magnesium sulphate double salt, $\text{K}_2\text{SO}_4\cdot \text{MgSO}_4\cdot 4\text{H}_2\text{O}$

⁵ Carnallite, a hydrated potassium magnesium chloride salt, $\text{KMgCl}_3\cdot 6\text{H}_2\text{O}$

⁶ Hexahydrite, a magnesium sulphate salt, $\text{MgSO}_4\cdot 6\text{H}_2\text{O}$

⁷ Schoenite, a hydrated potassium magnesium salt, $\text{K}_2\text{Mg}(\text{SO}_4)_2\cdot 6(\text{H}_2\text{O})$.

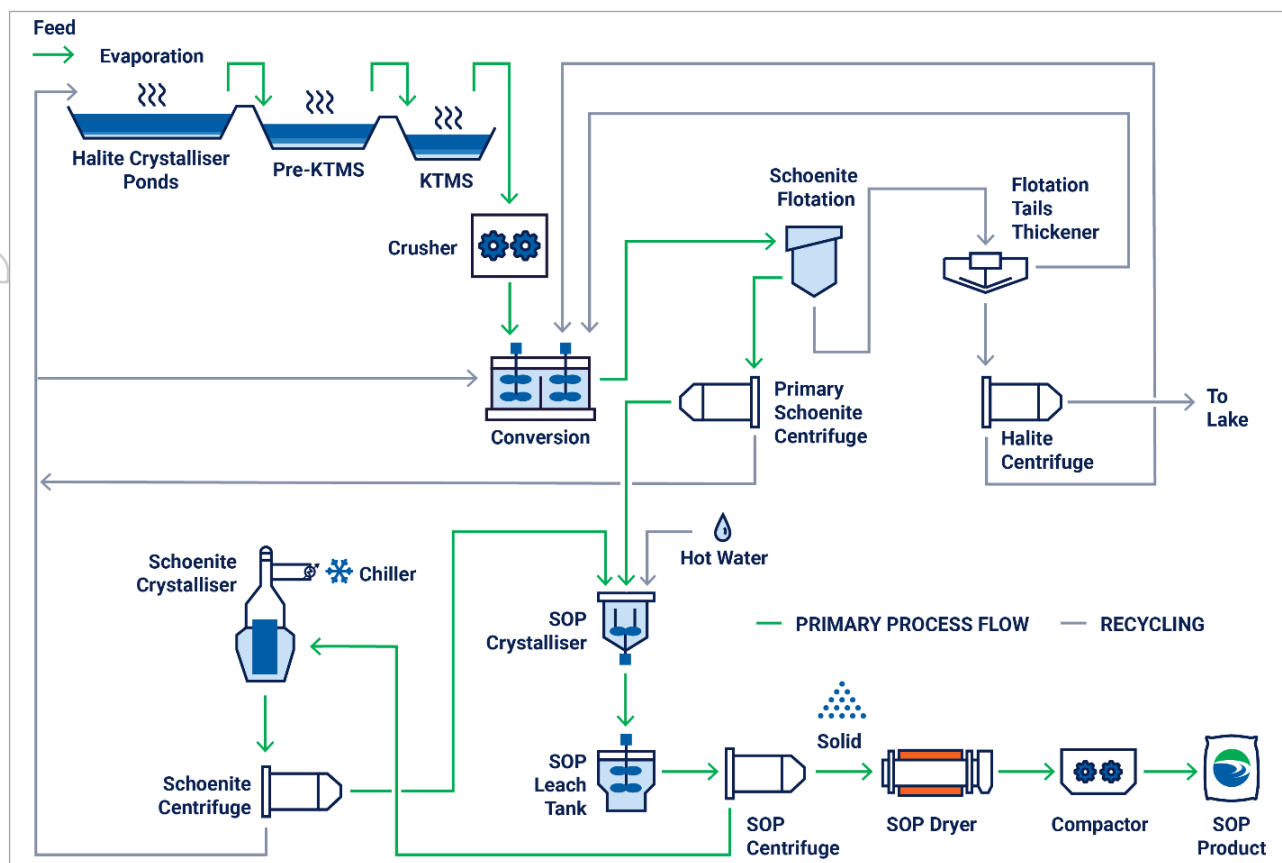


Figure 7: Flowsheet for the Lake Throssell SOP Project

Infrastructure

The Lake Throssell Project requires infrastructure similar to other remote resource projects throughout Western Australia. The following non-process infrastructure will be constructed to support operations:

- Power station, including a solar farm and power distribution
- Raw water supply and water treatment
- Accommodation village
- Airstrip
- Offices, stores, and workshop
- Communications
- Bulk fuel storage
- Roads

Trigg will obtain power from an Independent Power Provider (IPP) through a 10-megawatt (**MW**) power station with a 5MW solar farm. Initial analysis has determined the power station will use trucked liquified natural gas (**LNG**). An all-in levelised electrical price (inclusive of fuel cost) of \$0.18/kWh has been estimated for the Project.

A desktop study has been completed on potential raw water sources for the Project. It has been assumed for the purposes of the Scoping Study a raw water borefield will be located 30km from the SOP process plant with sufficient capacity to provide 2.5GL pa of brackish water. A program of work is currently being planned to drill a number of identified water targets from the desktop study.

The planned accommodation village has a total capacity of 120 rooms to support operations. The Project will operate on a 24hr, 7-day basis assuming a 2 weeks on / 1 week off roster for shift personnel and an 8 days on / 6 days off roster for day shift roles. A gravel airstrip will be constructed to support a twin prop air service from Perth to Lake Throssell for shift change overs. The airstrip will be suitable for an ATR 42 seat or ATR 72 seat aircraft.

Bulk fuel will be delivered to site and stored in a 550kL bulk fuel farm, which has sufficient diesel for 21 days. A site fuel truck will distribute and refuel generators for the bore field. The next study phase will look at the cost of reticulating power along the lake to reduce diesel consumption. Pricing for bulk fuel delivery to site was obtained and a price of \$0.82/L (excl GST, plus rebate) used for the study.

The greenhouse gas (GHG) emissions have been estimated on an annual basis. With a 15-20% renewable energy penetration the GHG emissions are estimated to be approximately 42,500t CO₂e per annum or 173kg/t of SOP at nameplate capacity.

Access to the Project is via the Great Central Road to the nearest town of Laverton located 180km from Lake Throssell. The Australian Government has provided funding of \$46.5M to seal the first 40km of the Great Central Road from Laverton and this work is currently underway. There is a further \$95.6M future funding package to seal beyond Cosmo Newberry, 84km east of Laverton. Under the Outback Way funding program it is anticipated the road will be completely sealed by 2028/29⁸.

Also refer to 'Legal, Tenure and Environmental Approvals' and 'Heritage and Native Title' sections of this release for the basis of these assumptions.

Figure 8 shows a preliminary layout of the Lake Throssell SOP Project with access to the Project via the Great Central Road.

⁸ <https://investment.infrastructure.gov.au/projects/key-projects/outback-way.aspx>

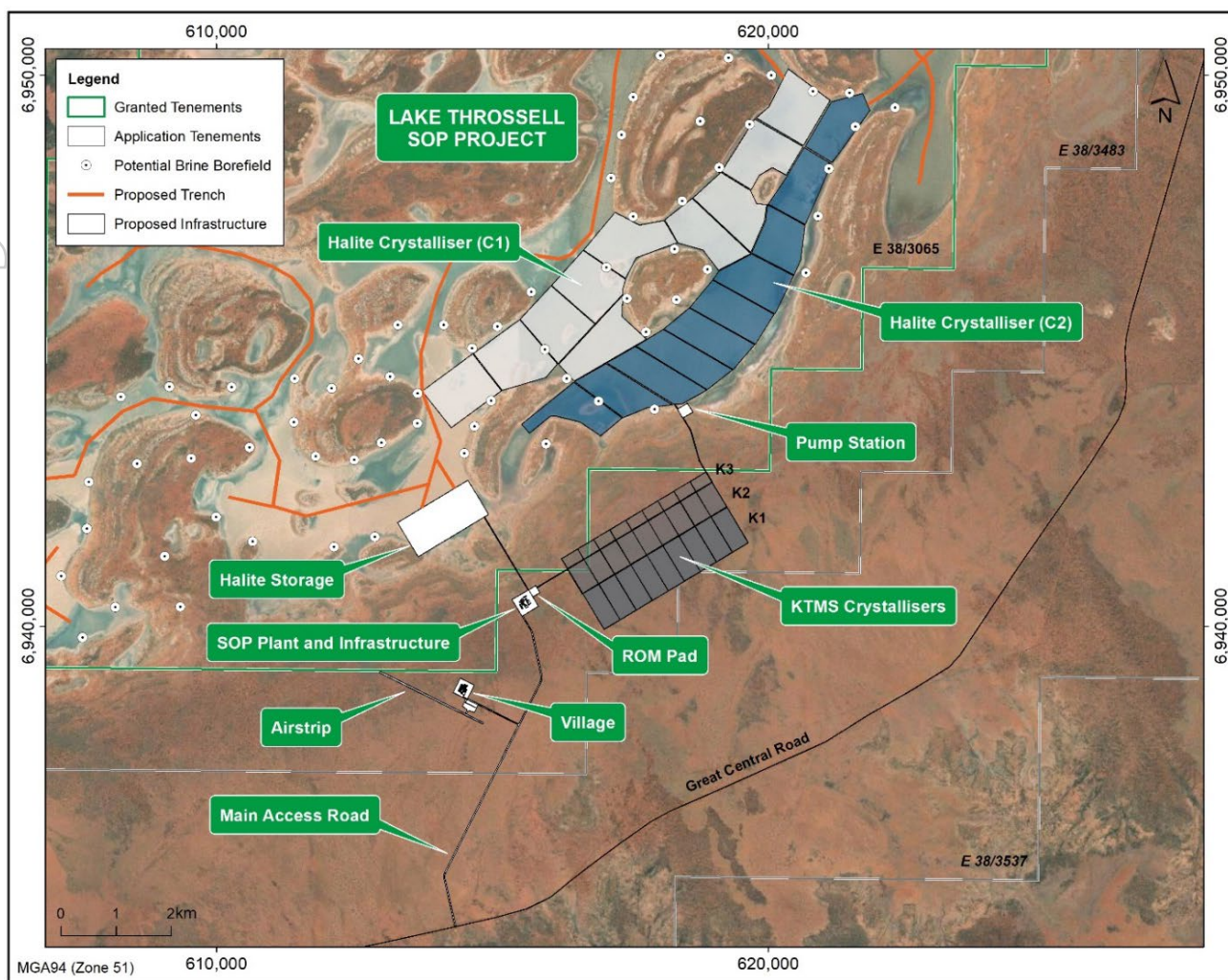


Figure 8: Indicative project layout

Project Economics

Financial analysis of the Lake Throssell SOP Project has been undertaken using a discounted cash flow model based on estimated production rates, capital costs, FOB operating costs, SOP prices and currency exchange rates. This financial evaluation is based on pre-tax, ungeared (100% equity) project cash flows, modelled on an annual basis in real 2021 dollars⁹.

Financial analysis of the project is based on a “100% equity” basis and the cost of capital is ignored. Results are inclusive of a State Royalty and are on a pre-tax basis, unless stated otherwise.

Trigg engaged CRU, a recognised leader in SOP marketing and market research for the SOP sector. Based on information provided by CRU a flat FOB price of US\$550/t SOP (NW Europe) has been assumed for the Project.

An exchange rate of AUD:USD of 0.73, being the spot exchange rate on 1 September 2021¹⁰ has been assumed.

⁹ All assumptions and results in this announcement are reported on this basis unless otherwise stated.

¹⁰ Reserve Bank of Australia

Capital Estimate

CPC has undertaken sufficient engineering and budget pricing to develop a Class 5 capital and operating estimate to an accuracy of $\pm 25\text{-}35\%$. The estimated capital cost to build the processing plant and infrastructure at the Lake Throssell is \$378M including a contingency of \$70M. Capital breakdown by project area is presented in Table 3.

CPC has accounted for all associated infrastructure required to commence operation of the proposed project. Capital allowances have been included for infrastructure, high-voltage power supply and distribution, access roads, accommodation and mess facilities, raw water bore field for water supply, water treatment plant, sewage treatment plant, administration buildings, telecommunications, security, maintenance workshop, wash-down areas, fuel storage depot, emergency response facilities, airstrip and terminal.

Power will be provided to the site via a third-party Build-Own-Operate facility using trucked Liquefied Natural Gas (LNG) supplemented by a 5MW single axis tracking solar farm.

Operational personnel will work on a fly-in fly-out roster using a dedicated airstrip and terminal for the Lake Throssell Project. Site accommodation and mess facilities have been included for total site-based workforce of 114 personnel. A total of 71 personnel, including contractors, will be onsite at any point in time.

CPC obtained budget vendor quotes for all major equipment items and packages. A contingency and growth allowance of 25% has been applied to the total direct costs and a 10% contingency to indirect costs.

Table 3: Lake Throssell capital estimate

Capital Item	\$M
Brine Extraction	11.0
Crystalliser Ponds	109.9
SOP Process Plant	109.2
Infrastructure	30.9
Mobile Plant & Equipment	7.9
Total Directs	268.9
Indirects	22.7
Owners Costs	17.0
Total Indirects	39.7
Contingency & Growth	69.5
Total CAPEX	378.1

Operating Estimate

CPC has reviewed the operating cost estimate developed for the project and with an expected LOM all-in sustaining cost (AISC) of \$372/t SOP (FOB). Table 4 provides a breakdown of the LOM operating cost including production ramp-up phase.

Prior to first production working capital of \$34M is required and this has been included in the financial analysis. Sustaining capital allowances have been included for plant and infrastructure ranging between 1.5% to 5.0% of installed equipment cost. Additional sustaining capital is included for the following items:

- Installation of additional production bores as required by the mine schedule
- Increase of the Halite Ponds embankments every 8 years to provide additional halite storage capacity
- Replacement of the mobile fleet every 3-5 years for civil maintenance, KTMS harvesting and haulage, and waste salt haulage

A Tier 1 logistics firm has provided budget prices for SOP product packaging, freight and logistics of Lake Throssell SOP product. The product will be bagged in 1.7t bulk bags and loaded into sea containers. The containers will be transported via sealed road¹¹ (350km) to the railhead at Leonora and loaded on to rail for transport to the container port of Fremantle (900km). The study has assumed that diesel is back hauled by the SOP truck fleet, which is equivalent to one trailer per day, representing a 5% cost saving. Further investigation of back haul options is warranted during the Pre-Feasibility Study.

A Western Australian State Government Royalty of \$0.73/t has been included in the operating cost¹². A nominal amount has also been included for Native Title compensation.

Table 4: Summary of Lake Throssell operating cost estimate

Operating Item	\$Mpa	\$/t SOP
Labour	21.9	91.6
Power	13.1	54.8
Maintenance	7.5	31.5
Reagents & Consumables	9.8	41.2
Harvesting, Haulage & Logistics	25.8	108.1
General & Administration	3.4	14.1
Total Cash Cost	81.5	341.3
Sustaining Capital, royalties, NT compensation and closure costs	7.3	30.8
All in Sustaining Cost (AISC)	88.8	372.1

¹¹ See Infrastructure section for basis of this assumption.

¹² The Western Australia Mining Regulations 1981, as amended from time to time, outlines a royalty rate known as Amount A for industrial minerals, salt and gypsum (CaSO₄.2H₂O) which is also considered a salt. Salt, gypsum and other mixed salts are produced in Western Australia from brines, either from sea water or inland salt-lake/palaeovalley systems through solar evaporation. Trigg Mining intends to produce SOP (K₂SO₄) which is considered a salt and industrial mineral from brine using solar evaporation.

Benchmarking

At the date of this report, SOP is not yet commercially produced in Australia. Currently, there are two ASX listed companies developing brine-hosted SOP projects in Western Australia with both experiencing a level of technical challenges and cost over-runs during the construction and commissioning phases. Given there are no steady-state operating mines producing SOP at nameplate capacity in Australia, the Trigg Mining Board considers it an imperative to benchmark the capital and operating cost assumptions used in this Scoping Study.

Figure 9 and Figure 10 show the estimated capital and operating costs of Western Australian sulphate of potash projects either in construction or proposed at various stages of economic evaluation. Based on the scale of the Lake Throssell Project, the project is within the range of its peers and is on the more conservative side of the current trend in capital and operating costs.

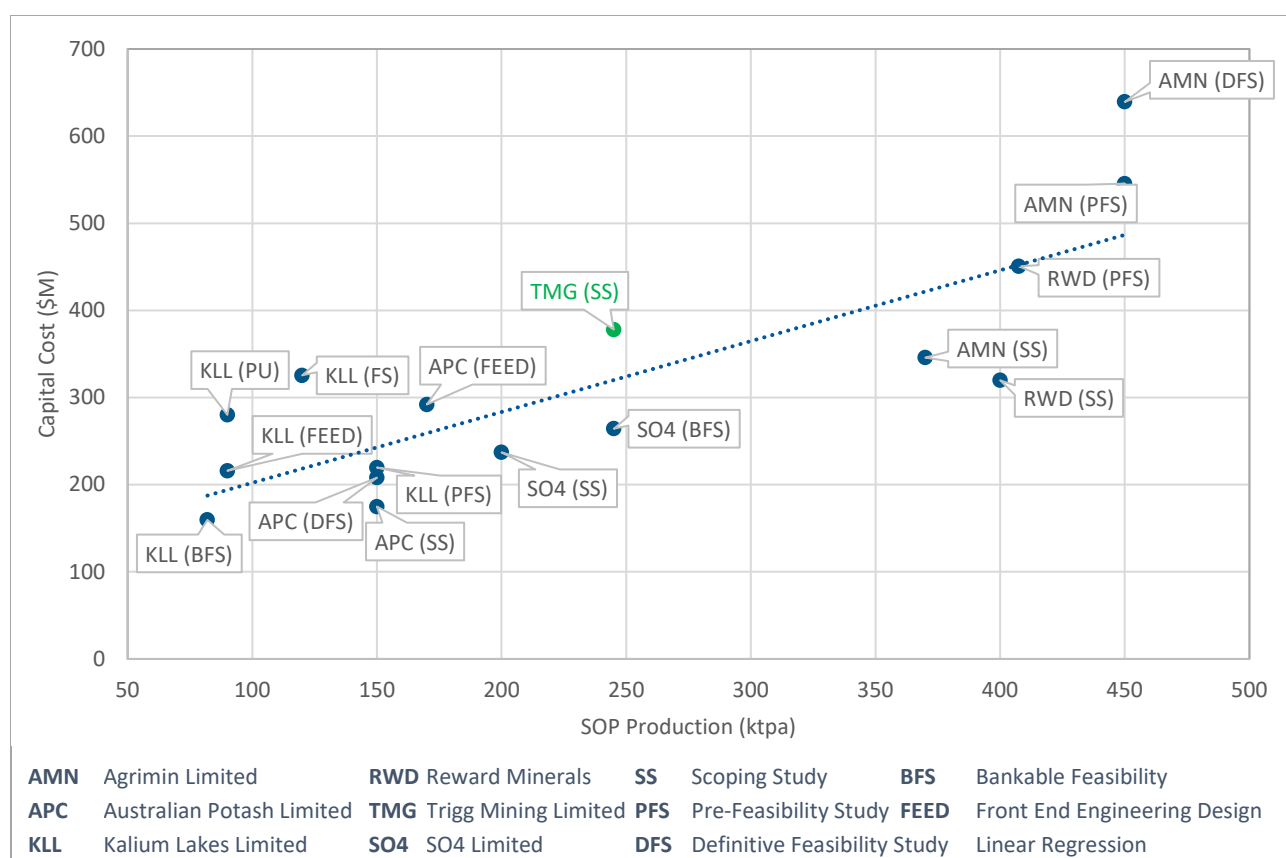


Figure 9: Benchmarking - Capital Costs by feasibility stage^{13 & 14}

¹³ USD capital costs and operating costs 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.

¹⁴ See Appendix 1 for a list of sources. Kalium Lakes Limited's FEED, Project Update and Feasibility Study Opex figures have not been quoted in their respective ASX announcements (only AISC) and therefore are not included in the above figure.

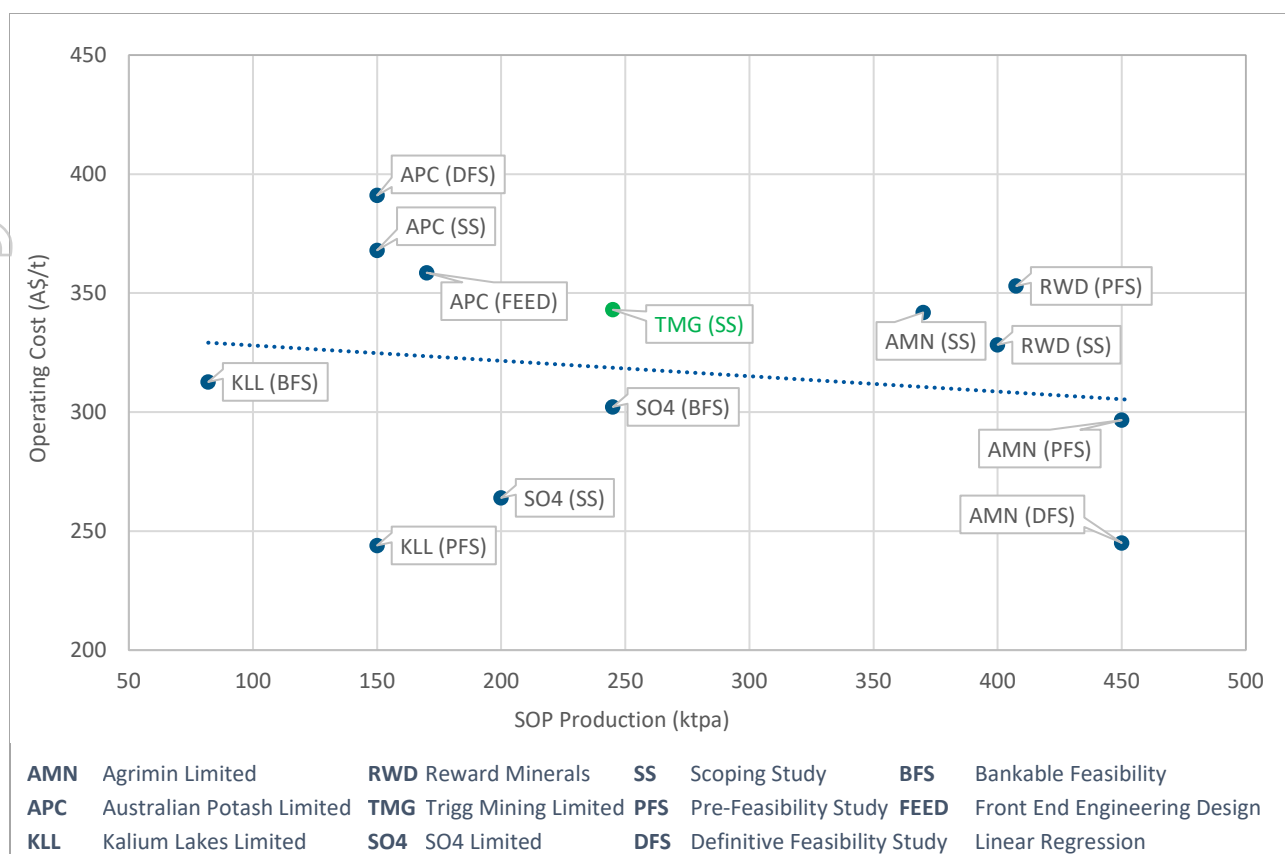


Figure 10: Benchmarking - Cash Operating Costs (C1) by feasibility stage^{13 & 14}

SOP Market Analysis

Sulphate of potash is mainly used as an agricultural fertiliser in food production and in some industrial applications such as plaster board, chloride-free drilling fluids and fire extinguishing powders. In agriculture it is predominantly used in chloride sensitive crops and in arid or acidic soils, making demand inelastic.

SOP is a valuable tool in crop management by positively influencing crop yield, quality and soil health. SOP nutrients play an important role in the development of crop proteins, enzymes and vitamins, as well as improving plant photosynthesis and growth. It improves nutritional value, taste and appearance (size, colour and scent), fruit's resistance to deterioration during transport and storage and its suitability for industrial processing. SOP can also improve the uptake of phosphorus, iron and other micronutrients and helps the plant to be more resistant to drought frost, insects and many diseases.

Demand

In 2020 the United Nations estimated the world's population had reached almost 7.8 billion and is expected to reach 9.7 billion by 2050. In contrast the world's arable land has decreased per capita by more than 40% over the past 50 years and fertiliser application rates have increased by approximately two thirds over a similar time period. More people are going to need more food, and with global arable land decreasing per capita, the need for higher crop yields will become increasingly important for global food security. These higher yields will remove more nutrients from the soils, increasing the need to be replenished with fertilisers, including sulphate of potash.

CRU estimates the current global market for sulphate of potash at 7.18Mtpa and forecasts a compound annual growth rate (**CAGR**) of 1.4%pa lifting global consumption to approximately 7.56Mt by 2025.

Supply

There are three main sources of sulphate of potash: Mannheim (50%); natural brines (35%); and sulphate exchange (13%). The Mannheim process and sulphate exchange are considered secondary chemical processes. In the Mannheim process potassium chloride (Muriate of Potash or MOP) is reacted with sulphuric acid at high temperatures, consuming high quantities of energy and producing highly corrosive hydrochloric acid as a waste or by-product. With the high cost of inputs this process has a natural price floor and requires a significant premium over the input costs of MOP and sulphuric acid to remain economic. This process also has a high energy consumption and is also considered to have a high carbon footprint.

When compared to the MOP market, which is largely consolidated with the four largest companies accounting for approximately two-thirds of the global market, the SOP market is considered fragmented. This is largely related to the Mannheim process where furnaces are rarely larger than 25,000tpa. Additionally, they need to source hydrochloric acid consumers which often caps their capacity. In contrast, natural brine operations are significantly larger, but are considered rare. The main global sources of brine SOP are in China (Lop Nur), Chile (Salar de Atacama) and the United States (Great Salt Lakes).

In Australia two companies are currently constructing brine-sourced SOP projects for a combined annual output <5% of the global 2025 market when they are expected to reach nameplate capacity. At 245ktpa the Lake Throssell SOP Project production volume will represent an additional 3% of the forecast 2025 global demand and Lake Throssell may become a Top 10 producer, globally (see Figure 11).

Overall CRU forecasts the SOP market to remain reasonably balanced with demand growth absorbing the new supply.

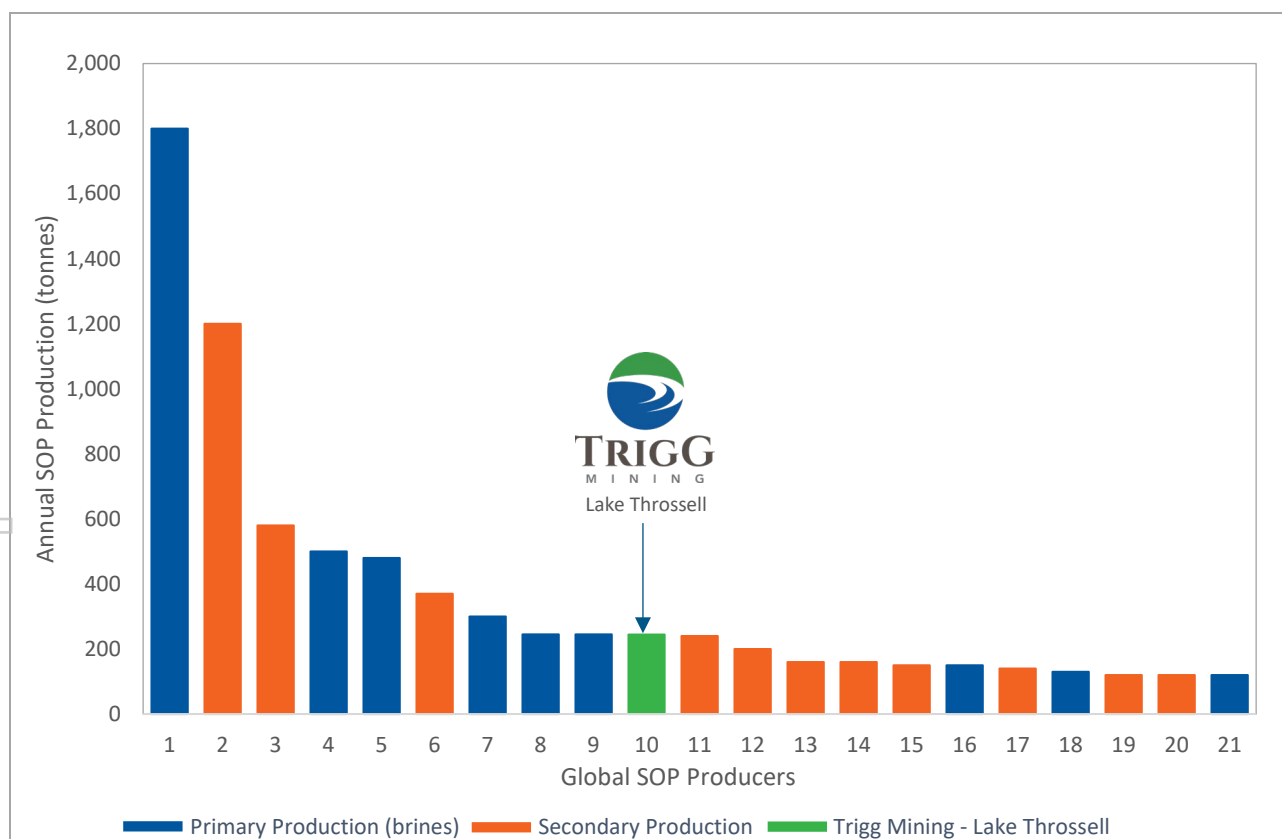


Figure 11: Global 2025 forecast production rates, showing Lake Throssell SOP Project (Source: CRU July 2021, Trigg analysis)

Global SOP Cost Curve

CRU has generated a forecast global SOP industry cost curve, FOB, for 2024. Based on a total cash cost of A\$341/t SOP (US\$249/t SOP), the Lake Throssell SOP Project sits in the first quarter of the global cost curve (see Figure 12).

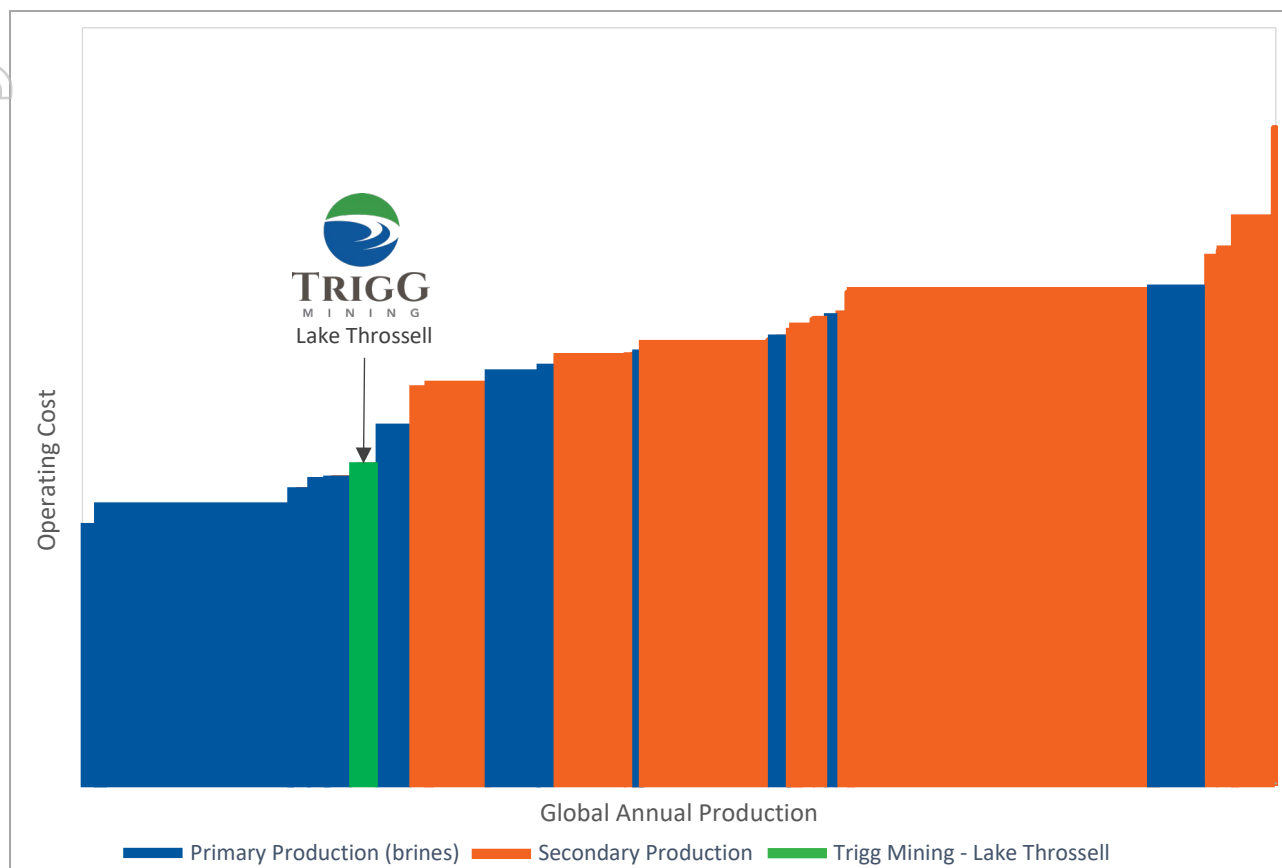


Figure 12: Global 2024 SOP Industry FOB cost curve (Source: CRU July 2021, Trigg analysis)

Pricing Assumptions

SOP prices have remained reasonably steady over the past decade. Over the 10-years to June 2021 the Northwest (NW) Europe SOP (FOB standard bulk) benchmark price averaged US\$528/t and traded in a band between US\$478/t (Q1 2017) and US\$576/t (Q2 2014). In recent months the SOP benchmark price has spiked due to strong demand, high crop prices, tight supply and shipping disruptions. Argus Potash quoted a price range on 2 September 2021 of US\$650-700/t¹⁵ (NW Europe FOB standard).

CRU has forecasted a NW Europe SOP price of US\$605/t for 2021 and an average of US\$578/t for the outlook period to 2025 (see Figure 13).

Trigg has assumed a SOP price of US\$550/t for this Study which is in line with its Australian SOP peers, CRU's historical 10-year average of US\$528/t, the CRU 5-year forecast average of US\$578/t and is considerably lower than the current quoted price of US\$650-700/t.

Trigg plans to produce a bagged granular product which attracts a price premium of approximately US\$25/t over the NW Europe FOB standard price. This premium has not been taken into account in the price forecast assumption in this Study.

¹⁵ Argus Media Potash 2 September 2021, USD:EUR exchange rate of 0.8435

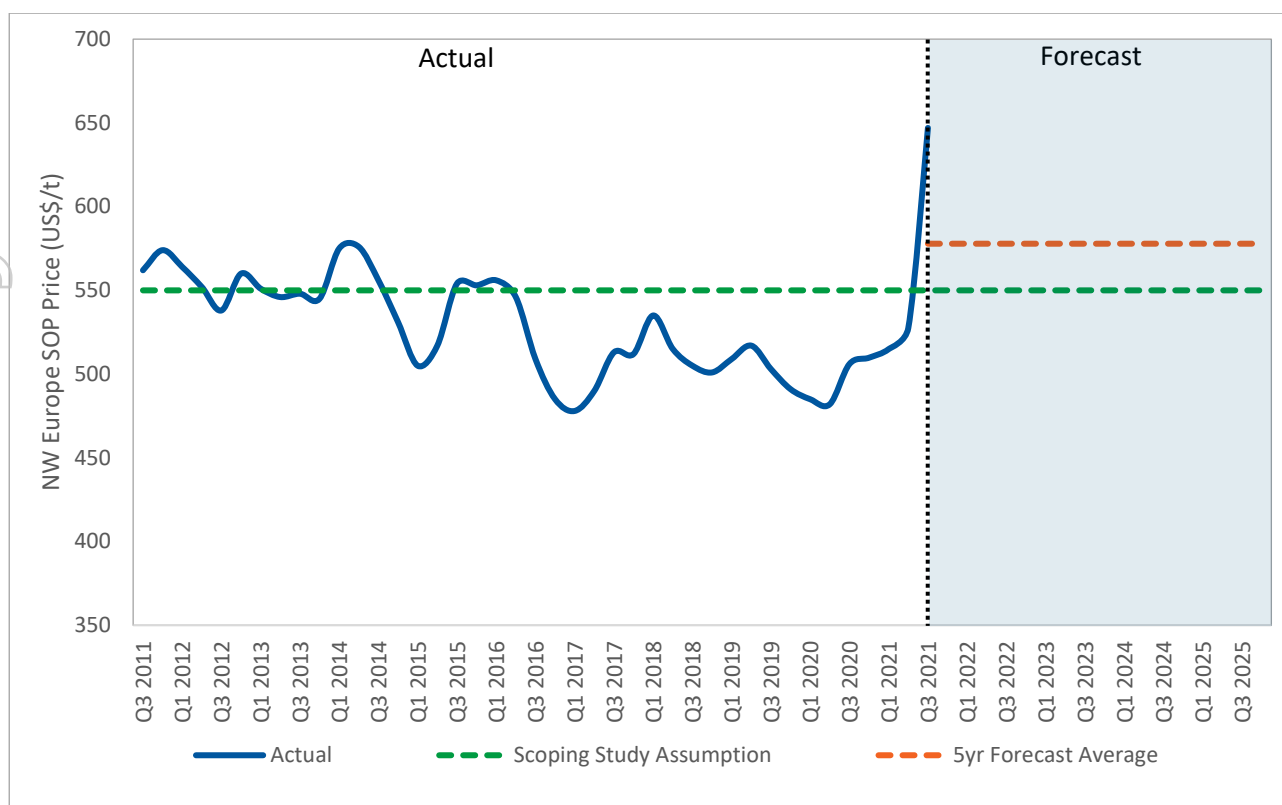


Figure 13: Northwest Europe FOB Historical and forecast price
(Sources: CRU July 2021 and Argus Media August 2021 with Trigg Analysis)

Economic Assessment

The Scoping Study delivered robust financial metrics as presented in Table 5.

Table 5: Project Evaluation Summary^{16,17,18}

Item	21-Year LOM
Average LOM Revenue from SOP Sales	\$180Mpa
Average LOM Operating Costs	\$341/t
Total Operating Profit (EBITDA, incl. WA Royalty and NT Compensation)	\$97Mpa
Pre-tax NPV ₈	\$364M
Pre-tax IRR	18%
Payback Period (from first production SOP)	4.5 years

Sensitivity of the pre-tax Net Present Value (NPV₈) to changes in key assumptions is set out in Figure 14. The Lake Throssell SOP Project NPV is most sensitive to changes in the SOP price, exchange rate, discount rate and production rate assumptions. The Project NPV is least sensitive to the capital cost and operating costs.

Estimated pre-tax project cash flows for the construction period and the first ten years of production are shown in Figure 15. After a two-year construction period, first SOP sales will commence at the beginning of the third year. Net cash flows will become positive after 2 years from start of construction, ramping up to approximately \$97M per annum after 5 years from commencement of production, which will be maintained

¹⁶ NPV₈ calculated on a pre-tax, ungeared (100% equity) project cash flows, modelled on an annual basis in real 2021 dollars using an 8% discount.

¹⁷ Operating costs, project revenues and EBITDA determined over the LOM including project ramp-up period.

¹⁸ Average LOM Revenue from SOP Sales includes royalties.

throughout the remainder of the 21-year project life. Cumulative LOM pre-tax net cash flow is approximately \$1.85 billion.

An allowance of \$25M has been included in the financial model for final closure of the project at the end of its mine life.

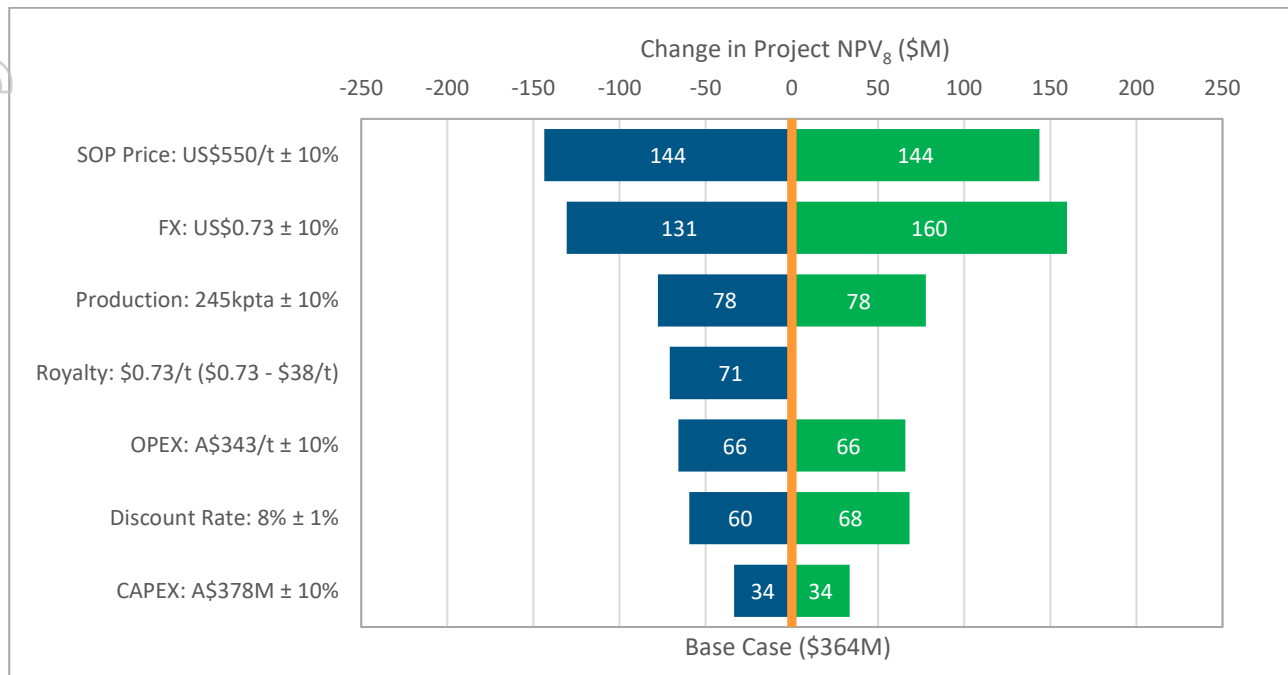


Figure 14: Pre-Tax NPV₈ Sensitivity Analysis¹⁹

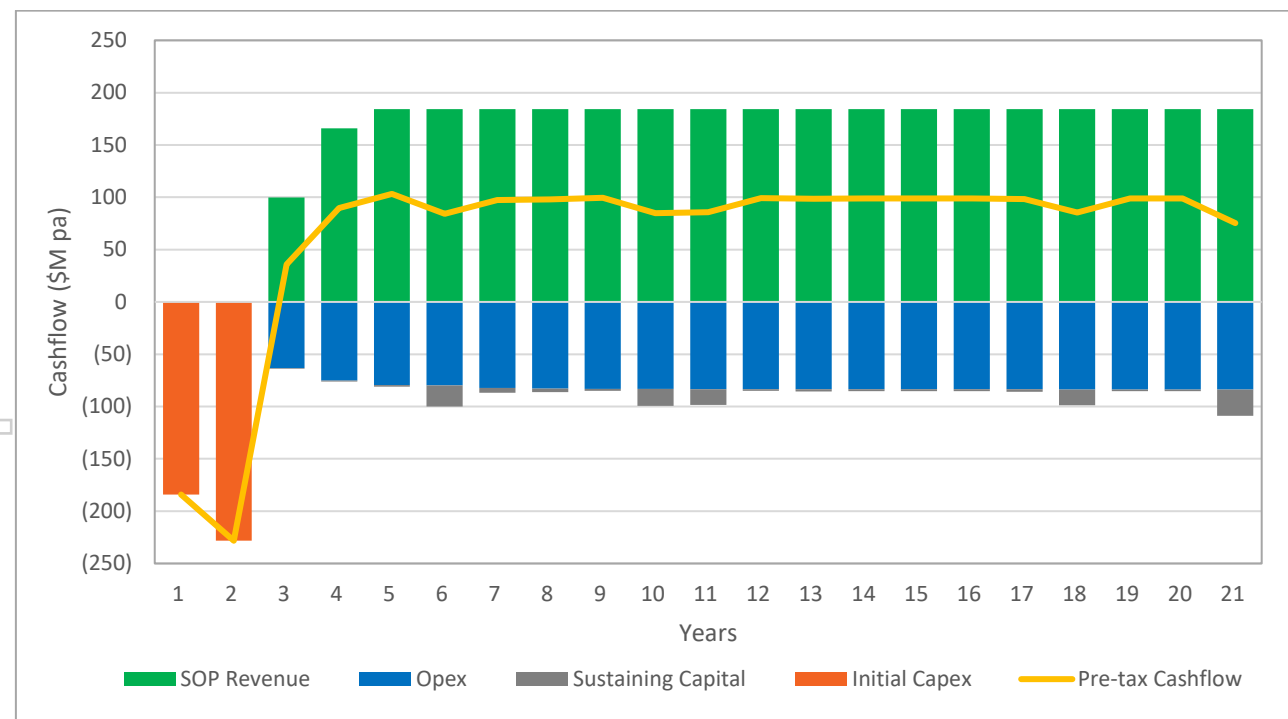


Figure 15: Pre-Tax Net Project Cash Flow

¹⁹ The Scoping Study has assumed a base case royalty rate of A\$0.73/t. Figure 12 shows the sensitivity range between A\$0.73/t to A\$38/t (or 5%)

Legal, Tenure and Environmental Approvals

A review of governmental department and other key stakeholders, secondary approval requirements and other compliance requirements was considered as part of the Scoping Study. The Project is currently compliant with legal, tenure and environmental permitting requirements.

Environmental baseline monitoring has commenced and is on track for the first full season to be completed in Q4 2021. Trigg intends to commence preparing its Environmental Scoping Document early next calendar year for submission to the Department of Water and Environmental Regulation for assessment. This will outline the scope of the environmental impact studies required to be completed for the Project.

The Company will require additional tenure for the development of the Project for the SOP process plant, access road and other infrastructure required for the operations. The Scoping Study has identified the regulatory approvals and permits required for the development of the Project.

Heritage and Native Title

Trigg recognises the holders and claimants of native title over the project lands: the Ngaanyatjarra Lands People to the northwest of the Great Central Road, the Nangaanya-Ku southeast of the Great Central Road and the Yilka Talintji to the west. Agreements with each of these groups will need to be settled prior to Final Investment Decision to address the impacts of the project on country.

Project Funding

Financing for the Lake Throssell SOP Project has not yet been secured, however based on the positive NPV and on receipt of all requisite approvals, there is reasonable basis to assume that the necessary funding for the Project is achievable.

Trigg will consider a range of funding sources, with the objective of securing the most cost competitive and value maximising option for the Company.

Given the scale of the operation, the Project is expected to generate substantial free cash flow per year to service debt, which will enhance the debt capacity of the Project. As a result, a greater percentage of debt funding may be achievable when compared to smaller scale, lower margin SOP projects.

Trigg plans to pursue a range of debt options, including Export Credit Agency (ECA) covered debt finance and senior-secured project debt finance. The Company's preference is to secure ECA financing as this option has lower funding costs, is longer-term, and the potential to support larger debt sizing than conventional senior-secured project finance debt.

Trigg will explore all available funding options to for the Project with the preferred debt funding route to likely comprise a blend of ECA funding supplemented by project debt finance from a consortium of banks. Analysis shows that the Project can support sufficient debt funding of approximately 50% of the upfront capital expenditure, subject to the assumed production target.

Trigg has commenced early discussions with potential off-takers with respect to securing offtake for the Project. Trigg will preferentially engage with offtake counterparties that may contribute funding to the Project which may include: conventional equity at the corporate and/or project level; convertible notes or bond; debt financing in the form of either conventional project debt financing, prepayment for product or royalties; or a combination of the above.

Trigg's current market capitalisation is approximately \$13M (as at 1 September 2021). The Company remains confident that its market capitalisation will increase as it continues to de-risk, secure offtake, debt financing and execute the development of the Lake Throssell SOP Project. Sources of equity funding may include

private equity funds specialising in resource project investment; institutional funds; strategic investors; and high net worth, sophisticated and retail investors. Depending on market conditions, the equity component may be structured with a combination of ordinary and hybrid equity.

Given the above, the Company has concluded that it has a reasonable basis to expect that the upfront project capital cost could be funded following the completion of a positive bankable feasibility study and obtaining the necessary project approvals.

Forward Work Plan

An investment decision for the Lake Throssell SOP Project is expected to occur in mid to late 2025. The Scoping Study has identified no critical technical flaws, and a Pre-Feasibility Study is expected to be completed by early 2023. Environmental approvals are on the critical path of the project development schedule shown in Figure 16.

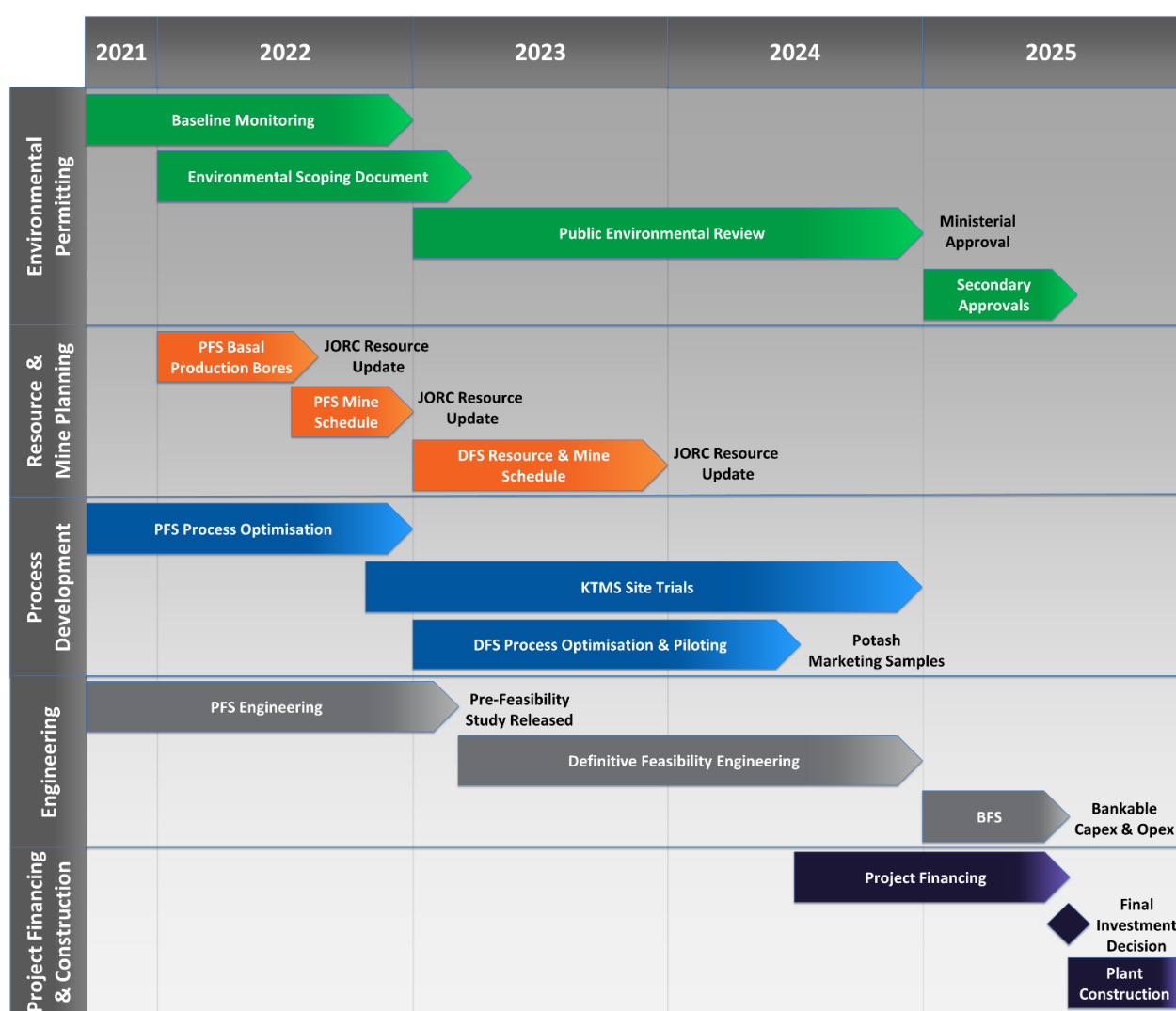


Figure 16: Scoping Study Indicative Project Schedule²⁰

²⁰ Subject to availability of funding and resources.

Resource definition work will continue in the first half of 2022 with the installation of approximately five test production bores installed along the strike of the palaeovalley. The aim of this work will be to obtain the data needed to determine an Ore Reserve. Once these test bores have been installed and tested this will allow the hydrogeological resource model to be calibrated. Upon completion of this work there will be limited resource development work required through to Bankable Feasibility Study.

Preliminary geotechnical investigation work is planned later this year to confirm the location of the evaporative crystalliser ponds. This work will be followed up next year with a test pit program to finalise project location and identification of suitable borrow material for construction of the pond embankment walls.

Apart from permitting and approvals, the main critical path for engineering and project development, is the construction of a demonstration evaporative crystalliser field to grow sufficient KTMS for ongoing flowsheet development, piloting and vendor testing. Trigg is planning to commence field trials in late calendar year 2022 and the Company will continue to operate the trial pond field through to commencement of construction to fully understand control of the brine and crystalliser fields and environmental factors that influence KTMS salt quality.

The production scheduled in this Study does not include 8.5Mt of drainable Inferred Mineral Resource or the Exploration Target of 2.6 - 9.4Mt of drainable SOP at 4,261 – 4,616gm/L K (or 9.1 - 10.0kg/m³ K₂SO₄) as released to the ASX on 26 July 2021. Should further exploration increase the confidence in the estimation of this material there is potential to continue operations longer than the Study case of 21 years. Trigg plans to continue exploration on the Lake Throssell Project and the nearby Lake Yeo Project which lies from 35km to the south of Lake Throssell covering an area of 1,915km² with over 200km² of playa area and approximately 130km of interpreted palaeovalley along the interpreted strike extension of Lake Throssell, subject to funding and the grant of tenure.

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



Keren Paterson

Managing Director & CEO
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Appendix A: Competent Persons & Cautionary Statements

Competent Person Statements

The information in this announcement that relates to the Exploration Results, Mineral Resources and Exploration Target is based upon information compiled by Mr Adam Lloyd, who is employed by Aquifer Resources Pty Ltd, an independent consulting company. Mr Lloyd is a Competent Person who is a Member of the Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and the activity to which is being undertaking to qualify as a Competent Person for reporting of Exploration Results, Mineral Resources and Ore Reserves as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Lloyd consents to the inclusion in the announcement of the matters based upon the information in the form and context in which it appears.

The information in this announcement that relates to process design and associated Project infrastructure is based on information compiled by Dr Anthony Chamberlain who is an employee of Trigg Mining Limited and a Member of the Australian Institute of Mining and Metallurgy. The process design criteria were derived from an evaluation of the Lake Throssell concept study completed by Hatch Engineering, and benchmarking against performance of similar potash flowsheets. Dr Chamberlain has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which he is undertaking to qualify as a Competent Person as defined in the JORC code. Dr Chamberlain consents to the inclusion in the report of the matters based on his information in the form and context which it appears.

Cautionary Statement Regarding Forward Looking Statements

Some statements in this announcement regarding estimates or future events are forward-looking statements. They include indications of and guidance on, future earnings, cash flow, costs and financial performance. In addition, statements regarding plans with respect to the Company's mineral properties may contain forward-looking statements.

Forward-looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "could", "nominal", "conceptual" and similar expressions. Forward-looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions.

Forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward-looking statements may be affected by a range of variables that could cause actual results to differ from estimated results and may cause the Company's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward-looking statements. These risks and uncertainties include but are not limited to liabilities inherent in mine development and production, geological, mining and processing technical problems, the inability to obtain mine licences, permits and other regulatory approvals required in connection with mining and processing operations, competition for among other things, capital, acquisitions of reserves, undeveloped lands and skilled personnel; incorrect assessments of the value of acquisitions, changes in commodity prices and exchange rates; currency and interest rate fluctuations; various events which could disrupt operations and/or the transportation of 14 mineral products, including labour stoppages and severe weather conditions; the demand for and availability of transportation services; the ability to secure adequate financing and management's ability to anticipate and manage the foregoing factors and risks. There can be no assurance that forward-looking statements will prove to be correct.

Statements in relation to future matters can only be made where the Company has a reasonable basis for making those statements.

The Company notes that an Inferred Resource has a lower level of confidence than an Indicated Resource and that the JORC Code (2012 Edition) advises that to be an Inferred Resource it is reasonable to expect that the majority of the Inferred Resource would be upgraded to an Indicated Resource with continued exploration. Based on advice from relevant Competent Persons, the Company has a high degree of confidence that the Inferred Resources for the Lake Throssell SOP Project will upgrade to Indicated Resources with further exploration work.

This announcement has been prepared in compliance with the JORC Code 2012 Edition and the current ASX Listing Rules.

The Company believes that it has a reasonable basis for making the forward-looking statements in this announcement, including with respect to any production targets, based on the information contained in this announcement and in particular:

- i) Trigg Mining owns 100% of the Lake Throssell SOP Project and has a sufficient Mineral Resources that the Company is confident it can secure product offtake contracts to support the development of the Project. Future development of the Project is dependent on technical and economic hurdles.
- ii) The Company plans to undertake further resource definition work to improve the Mineral Resource status of the Basal aquifer. A test production bore and aquifer testing program is planned and the company's Resource Consultant has a high level of confidence to convert a high proportion of the remaining Inferred Resource to Indicated and Measured status following positive test pumping and geophysical results. The results of the program will allow calibration of the existing solute transport model and may allow an Ore Reserve to be estimated in conjunction with future evaluation studies.
- iii) The Scoping Study was completed by CPC Project Design Pty Ltd (**CPC**) with an estimating accuracy of $\pm 25-35\%$. CPC is a well-recognised engineering construction and project development firm with an established team and project experience covering Western Australia and multiple mineral types. CPC has compiled the capital and operating cost estimates and provided sign-off for the Scoping Study level cost estimates (excluding Trench Network, Brine Borefield and Owner's costs) based on the mining schedule and estimated mine operating costs provided by Aquifer Resources. Capital and operating cost estimates was prepared by CPC in accordance with their ISO9001 accredited Project Design Guidelines – Capital and Operating Cost Estimate (CPC-ES-W-001 Revision 3).
- iv) An opinion provided to the Company by Euclase Capital in relation to the future potential funding available from global capital markets to finance development of the Lake Throssell Project. This evaluation included, but was not limited to, a consideration of: the estimates of Trigg and leading industry commentators/participants in relation to likely future potash price levels; the size and relative forecast economic parameters of the Lake Throssell Project versus other potash development projects; jurisdictional location of the Lake Throssell Project; potential for the Lake Throssell Project to attract long term off-take contract interest; current Trigg market capitalisation relative to expected future finance requirements for the Lake Throssell SOP Project; and relevant Trigg management experience in developing greenfield mining projects in Western Australia and elsewhere.

Appendix B: Peer Analysis Source Data

Relating to Figure 9 and Figure 10 of this Report.

Company Feasibility Study	Source
APC SS	Australian Potash Scoping Study ASX release - 23 March 2017
APC DFS	Australian Potash Definitive Feasibility Study ASX release - 28 August 2019
APC FEED	Australian Potash Front End Engineering Design ASX release - 20 April 2021
AMN SS	Agrimin Limited Scoping Study ASX release - 23 August 2016
AMN PFS	Agrimin Limited Pre-Feasibility Study ASX release - 7 May 2018
AMN DFS	Agrimin Limited Definitive Feasibility Study ASX release - 21 July 2020
SO4 SS	Salt Lake Potash Limited Scoping Study ASX release - 13 June 2019
SO4 BFS	Salt Lake Potash Limited Bankable Feasibility Study ASX release - 11 October 2019
RWD SS	Reward Minerals Scoping Study ASX release - 2 April 2015
RWD PFS E	Reward Minerals Pre-Feasibility Study (Enhanced) ASX release - 13 July 2018
KLL PFS	Kalium Lakes Limited Pre-Feasibility Study ASX release - 3 October 2017
KLL BFS	Kalium Lakes Limited Bankable Feasibility Study ASX release - 18 September 2018
KLL FEED	Kalium Lakes Limited Front End Engineering Design ASX release - 4 March 2019
KLL PU	Kalium Lakes Limited Project Update & Presentation ASX release - 21 May 2020
KLL FS	Kalium Lakes Limited Feasibility Study ASX release – 18 Aug 2021



Appendix C

Lake Throssell Sulphate of Potash Project

Mineral Resource Report

For Trigg Mining Limited

5 October 2021



**Aquifer
Resources**

HYDROGEOLOGY | BRINE RESOURCES

Version	Prepared By	Date
Rev 1a	A Lloyd 	5/10/2021

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APPENDIX 1 – Drill hole and assay tables

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1. Introduction

The Lake Throssell Potash Project is 100% owned and operated by Trigg Mining Limited (Trigg) and lies approximately 180 km north-east of Laverton, situated on a granted Exploration Licence (E38/3065). Trigg has a total of 1,084 km² of exploration tenure granted or pending approval across Lake Throssell.

Trigg Mining engaged Aquifer Resources to complete a Mineral Resource Estimate and Mine Plan for the Lake Throssell Project in support of the Lake Throssell Potash Project Scoping Study. This Mineral Resource Report provides details on the data and methodology used in determining the updated Mineral Resources and a Mine Plan to support the Production Target.

The basis of the updated Mineral Resource and establishment of a Mine Plan are the results from review of logging and mapping of high permeability sediments in the basal aquifer and groundwater flow and solute transport modelling for the Lake Throssell aquifer system. This has allowed conversion of the highest permeability sediments of the basal aquifer system to be converted from Inferred Mineral Resources to Indicated Mineral Resources. The modelling outputs have been used to determine an abstraction regime that supports a Mine Plan and Production Target.

1.1. Site Setting

The project area at Lake Throssell is characterised broadly by three different topographical features.

To the north of the lake, the topography is generally higher where bedrock outcrop is present with sparse vegetation intersected with some breakaways and deeper ephemeral creek lines that may discharge during rainfall events onto the lake surface.

The lake area is flat, the lake surface is divided by lunette islands which intersect the playa. Distances between islands ranges from hundreds of metres to up to 2.5 km in diameter. The islands are elevated up to 8m above the surface of the lake and are mainly formed of gypsonite and sand dunes. The gypsonite zones are representative to be the old playa surface which has been eroded away through the process of geological deflation, developed through wind processes.

The area south of the lake shoreline is generally flat with localised areas of bedrock outcrop, which extends to and beyond the Great Central Road. There are virtually no creek lines developed in this area.

The Lake Throssell location and regional catchment is present in Figure 1. the upstream catchment is approximately 48,000 km² and extends approximately 450 km to the northeast.

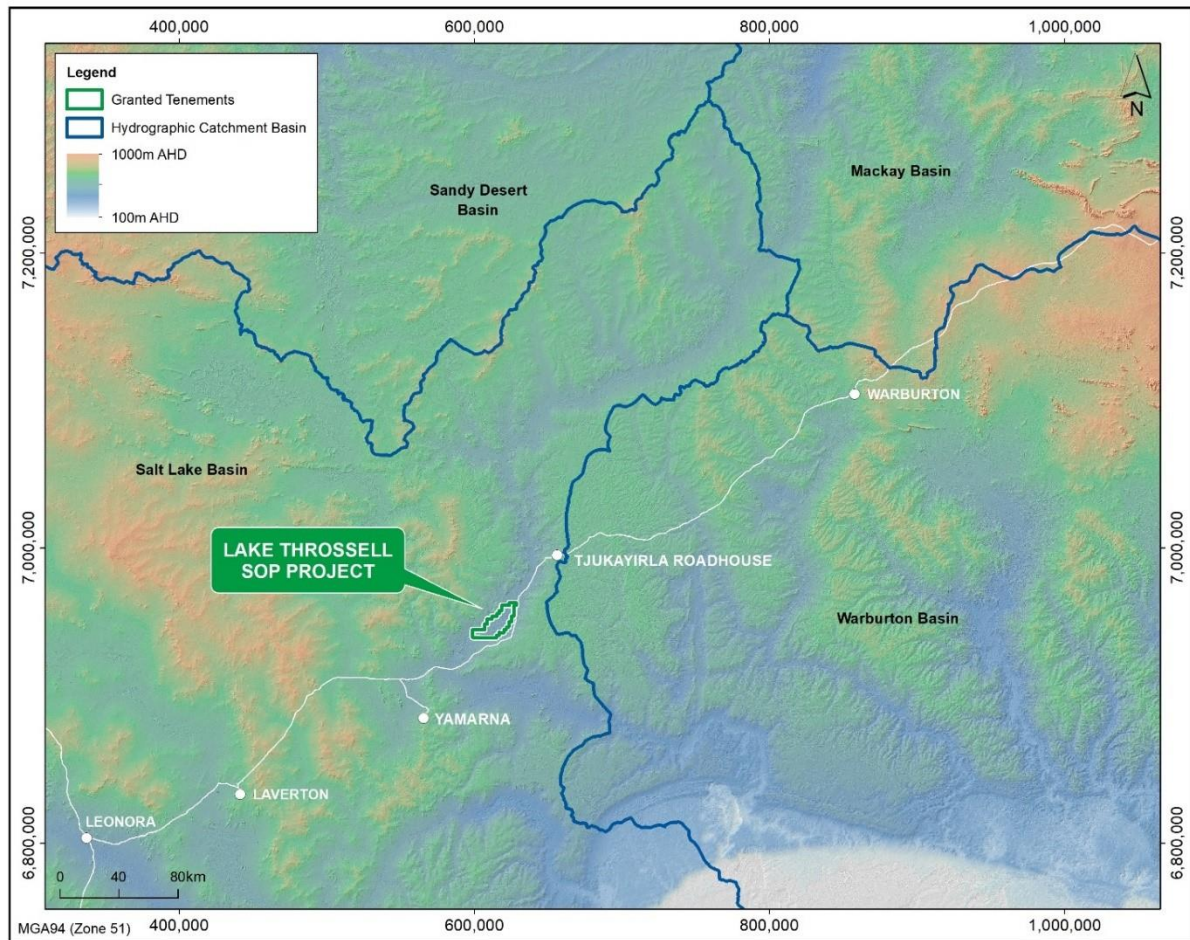


Figure 1: Regional Topography and Catchments

2. Geology and Hydrogeology

2.1. Regional

Lake Throssell is located on the margin of the Achaean Yilgarn Craton and the Proterozoic Officer Basin. There has been little in the way of previous mapping of the regional geology in the Lake Throssell area, the only deep drill hole is the BMR (Bureau of Mineral Resources, Geology and Geophysics) Throssell 1 located to the north of Lake Throssell, otherwise the regional geology has been based on outcrop mapping and geophysical interpretation. The regional geology has been described by Bunting et al (1978) in the 1:250,000 Geological Series Explanatory Notes for the Throssell Sheet SG/51-15. A summary is described below. The geology of the region is presented in Figure 2.

2.1.1. Archaean

Archaean rocks are exposed to the west of Lake Throssell on the south-western pending tenements, elsewhere the crystalline basement is covered by flat-lying Proterozoic or Permian bedrock or Cenozoic cover.

Within the granite terrain, greenstone areas form isolated north-northwest-trending metamorphic belts. No greenstones belts have been mapped within the Lake Throssell vicinity, the nearest is in the vicinity of the Gruyere mine site, approximately 40km, southwest of the Lake.

The greenstone belts are intruded and broken up by granitic rocks ranging from granite to tonalite in composition. The granitic rocks account for approximately 90 per cent of the Archaean rocks outcropping in the region as part of the Yilgarn Craton. The granite is typically covered by superficial deposits and can be deeply weathered.

2.1.2. Proterozoic

Proterozoic rocks outcrop on either side of the palaeovalley north from Lake Throssell. They have been grouped into the same informal sequence, here called the Older and Younger Proterozoic. The Proterozoic to the east of the Throssell Palaeovalley is thought to form part of a Younger Proterozoic sequence. The paucity of outcrop, lack of structural information and absence of contact relationships means, however, that this subdivision of the Proterozoic within the area is tentative.

Early Proterozoic

A flat-lying to very gently north-dipping undeformed sequence of quartz and glauconitic arenite, overlain by multicoloured oolitic and intraclastic sandstone, fine-grained flaggy micaceous sandstone and siltstone, unconformably overlies Archaean granite. The quartz arenite is medium to coarse grained, well sorted, and sub-rounded to well-rounded with a siliceous cement. Glauconite is present in places and forms up to 10 per cent of the rock. The multi-coloured sandstone contains ferruginous ooids with poor concentric zoning.

The outcrops in area represent only the basal 30 to 40 m of a sequence which is several thousands of metres thick and much better exposed in areas to the northwest. A tentative stratigraphy for the whole sequence has been suggested are equivalent to their Yezma Sandstone, and Frere Formation, respectively.

Late Proterozoic

A thin sequence of Younger Proterozoic rocks overlies the Older Proterozoic in the east of the Throssell Palaeovalley. The presence of the younger sequence is based largely on extending the interpretation of seismic results into this area and supplementing it with sparse outcrop information.

Based on the seismic interpretation, a thin interval (less than 400 m) of Younger Proterozoic rocks overlays the Older Proterozoic sequence. To the east of the Throssell area this sequence thickens to a maximum of about 7000 m.

The only other information on the Younger Proterozoic sequence in the area is that provided by stratigraphic drill hole BMR Throssell 1. This hole intersected 101 m of palaeovalley fill sediments before penetrating 97 m of indurated claystone, siltstone and sandstone, which correlate with the Proterozoic Babbagoola Beds.

2.1.3. Permian

Paterson Formation

The Lower Permian Paterson Formation is an extensive, thin, flat-lying terrestrial formation that forms the bedrock in all but the northern areas of the Lake Throssell project. Although the rocks comprising the formation have commonly been affected by duricrusting processes, there are good outcrops in prominent breakaways on the north and southern sides of the Throssell palaeovalley.

Although the formation is probably not much more than about 100 m thick throughout much of the Sheet area, the outcrops contain a wide range of rock types, reflecting the formation's complex glacial, fluvial, and lacustrine depositional environments. Generally, it consists of laminated claystone and siltstone containing rare erratic pebbles and cobbles, but beds highly disturbed by slumping at a time of formation or slightly after are also present. The lacustrine unit is overlain by 13 m of fluvial, conglomeratic to very coarse-grained, pebbly sandstone, containing well developed decimetre-scale trough cross-stratification. The upper unit has a sharp erosional base with well-developed channels; it rests on a 2-m thick paleosol developed at the top of the lacustrine facies.

The Paterson Formation unconformably overlies Archaean basement in the south-central part of the project area and Proterozoic quartzite towards the northwest. Palynological studies of samples from the formation in adjacent areas date it as Early Permian.

2.1.4. Cenozoic

Silcrete

The silcrete is a grey-green, silicified, poorly to well sorted sandstone, composed of angular to rounded quartz grains (rarely chert, chalcedony or quartzite). The matrix is opaque microcrystalline silica with minor chalcedony and is locally ferruginized.

The silcrete forms a resistant, slightly undulating capping up to 2m thick, preferentially developed over quartz-rich Permian and deeply weathered Precambrian rocks. It is generally massive or cavernous. Weathering of the capping produces a colluvium of spherical boulders.

In places laterite is developed over silcrete, indicating that the silcrete is older than the laterite. However, they may have formed at the same time. The silcrete is thought to be Miocene or older.

Laterite

Laterite occurs patchily throughout the area but is best developed in areas of Archaean mafic and ultramafic rock. In these areas it is a ferruginous, pisolitic to massive crust, generally grading directly into bedrock. To the east of the project area the laterite profile grades upwards into a loose, progressively less-densely packed ironstone, and eventually into sand with scattered pisoliths.

Calcrete

The term calcrete is used to describe impure carbonate deposits in relict drainage systems. The calcrete is nodular, laminated, massive, or cavernous, and is composed of calcium carbonate with fragments of quartz, laterite and silcrete. BMR Throssell 1 penetrated 27 m of calcrete. Textures indicate that the carbonate has filled voids, and has both replaced and pushed apart pre-existing clasts, chalcedonic silica replacement is common. The major relict drainage systems, including Lake Throssell, and Lake Yeo, and a north-trending palaeovalley, contain extensive deposits of calcrete.

Colluvium and alluvium

Rock fragments, sand, silt, and clay at the foot of hills and breakaways, on long gentle slopes, and in depressions and water courses have been mapped as one unit. This unit is formed mainly by sheet-wash down uniform slopes, and channel flow in ephemeral streams. These sediments are still being deposited and older ones reworked. Aeolian sediments may be intermixed with the colluvium, and boundaries with the aeolian sandplain arc often gradational. Thickness of the colluvium and alluvium averages a few metres, but maybe up to 20m in the palaeovalley.

Aeolian sandplain deposits

A substantial portion of the area is covered by a veneer of red quartz sand, which forms a gently undulating plain with longitudinal dunes developed on it.

Most dunes are between 5 and 10 m high and up to 10 km long. They are mostly sub-parallel and trend eastwards, although east of Lake Throssell there is a pronounced change in orientation to a north-easterly trend. Angles formed by merging dunes generally open westward, indicating that the dunes were formed by westerly winds.

Lake and associated deposits

Lakes Throssell is a portion of an infilled relict trunk drainage system (palaeovalley) and now ponding areas for the present internal drainage. Recent deposits of gypsiferous and saline clay, silt, and sand occur in the salt lakes and claypans. Lake-derived aeolian deposits of mainly silt and sand form lunette dunes and sheets associated with the salt lakes. Gypsum and quartz are the main constituents; halite is minor. Dunes of flour textured gypsum up to 10 m high occur predominantly on the eastern (lee) side of larger salt lakes.

Next to the lakes there are commonly flat areas of loamy colluvium with small claypans. These are largely composed of silt and gypsiferous material derived by wind action from salt lakes. BMR Throssell 1 penetrated Cainozoic lacustrine deposits from about 27 m to 101 m.

2.1.5. Structure

The project area is situated near the northeast margin of the Yilgarn Block, a stable craton of Archaean age. To the north and east the Archaean rocks underlie almost undisturbed flat-lying Proterozoic and Phanerozoic sediments of the Nabberu and Officer Basins. Seismic traverses along the southeast side of Lake Throssell suggest that the eastern edge of the Yilgarn Block is a major fault with a downthrow to the northeast of some 7,000-m. Within the basin sediments there appears to be some faulting in a north-west to south-east direction, which underlie Lake Throssell at depth.

2.2. Local Geology

The geology of the lake and palaeovalley sequence is consistent with other comparable sequences in the region. The shallow surficial sediments of the lake surface are dominated by an evaporite surface, comprised of mostly of gypsum, underlain by more silty and clayey sequences with occasional thin granular and calcrete zones.

These surficial lithologies lie on top of a thick sequence of stiff lacustrine clay, which acts as a regionally confining aquitard with very low vertical hydraulic conductivity, meaning it hydraulically separates the shallow sediments of the palaeovalley from the sediments beneath the clay. Below the lacustrine clay sequence is a fine to medium grained basal sand with silty and clayey bands of fluvial origin, estimated to be between Eocene and Pliocene age. At the base of this fluvial system is the contact with the Permian age Paterson Formation, a palaeosurface that represents up to 200 million years of weathering, erosion, and deposition. In the deepest sections of the palaeovalley, the Paterson Formation is an unconsolidated fluvial glacial deposit of gravel, sand, and silt.

On the margins of the palaeovalley, the Paterson Formation is present at outcrop as dark to light grey poorly sorted siltstone, mudstone, sandstone, and quartzite, with conglomerate beds. Thick saprolite zones are present up to 50m in thickness where exposed on the palaeovalley margins, often dominated by silt and fine sand. Unconsolidated glacial fluvial sediments of mixed gravel and minor silt are present within this saprolite zone which are likely to be representative of either in-situ weathering or local colluvial deposits when at the contact with the overlying Cenozoic sediments. A conceptual cross section of the geology is presented in Figure 3.

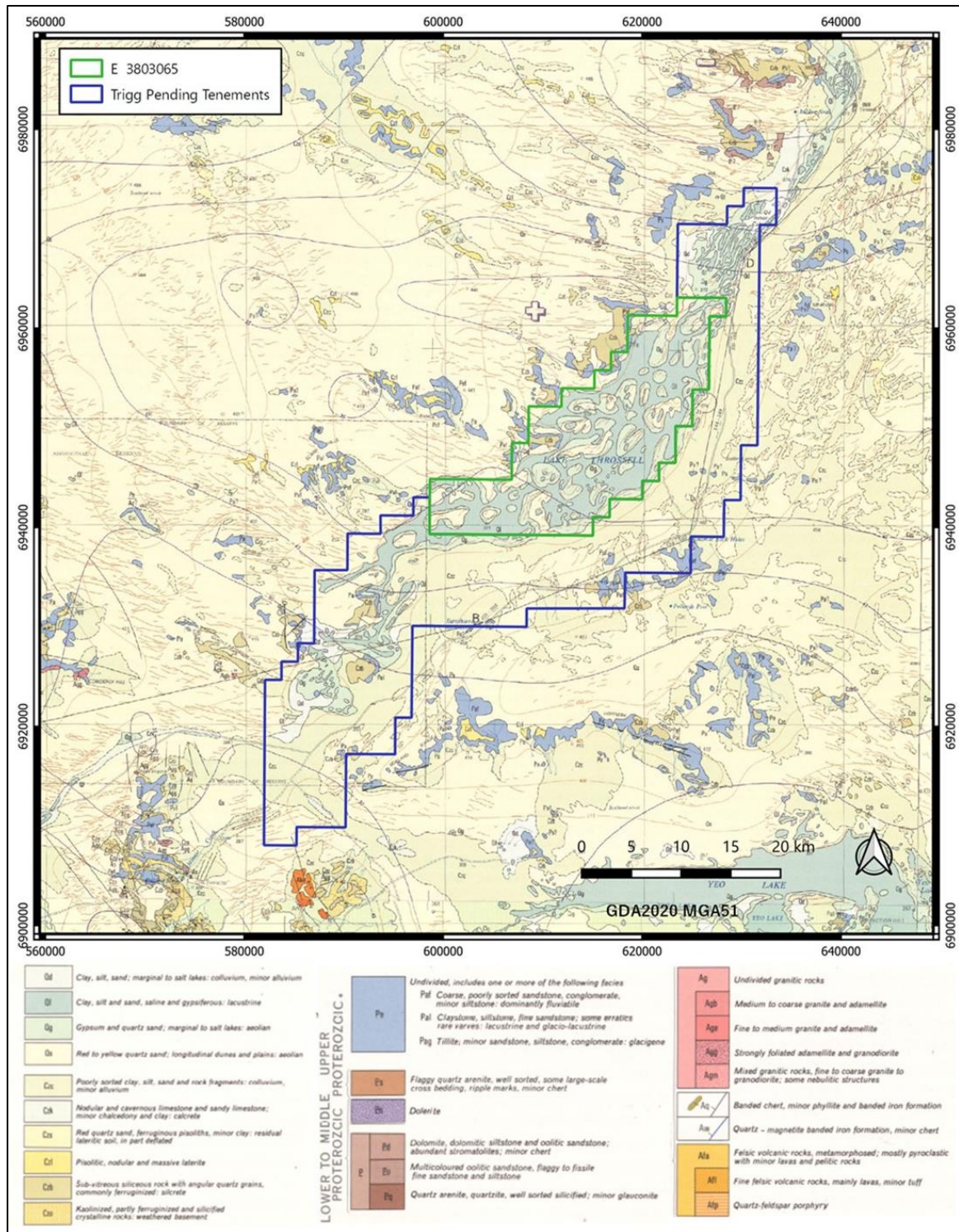


Figure 2: Mapped Geology (Bunting et al (1978))

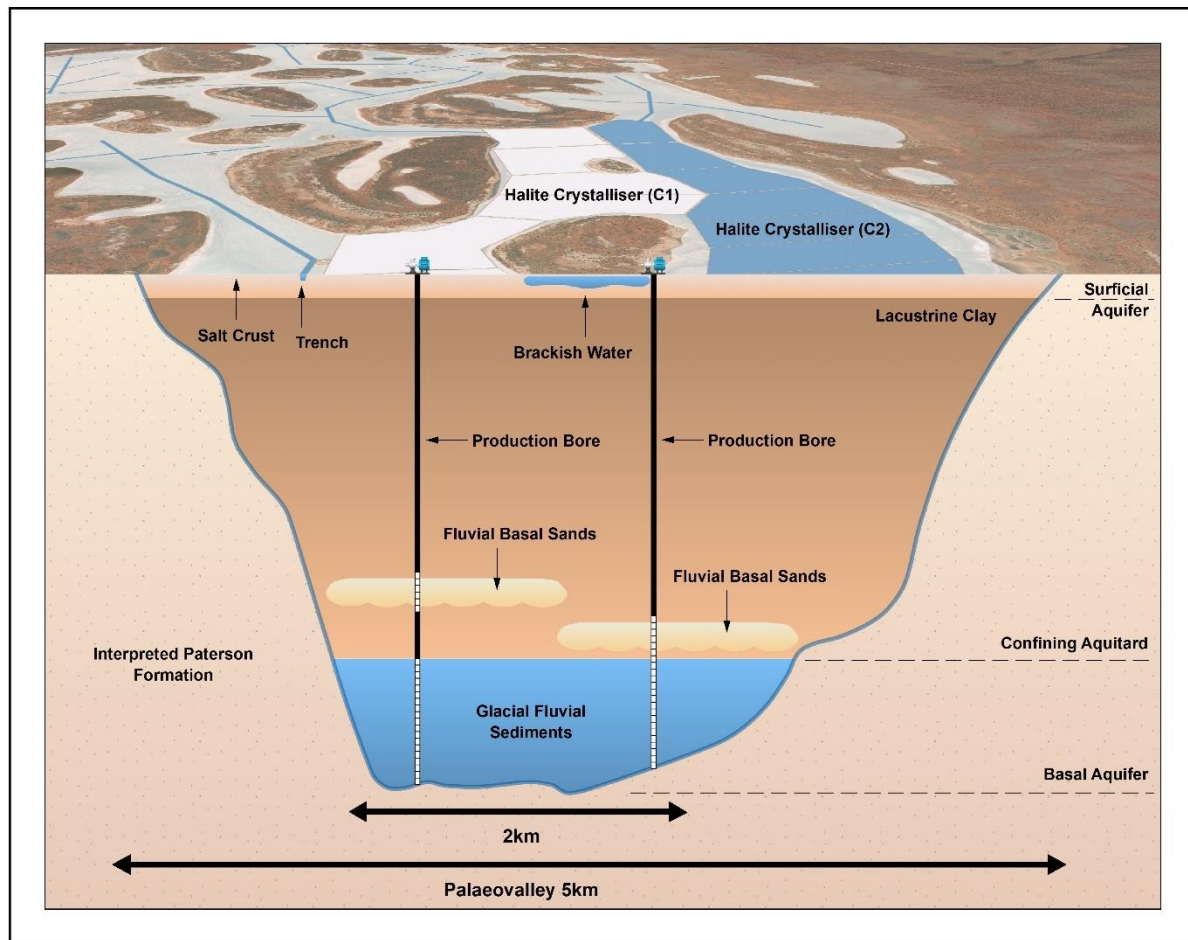


Figure 3: Conceptual cross section of the palaeovalley sequence and potential brine infrastructure at Lake Throssell

3. Hydrogeology

The salt lake acts as a point of discharge for the regional groundwater system. Groundwater flow in the shallow sediments within the lake's catchment flows towards the lake surface where evaporation is dominant and there is a net loss to the system making the groundwater hypersaline in nature.

The water table at the lake surface is approximately 0.2 to 0.5 m beneath the surface, it is considered to be relatively flat at the surface of the lake and is hypersaline. Within the islands the water table is considered to be elevated likely reflecting the increase in topographic elevation. Outside of the lake area no drilling has been completed to estimate the depth to water table, however it is broadly assumed that the depth to water table will increase away from the lake surface as topography rises.

The key aquifer units are considered to be:

- The lake surface (Upper Aquifer)
- The fluvial sediments (Basal Aquifer)
- The glacial fluvial sediments (Basal Aquifer); and
- The Permian saprolite. (Basal Aquifer).

The Lacustrine clay is considered to be an aquitard of very low vertical hydraulic conductivity, this clay separates the upper unconfined aquifer from the lower confined basal aquifer.

The aquifer properties have been determined for the lake surface through trench test pumping. There is limited available information on the aquifer properties of the basal aquifer as no test pumping has been completed to date.

4. Summary of Exploration

Exploration to date at the Lake Throssell SOP Project has comprised the following programs:

- Lake surface hand auger – 16 drill holes;
- Gravity Surveys – 200 line-km;
- Heli-supported rotary drilling – 26 drill holes;
- Air-core drilling (both on and off lake) – 54 drill holes;
- 355 brine assay samples from a total of 5,720m of drilling;
- 62 Particle Size Distribution (PSD) analysis to determine drainable porosity;
- 18 Lexan-tube core samples taken from the lake sediments;
- 2 ten day pumping tests on 100m trial trenches; and
- 7 short term pumping tests on test pits.

All drill-holes and surface excavations completed to date are presented in Figure 4 and the following sections are a summary of each of the programs.

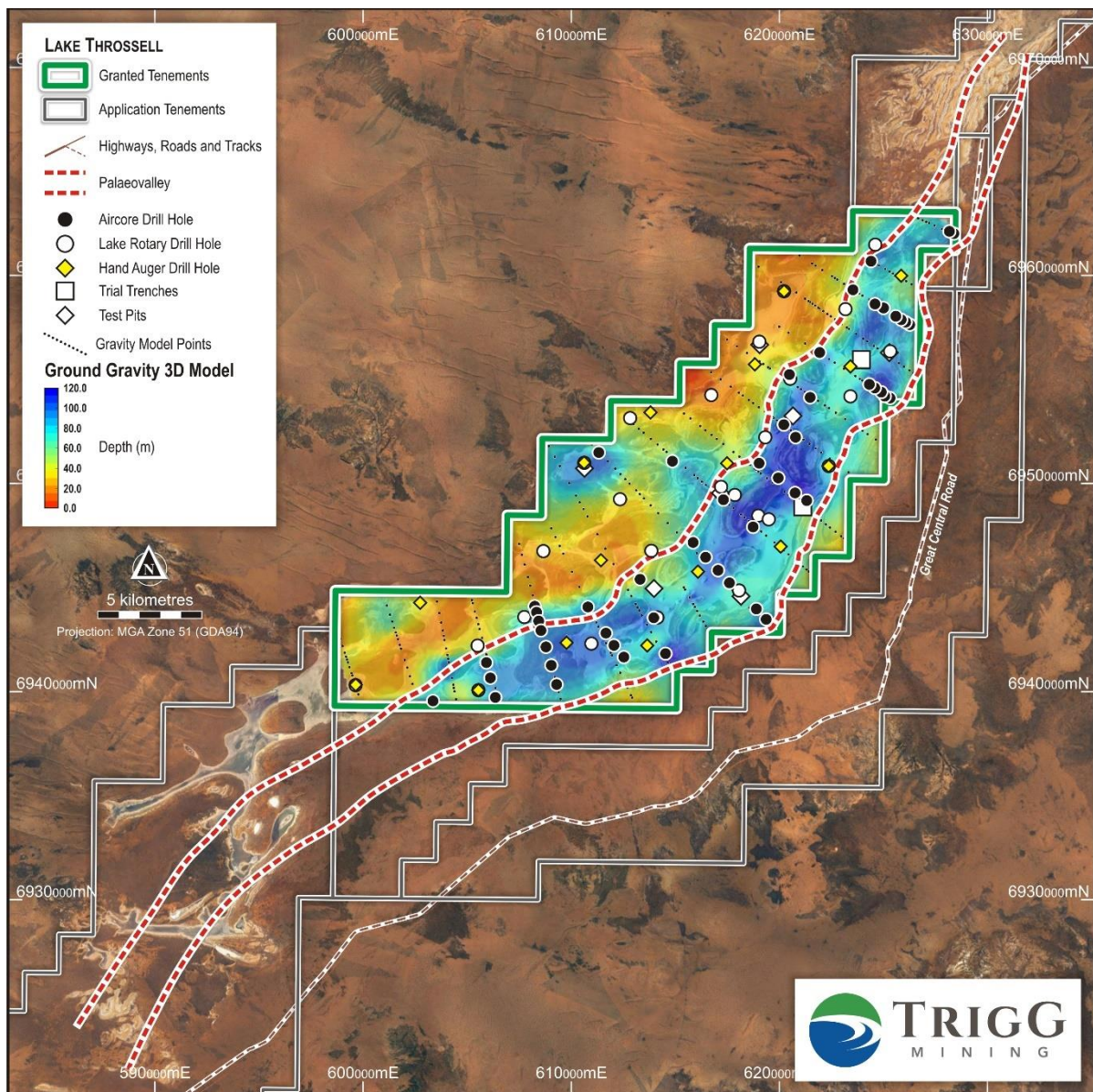


Figure 4: Lake Throssell investigation locations

4.1. Surficial Aquifer

4.1.1. Hand Auger Drilling and Sampling

A preliminary lake surface auger program was completed in December 2019 (ASX announcement 16 December 2019) to give an indication of brine grade in the shallow lake sediments. A total of 16 auger holes up to 1.2 m in depth were completed.

The holes encountered a typical lake surface sequence, dominated by gypsum with silt and clay, with brine at approximately 0.3 m below ground level (**bgl**). Brine samples were obtained from each hole between 0.3 m and the end-of-hole.

The collar locations are presented in Figure 4 and the brine assays and associated geological descriptions are presented in Appendix 1.

4.1.2. Rotary Auger Drilling and Sampling

The program was completed in July 2020 using a heli-supported rotary auger rig targeting the top sequence of lake surface sediments to a maximum depth of 10 m (ASX announcement 10 August 2020). The program obtained brine samples and core samples for porosity testing over the entire playa-lake surface, consisting of 26 drill holes for a total of 86 m of core and 77 brine samples. Drill-hole locations are presented in Figure 4.

The program encountered gypsum dominated sandy silt and clay in the top 5 m. The gypsum layers were up to 0.2 m thick and often associated with good to very good brine in-flow rates, inferring that these zones were more highly permeable.

Minor sand and gravel layers were also identified in three holes, with one hole (LTAG19) containing a clay/silt supported sand interval of at least 1.3 m with rounded pebbles. A more clay-dominated sequence is present below 5m, with less gypsum and increasing density.

As part of the program, two holes were designed to test the characteristics of the surficial sequence within the islands (LTAG04 and LTAG05). Drilling and brine analysis confirming a lack of brine flow and more dilute brine, inferring lower permeability and lower grade brine is present within these areas.

Core samples were obtained throughout drilling using Lexan tubes for laboratory sampling and analysis of porosity and permeability.

Brine samples were obtained during the program by bailing the hollow stem of the auger when open to a known interval to provide a representative sample. A summary of collar locations, hole depths, encountered geology and brine analysis is presented in Appendix 1.

4.1.3. Lake Surface Test Pumping

The program was completed with the aim of estimating the aquifer properties, including drainable porosity (specific yield) and hydraulic conductivity (vertical and horizontal), for the upper section of the lake surface aquifer by test pumping the aquifer.

The program consisted of two trial trenches and seven test pits distributed across the lake. The trenches were 100 m long and were surrounded on all sides by a number of monitoring pits. Whilst the test pits consisted of one small trench and one adjacent monitoring pit. All excavations were completed with a 15-tonne amphibious excavator that was able to excavate to depths of between 3m and 4.5 m.

The trial trenches were pumped until water levels in the majority of monitoring pits had stabilized – which was between 10 and 11 days in both cases. Test pits consisted of a small pumping trench between 6 and 9 m long with an adjacent monitoring pit. Test pits were de-watered and the brine

level draw-down and recovery rates were monitored. Throughout all testing brine levels, flow rate and brine quality was frequently monitored.

Trench locations and dimensions are presented in Figure 4 and Table 1. An example of the 100 m long trial trench and monitoring pit network is shown in Figure 5. A test pit excavation is shown in Figure 6, with layering evident close to surface and becoming more clayey with depth.



Figure 5: Trial Trench one with surrounding monitoring pits



Figure 6: Test pumping of a test pit excavation

The lake surface to 2 m below the ground level is more heavily dominated by gypsum, with clayey horizons dominant to the base of the excavation, intermixed with silty zones. The large excavation provided an opportunity to observe the layered nature of the sequence, how the walls stood up and the brine inflow horizons associated with gypsum dominated layers.

The test pumping data has been analysed using local scale numerical models in groundwater modelling software FEFLOW. The models were calibrated to the brine level draw-down and recovery by changing the hydraulic conductivity (horizontal and vertical) and specific yield of the aquifer to obtain an acceptable fit between the measured data and the simulation. Calibration was achieved by a combination of manual and automated iterations. An example of the trench pumping data and calibration simulation is provided in Figure 7 to Figure 9.

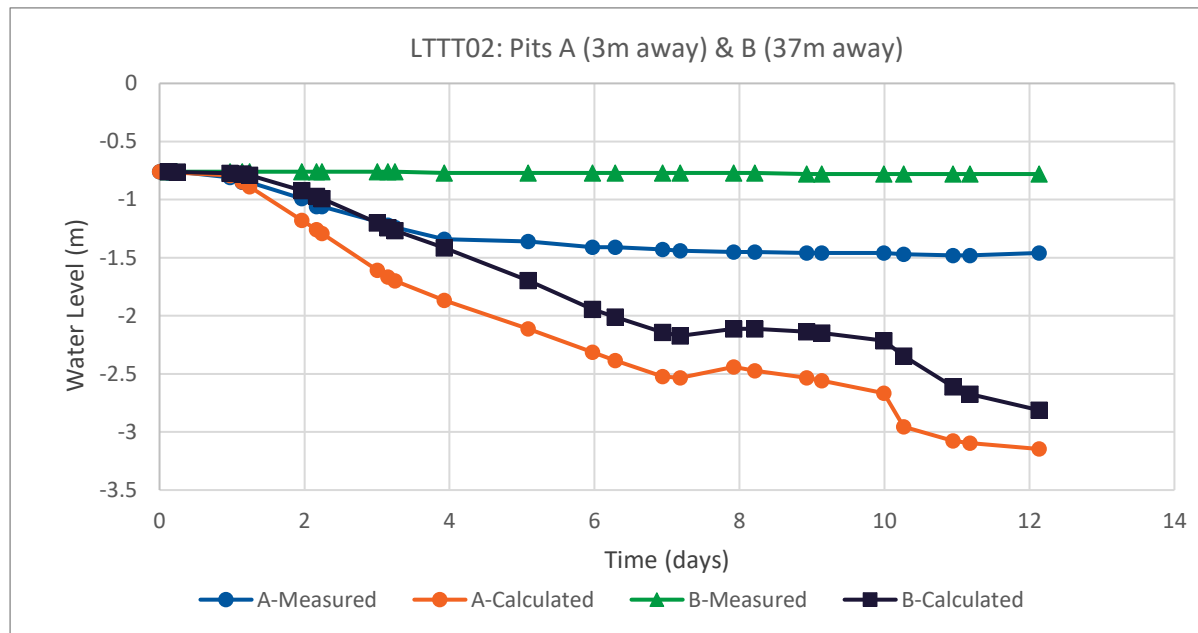


Figure 7: Test pumping measured response and modelling (calculated)

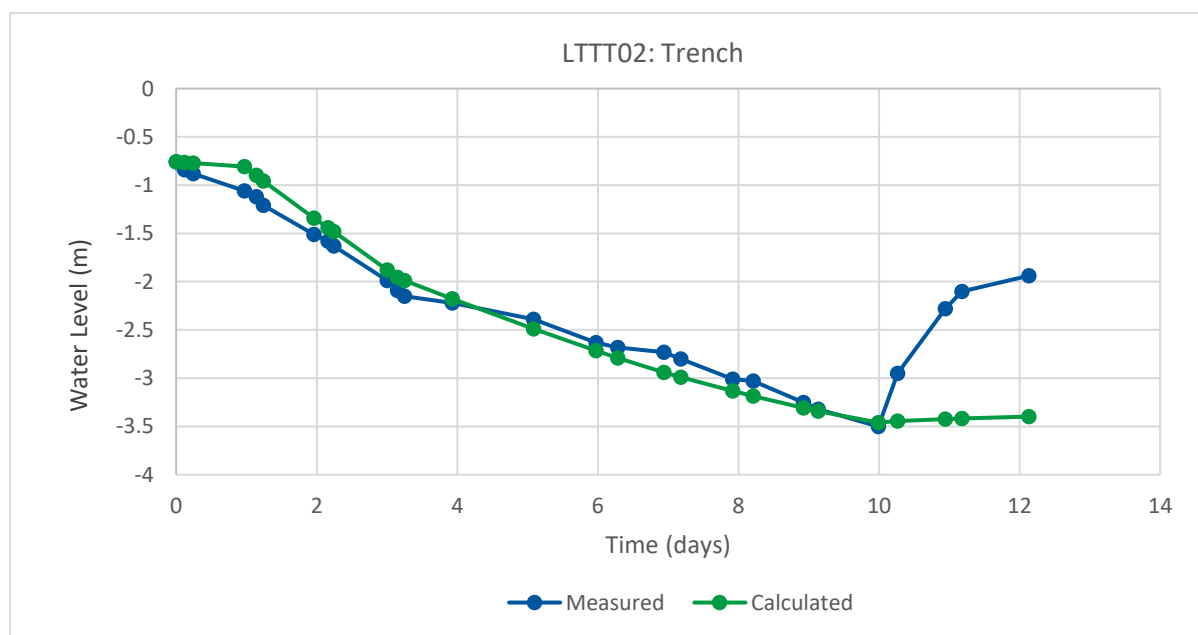


Figure 8: Test pumping measured response and modelling (calculated)

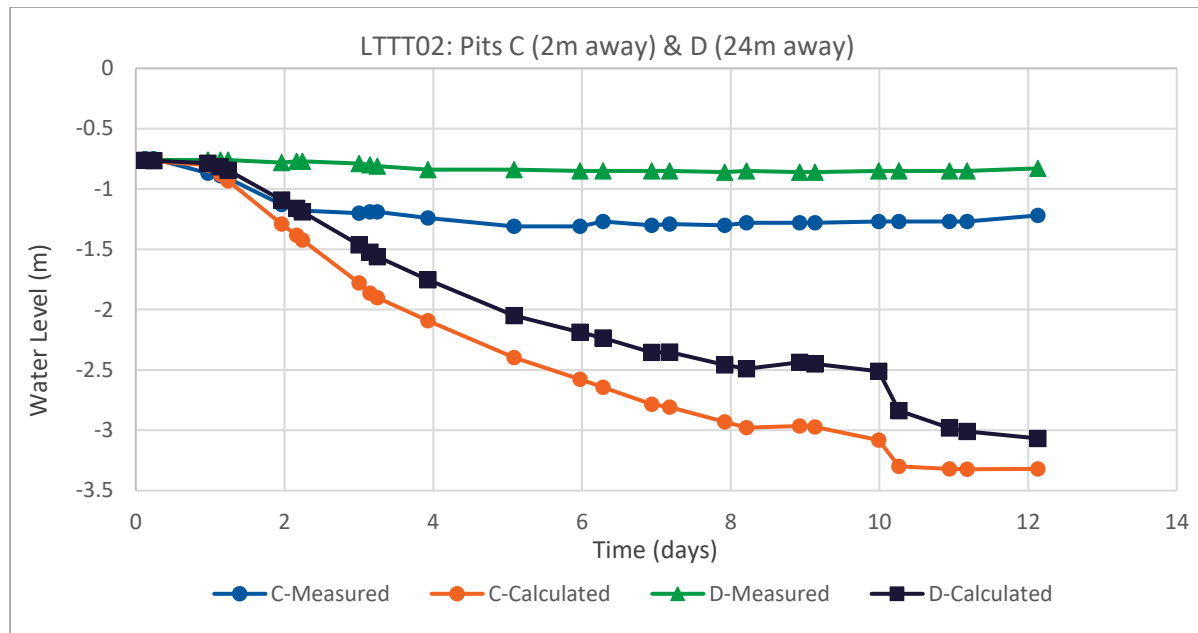


Figure 9: Test pumping measured response and modelling (calculated)

The final aquifer property results from the modelling are highly variable, confirming the highly heterogeneous nature of the layered lake surface aquifer. Specific yield results varied between 0.01 (stiff clay) and 0.4 (the maximum possible related to gypsum evaporite sequences).

Hydraulic conductivity derived from the modelling ranged between 0.2 meters per day (m/d) (stiff clay) and 340 m/d (gypsum dominated flow). Hydraulic conductivity was also estimated using distance drawdown analysis for the two trial trenches, these results indicated values of 4.8 and 7.8m/d, which compare favourably to the weighted average of the test pumping results (13.9 m/d). The trench pumping results are presented in detail in Table 1.

Table 1: Trench Locations and Pumping Results from Modelling

ID	Type	Easting	Northing	Length (m)	Depth (m)	Max Draw-down (m)	Pumping Duration	Average Pumping Rate (L/s)	Hydraulic Conductivity (m/d)	Specific Yield (-)
LTTT01	Trial Trench	623935	6955953	100	4.5	1.9	10 Days	1.0	1.5	0.40
LTTT02	Trial Trench	621117	6948873	100	4.5	2.6	11 Days	1.2	0.5	0.40
LTPP01	Test Pit	619044	6956671	6.5	3.7	2.4	2 Hours	1.2	0.2	0.01
LTPP02	Test Pit	625277	6956289	8.3	3	1.9	3 Hours	2.1	0.8	0.02
LTPP03	Test Pit	617157	6949545	6.3	4	2.8	2.5 Hours	1.4	0.6	0.01
LTPP04	Test Pit	620646	6953250	8.6	3	1.9	1.5 Hours	1.7	1.9	0.05
LTPP05	Test Pit	610629	6950730	9	3	0.1	2 Hours	4.2	340	0.40
LTPP06	Test Pit	618148	6944582	6.3	3.8	1.6	4 Hours	2.6	32	0.10
LTPP07	Test Pit	613967	6944956	7.2	3.8	1.8	2.5 Hours	1.9	0.9	0.15

Brine samples were obtained at the start and end of pumping of the test pits, while the trial trenches were sampled every day for field parameters of salinity, SG and pH, with samples retained for laboratory analysis on every second day.

Brine grade variations during pumping show a muted response with most test pits moderately reducing in grade by less than 3%, while the grade increased by up to 10% at LTTT01. The full brine analysis results are provided in Appendix 1.

4.2. Basal Aquifer

4.2.1. Gravity Geophysical Survey

An initial ground gravity survey was completed in March 2020 (ASX announcement 7 May 2020) and followed up with an in-fill survey in July 2020 (ASX announcement 10 August 2020) for a total of approximately 200 line-kilometres with the aim of identifying drilling targets within the palaeovalley system as a first step of identifying a palaeochannel basal aquifer to target with future production bores.

The surveys comprised a total of 1,040 stations at approximate 200 m spacing on traverses perpendicular to the inferred alignment of the palaeovalley. The gravity data was processed by gridding the Bouguer anomaly and regional separation from the Bouguer anomaly to produce a residual gravity anomaly that is considered to represent the broad palaeovalley geometry.

When compared to the known geology, the gravity highs are well correlated with mapped outcropping Paterson Formation and gravity lows are located within areas of low-lying regolith cover within the Throssell palaeovalley system, providing confidence in the regional model and general understanding of comparative palaeovalley in the region. Two gravity low anomalies have been found to be representative of deeply weathered bedrock instead of palaeovalley sediments. These are located in the central part of the tenement on the northern and southern side of the palaeovalley.

Following completion of the air-core program the gravity model has been updated by calibrating to the end-of-hole geology. The updated map of the residual gravity anomaly is presented in Figure 4.

The gravity model was used to generate drill targets for air-core drilling and inform the geological model away from areas of drilling control.

4.2.2. Air-core Drilling

The air-core drilling program commenced in late November 2020 to test aquifer targets at the base of the palaeovalley sequence determined from the gravity survey. The deepest sections of the palaeovalley are considered to be most prospective for sand and gravel aquifer sequences deposited in a palaeochannel environment.

The drill program was completed by a track-mounted air-core drill rig. The program commenced in November 2020 but was delayed due to wet weather in December 2020 with 16 holes completed, a further 38 drill holes were completed in February 2021 for a total of 5,623 m (ASX announcements 21 December 2020 and 9 March 2021). The average hole depth was approximately 104 m with a maximum depth of 144 m (Figure 4 and Appendix 1).

The drill program confirmed the presence of a broad palaeovalley system approximately 100m deep with a thick lacustrine clay sequence and a number of deep aquifer targets of variable thickness and brine yielding. These included the basal sand and a glacial fluvial sand and gravel.

The basal sand is between approximately 5 to 17 m thick and is typically a yellow, brown to green fine to medium grained sand with silty bands, typically located between 70 and 100 m depth, and below the lacustrine clay on the eastern side of the palaeovalley associated with deposition in a medium to low energy palaeo-river system of likely Eocene to Pliocene age.

The glacial fluvial sand and gravel is typically a light to dark grey fine to medium sand with rounded to sub-angular gravel and occasional silt, the gravel is broken by the drilling but can be assumed to potentially be up to cobble size. The thickness of this sequence may range from 1 to 2 m up to 43 m in the deepest section, estimated to be approximately 12 m thick on average, and it is located mainly on the south and western sides of the palaeovalley. It is present as irregular zones either beneath the lacustrine clay or the fluvial basal sand or within zones of the Permian Saprolite zone, inferring that it is likely derived from a combination of an in-situ weathering profile of the coarse-grained Permian bedrock of fluvial glacial origin and a reworked pre-Eocene/Pliocene locally derived colluvial or alluvial deposit.

Drilling spoil samples were obtained for laboratory analysis of PSD to allow quantification of sand, silt, and clay portions from the various lithological zones across the system. Empirical equations have been applied to the PSD analysis which enables estimates of hydraulic conductivity and specific yield for the Mineral Resource Estimate. 62 samples in total were selected for laboratory analysis, which are discussed in the porosity and specific yield section below.

A total of 253 brine samples were submitted for assay, with results returning high grades of up to 5,800 mg/L K ($12.9 \text{ kg/m}^3 \text{ K}_2\text{SO}_4$), with an average grade of 4,488 mg/L K ($10.0 \text{ kg/m}^3 \text{ K}_2\text{SO}_4$). Of the 253 samples taken from the air-core program, 98% returned grades exceeding 4,000 mg/L K and 50% exceeded 4,500 mg/L potassium ($10.0 \text{ kg/m}^3 \text{ SOP}$) confirming the extensive high-grade, low variability tenor of the brine within the Lake Throssell palaeovalley system.

5. Geological Summary

A summary of the encountered geology of the project is presented in Table 2 which also takes into account the hydrogeology of the deposit.

The geology is consistent with other lakes and palaeovalley sequences in the region. In the shallow sediments there is an evaporite surface, dominated by gypsum, underlain by more clayey dominated sequences with occasional thin granular and calcrete zones.

These surficial lithologies lie on top of a thick sequence of stiff lacustrine clay, which acts as a regionally confining aquitard with very low vertical hydraulic conductivity, meaning it hydraulically separates the shallow sediments of the palaeovalley from the basal aquifer sediments.

Beneath the lacustrine clay sequence is a fine to medium grained basal sand with silty and clayey bands of fluvial origin of between Eocene and Pliocene age. At the base of this fluvial system is the contact with the Permian age Paterson Formation, a palaeosurface that represents up to 200 million years of weathering, erosion and deposition. The contact is present in the base of the palaeovalley, the Paterson Formation in the deepest sections of the palaeovalley is an unconsolidated fluvial glacial deposit of gravel, sand and silt.

The Paterson Formation is present at outcrop at the margins of the palaeovalley as dark to light grey poorly sorted siltstone, mudstone, sandstone and quartzite, with conglomerate beds. Thick saprolite zones are present up to 50 m in thickness where exposed on the palaeovalley margins, often dominated by silt and fine sand. Unconsolidated glacial fluvial sediments of mixed gravel and minor silt are present within this saprolite zone which are likely to be representative of either in-situ weathering or local colluvial deposits when at the contact with the overlying Cenozoic sediments. An example of the fluvial and glacial sequence is presented in Figure 10, where 43 m of combined fluvial and glacial fluvial sediments are evident.

Permian Paterson Formation is outcropping on the western edge of the lake and between 3 and 5km to the south east of the lake.



Figure 10: Chip trays showing the basal aquifer sequence (86 to 129m - gravel, fine sand, silt and minor clay)

6. Hydrogeological Characteristics

The hydrogeology of a brine deposit is important to characterise as it is essential to understand the groundwater flow regime and aquifer properties for the subsurface sediments in order to estimate future brine abstraction potential. At this early stage of the Lake Throssell Project, there has been no aquifer testing of the deep aquifer, therefore the understanding of the system is mostly qualitative.

The water table at the lake surface is approximately 0.2 to 0.5 m beneath the surface, it is considered to be relatively flat at the surface of the lake and is hypersaline. Within the islands the water table will likely rise reflecting the increase in topographic elevation. Outside of the lake area no drilling has been completed to estimate the depth to water table, however it is broadly assumed that the depth to water table will increase away from the lake surface as topography rises. The salt lake acts as a point of discharge for the regional groundwater system. Groundwater flow in the shallow sediments within the lake's catchment flows towards the lake surface where evaporation is dominant and there is a net loss to the system making the groundwater hypersaline in nature.

The aquifer potential of each of the stratigraphic layers is provided in Table 2 to provide an indication of potential for brine abstraction, test pumping of each of the aquifer zones is required to confirm their potential. The lake surface can be targeted in future by trenching, whilst production bore targets consist of the Eocene fluvial sediments, Permian glacial fluvial sediments and the saprolite.

Table 2: Current interpreted geological stratigraphy at Lake Throssell

Stratigraphic Layer	Assumed Age	Lithological Description	Range in Thickness	Aquifer Potential	Resource Domain
Lake Surface	Recent	Saturated Evaporitic sand and gravel in a silty matrix, gypsum up to 20mm in size.	4-6m	High	Surficial Aquifer
Alluvial Clay	Quaternary	Soft sandy brown clay with minor fine to medium grained sand, occasional evaporites.	5-25m	Low	
Lacustrine Clay	Neogene / Palaeogene	Stiff lacustrine clay with minor interbeds of fine sand and calcrete, present throughout the palaeovalley.	11-80m	Aquiclude, likely to provide leakage	Confining Layer
Fluvial Basal Sand	Pliocene/Eocene	Yellow to green fine to medium grained sand with intermixed clay and silt bands, mostly located on the eastern side of the palaeovalley.	2-17m	Moderate	Basal Aquifer
Glacial fluvial Sediments	Eocene to Permian	Sub-rounded to sub-angular mixed lithic gravel at base of palaeovalley fill sequence and within zones in the saprolite common throughout the southern and western part of the palaeovalley. Possibly weathered in-situ or re-worked in origin.	1-35m	Low to Major	
Saprolite	Permian	Light to dark grey to black, very fine to fine grained poorly sorted sand, silt, and clay.	3-50m	Low to Moderate	
Bedrock (Paterson Fm)	Permian	Dark to light grey poorly sorted mudstone, siltstone, sandstone, conglomerate and tillite.	Unknown	Low	Bedrock (Resources not determined)

In addition to specific yield (drainable porosity), which is discussed below in the context of the mineral resource estimate, hydraulic conductivity and specific storage are important hydrogeological aquifer properties to understand and measure for a brine deposit. Hydraulic conductivity is a measure of a

material's capacity to transmit water, the higher the value the more water can pass through. Aquifer's generally have higher values of hydraulic conductivity than non-aquifers (otherwise known as aquitards and aquicludes). Values of hydraulic conductivity have been derived for the surficial aquifer from laboratory tests and test pumping analysis. These are presented in Table 3 and Table 4.

Specific storage is a confined aquifer property and is applicable to the basal aquifer which is likely to be confined. It is an aquifer property related to the pressure that the aquifer and brine are subject to at depth. Specific storage is not considered in this report and will be addressed when test production bores are installed and test pumped in the basal aquifer.

Table 3: Estimates of hydraulic conductivity for the surficial aquifer from test pumping

Location	Method	Hydraulic Conductivity (m/d)
LTTT01	Distance Drawdown analysis	7.8
LTTT01	Numerical Model Calibration	1.5
LTTT02	Distance Drawdown analysis	4.8
LTTT02	Numerical Model Calibration	0.5
LTTP01	Numerical Model Calibration	0.2
LTTP02	Numerical Model Calibration	0.8
LTTP03	Numerical Model Calibration	0.6
LTTP04	Numerical Model Calibration	1.9
LTTP05	Numerical Model Calibration	340
LTTP06	Numerical Model Calibration	32
LTTP07	Numerical Model Calibration	0.9

Table 4: Estimates of hydraulic conductivity from particle size distribution analysis

Stratigraphic Unit	Hydraulic Conductivity (m/d)		
	Min	Max	Geomean
Lacustrine Clay	0.01	0.61	0.09
Fluvial Basal Sand	0.35	1.12	0.75
Glacial Fluvial Sand and Gravel	0.07	4.36	0.37
Permian Saprolite	0.07	0.14	0.10

7. Brine Characteristics

The average potassium concentration from all samples within the surficial sediments is approximately 5,124 mg/L K ($11.4 \text{ kg/m}^3 \text{ K}_2\text{SO}_4$), the lowest concentration is approximately 2,810 mg/L K ($6.3 \text{ kg/m}^3 \text{ K}_2\text{SO}_4$) at LGA26 (within an island) and the highest concentration is 6,660 mg/L K ($14.8 \text{ kg/m}^3 \text{ K}_2\text{SO}_4$) at LT016.

Higher concentrations of potassium appear to be located on the western side of the lake associated with accumulation of more evaporated brine. The lower concentrations of potassium are located in the northern side of the lake where it is likely more regular inflow of fresher surface water occurs. The potassium concentration distribution across the lake surface is presented in Figure 11.

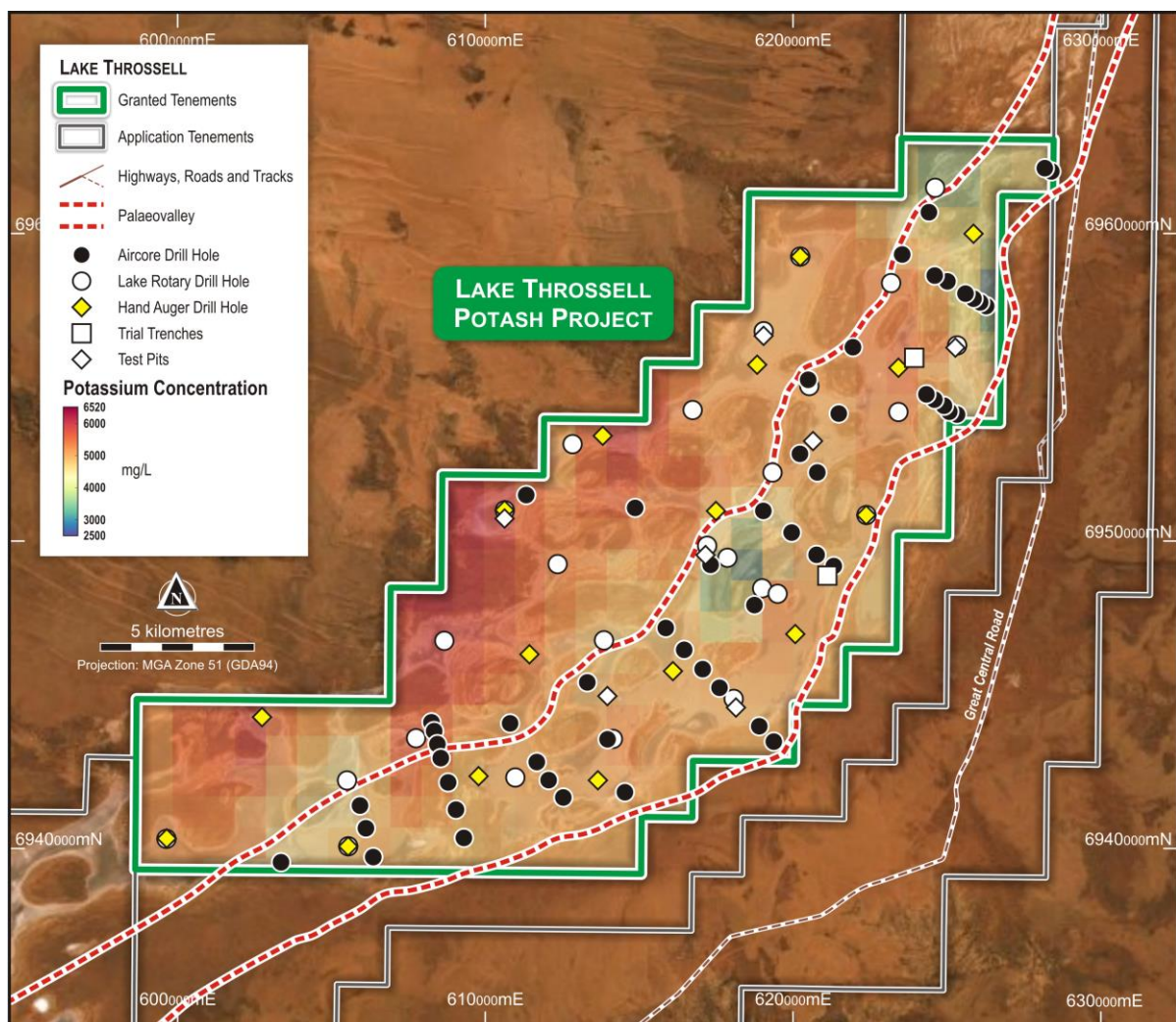


Figure 11: Potassium concentration at the lake surface (370 m RL depth slice)

The average potassium concentration from samples within the deep palaeovalley is approximately 4,500 mg/L K ($10.0 \text{ kg/m}^3 \text{ K}_2\text{SO}_4$), the lowest concentration is approximately 3,580 mg/L K ($8.0 \text{ kg/m}^3 \text{ K}_2\text{SO}_4$) at LTAC005 and the highest concentration is 5,500 mg/L K ($12.9 \text{ kg/m}^3 \text{ K}_2\text{SO}_4$) at LTAC040.

The potassium concentration and brine characteristics of the aquifers are very consistent across the palaeovalley. Figure 12 shows the deep aquifer brine grade concentration distribution, Figure 13 shows that the brine is somewhat uniform with concentration of between 4,000 and 5,000 mg/L K and 8,000 and 10,000 mg/L magnesium (Mg), in comparison to the lake sediments which has a wider distribution and is subject to more environmental conditions such as recharge and evaporation, and

has a more variable grade distribution. The end of pumping trench samples have been added to the distribution, which now form a cluster with slightly lower Mg and higher K concentrations compared to the deep aquifer samples.

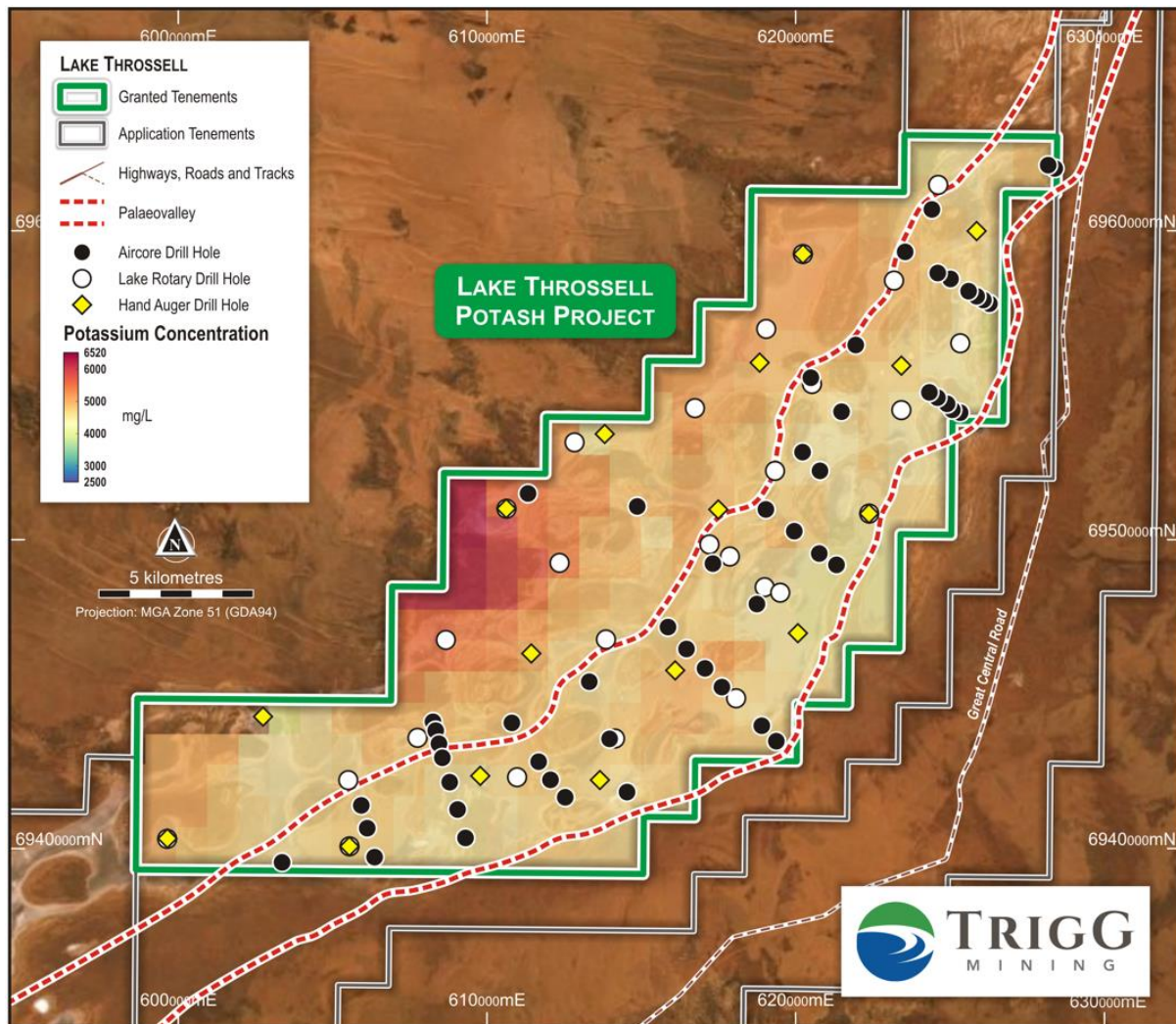


Figure 12: Potassium concentration in the basal aquifer (280 m RL depth slice)

Overall, the brine chemistry exhibits favourable characteristics for solar evaporative concentration and lower waste salts, with a relatively low Sodium to K ratio (16:1) and a high SO_4 concentration. The key average characteristics of the brine from the sampling to date at Lake Throssell are presented in Table 5.

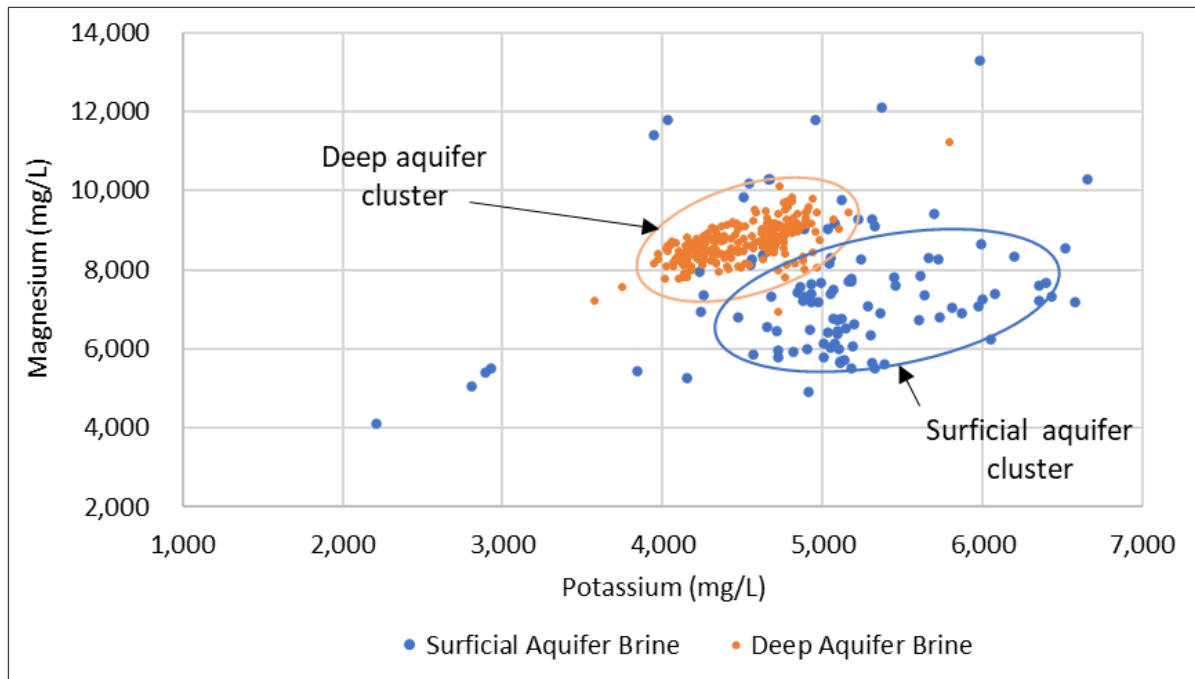


Figure 13: Potassium magnesium concentrations for the lake surface and deep brine aquifers

Table 5: Key average brine characteristics of Lake Throssell

Stratigraphy	K (mg/L)	SOP Equiv. (K ₂ SO ₄) (kg/m ³)	Mg (mg/L)	Na (mg/L)	SO ₄ (mg/L)	Total Dissolved Solids (mg/L)	K:Mg	Na:K
Surficial Aquifer	5,078	11.32	7,454	79,354	21,239	253,255	0.7	15.7
Basal Aquifer	4,498	10.03	8,682	76,755	24,141	255,365	0.5	17.6

Note: All concentrations based on average of all samples obtained to date and not spatially weighted. SOP equivalent or K₂SO₄ is calculated from K x 2.23.

8. Porosity and Specific Yield

The total volume of brine in a brine deposit is determined by the total porosity, total porosity is made up of specific retention (also known as retained porosity) and specific yield (also known as effective porosity). Specific yield is the volume of water that can be drained by gravity from a saturated volume of sediment. While specific retention is the volume that is retained under gravity drainage. The specific yield is the ratio used to define the drainable volume of a brine deposit. Portions of specific retention in the lake surface are accessible in addition to the specific yield but require additional modifying factors around lake recharge effects to be determined before quantification.

Total porosity and specific yield have been measured in the laboratory from core plugs obtained from the Lexan tubes during the heli-rotary auger program to depths of 6.3m and using empirical equations from the PSD results obtained during the air-core program for the deeper sediments.

Core plugs of the lake surface sediments were taken at Corelabs, Perth and analysed using the saturated centrifuge method.

Specific yield has also been determined from test pumping of the lake surface from trial trenches and test pits. These tests sample a much larger zone of the sequence and provide a bulk estimate of Sy over the saturated thickness of the excavation.

The results indicate that the sequence is highly heterogeneous throughout the profile with an average total porosity of 0.38 and the average and weighted average specific yield of 0.17. Results are presented in Table 6.

Table 6: Total porosity and specific yield estimates for the lake surface

Hole ID	Sample Depth (m)	Sample Interval (m)	Total Porosity (-)	Specific Yield (-)
LTAG01	1.8	0.1	0.34	0.24
LTAG01	3.3	0.1	0.36	0.19
LTAG06	2.5	0.1	0.35	0.17
LTAG06	4	0.1	0.36	0.17
LTAG06	4.8	0.1	0.36	0.17
LTAG14	2.5	0.1	0.36	0.16
LTAG14	1.8	0.1	0.26	0.10
LTAG14	3.3	0.1	0.30	0.11
LTAG14	6.3	0.1	0.35	0.23
LTAG20	2.5	0.1	0.49	0.22
LTAG20	1.8	0.1	0.39	0.16
LTAG20	4	0.1	0.36	0.17
LTAG20	5.5	0.1	0.40	0.19
LTAG24	5.5	0.1	0.31	0.16
LTAG26	2.5	0.1	0.49	0.20
LTAG26	1.8	0.1	0.45	0.13
LTAG26	4	0.1	0.47	0.18
LTAG26	5.5	0.1	0.46	0.17
LTTT01	0.3 to 4.5	4.2	n/a	0.40
LTTT02	0.3 to 4.5	4.2	n/a	0.40
LTTT01	0.3 to 3.7	3.4	n/a	0.01
LTTT02	0.3 to 3	2.7	n/a	0.02
LTTT03	0.3 to 4	3.7	n/a	0.01
LTTT04	0.3 to 3	2.7	n/a	0.05
LTTT05	0.3 to 3	2.7	n/a	0.40
LTTT06	0.3 to 3.8	3.5	n/a	0.10
LTTT07	0.3 to 3.8	3.5	n/a	0.15
Minimum			0.26	0.01
Maximum			0.49	0.40
Average			0.38	0.17
Weighted Average*			N/A	0.17

*Removed the upper and lower outliers (LTTT02 and LTTT03) in the trench pumping to account for high heterogeneity.

During the air-core program soil samples were obtained for laboratory analysis of PSD to allow quantification of sand, silt and clay portions from the various lithological zones across the system. A field capacity regression calculation at 33 kPa (Saxton Rawls 2006) has been used to determine specific yield (effective porosity).

A total of 62 samples were selected for laboratory analysis mostly targeting the potentially more productive aquifer sequences of sand sequences in the glacial fluvial sediments to provide a better understanding of the lithological composition relative to the geological logging. The samples were grab samples from drilling spoil and represent a 3m composite interval.

The analysis results demonstrate good correlation of aquifer properties to lithological description and are considered reasonable for disturbed sample analysis, the results are presented in Table 7 below. The exception being the Lacustrine Clay samples which shows some bias to more granular lithologies than a pure clay.

Table 7: Total porosity and specific yield estimates from particle size distribution analysis

Stratigraphic Unit	Number of Samples	Specific Yield (-)		
		Min	Max	Geomean
Lacustrine Clay	4	0.03	0.19	0.09
Fluvial Basal Sand	6	0.17	0.26	0.23
Glacial Fluvial Sand and Gravel	48	0.10	0.32	0.18
Permian Saprolite	4	0.09	0.12	0.10

9. Numerical Modelling

9.1. Model aims and set up

Groundwater numerical modelling has been completed by Advisian (Advisian 2021) using the FEFLOW modelling code to simulate the potential magnitude of brine abstraction from the surficial and basal aquifers. The modelling is considered reasonable for determination of the potential scale of abstraction and variation of potassium concentration over time based on a robust geological and grade model and reasonable aquifer properties. The modelling was completed to enable a mine plan to be developed to estimate a Production Target. Further test pumping, installation of test production bores and model calibration is required to facilitate conversion to Ore Reserves and validation of the mine plan using the groundwater models.

The model extent was based on the Throssell palaeovalley upstream from the confluence with the Yeo palaeovalley to a location distant from Lake Throssell and bounded closely by exposed bedrock. The lateral area of the model incorporated the surrounding surficial catchment. Two individual models were created to facilitate reasonable run times for predictive scenarios. Both models utilise the geological model surfaces and the resource model grade distribution. The surficial aquifer model uses the results from the trench test pumping as a guide to the average aquifer properties of the surficial aquifer. The aquifer properties of the basal aquifer are based on a desktop assessment of publicly available data from locally similar projects. The surficial aquifer water levels were calibrated to steady state conditions, but no transient calibration has been completed.

Information from the trench testing was used to assign hydraulic parameters for the lake sediments. Other parameters were assigned based on publicly available information for the Yeo palaeochannel system (Pennington Scott, 2016) and Lake Wells (AQ2, 2019). Table 8 lists the parameters used in the model for the various lithological units.

Table 8: Numerical model aquifer parameter values

Unit	Horizontal Hydraulic Conductivity (m/day)	Vertical Hydraulic Conductivity (m/d)	Specific Yield (-)	Specific Storage (m ⁻¹)
Bedrock	0.0001	0.0001	0.001	4e-7
Weathered bedrock	0.001	0.001	0.01	4e-6
Alluvium	0.3	0.03	0.1	1e-4
Lakebed	6.5	0.65	0.15	1e-4
Clay	0.03	0.0003	0.05	2e-6
Sand and Gravel	3.0	0.3	0.23	1e-6
Fluvial Sand	0.5	0.05	0.17	2e-6

Unit	Horizontal Hydraulic Conductivity (m/day)	Vertical Hydraulic Conductivity (m/d)	Specific Yield (-)	Specific Storage (m ⁻¹)
Saprolite	1	0.1	0.23	1e-6

The models are a solute transport model which simulate potassium grade change over time from each abstraction point. The initial brine grades in the model were imported from the resource block model. The islands in the block model are set to grade concentrations of zero which are represented in the model. The model does not include any recharge; therefore, abstraction is purely from groundwater storage, reflecting the Mineral Resource. The model simulates 20 years of abstraction from trenches in the lake surface and proposed bores within the basal aquifer as presented in Figure 14.

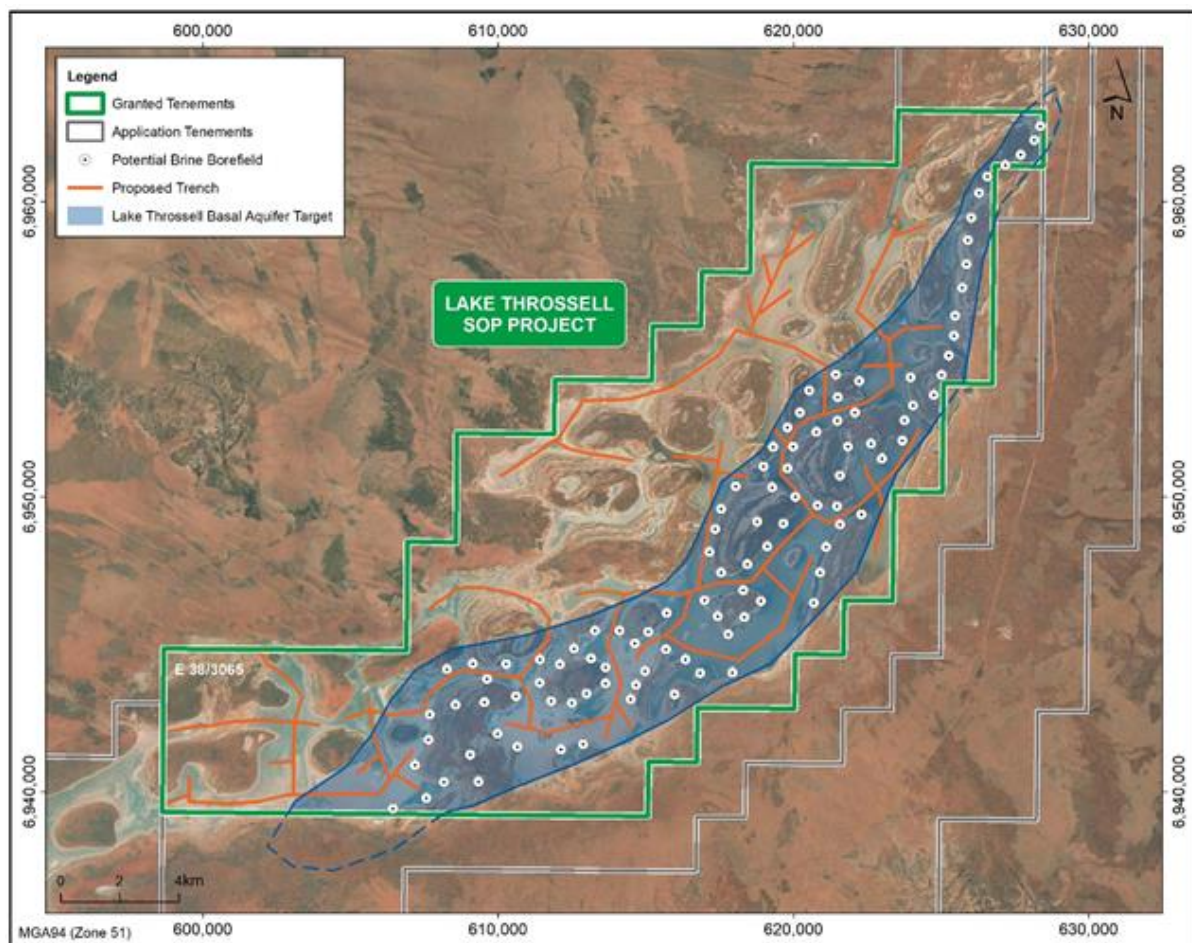


Figure 14: Proposed trench network and bore locations

9.2. Trench Abstraction Simulation

The trench simulation was based on a trench network 4 m wide and up to 8 m depth or 0.1 m above the base of the lake sediments, whichever was the higher. For the trench simulations the lake sediment was divided into three layers. The elevation of the base of the uppermost layer was specified at a depth of 6.5 m bgl or 0.15 m above the base of the lake sediments, whichever was higher. The elevation of the central layer was specified as 8 m bgl or 0.1 m above base the base of the lake sediments, again whichever was highest.

The abstraction from the trenches was based on a total maximum abstraction of 550 L/s for the first two years, followed by a total maximum abstraction rate of 300 L/s for all subsequent years. These rates were divided equally amongst six abstraction points. The abstraction was limited such that the water level in the trench could not fall below 6 m bgl at each location, with the abstraction ceasing if the water level fell below this level.

The simulation produced 200 ktpa of equivalent SOP (K_2SO_4) from the trenches within the first two years at the higher flow rates and sustained 110 ktpa until year 8, after which production slowly declined to between 50 and 40 ktpa in response to falling water levels. The average production rate of the trenches over the 20 year simulation was 245 L/s at 5,140 mg/L potassium (11.5 kg/m³ SOP). A total of 1,800 kt of equivalent SOP (K_2SO_4) was produced over the 20 year simulation period.

Abstraction rates and drawdown extents are presented below in Figure 15 to Figure 17.

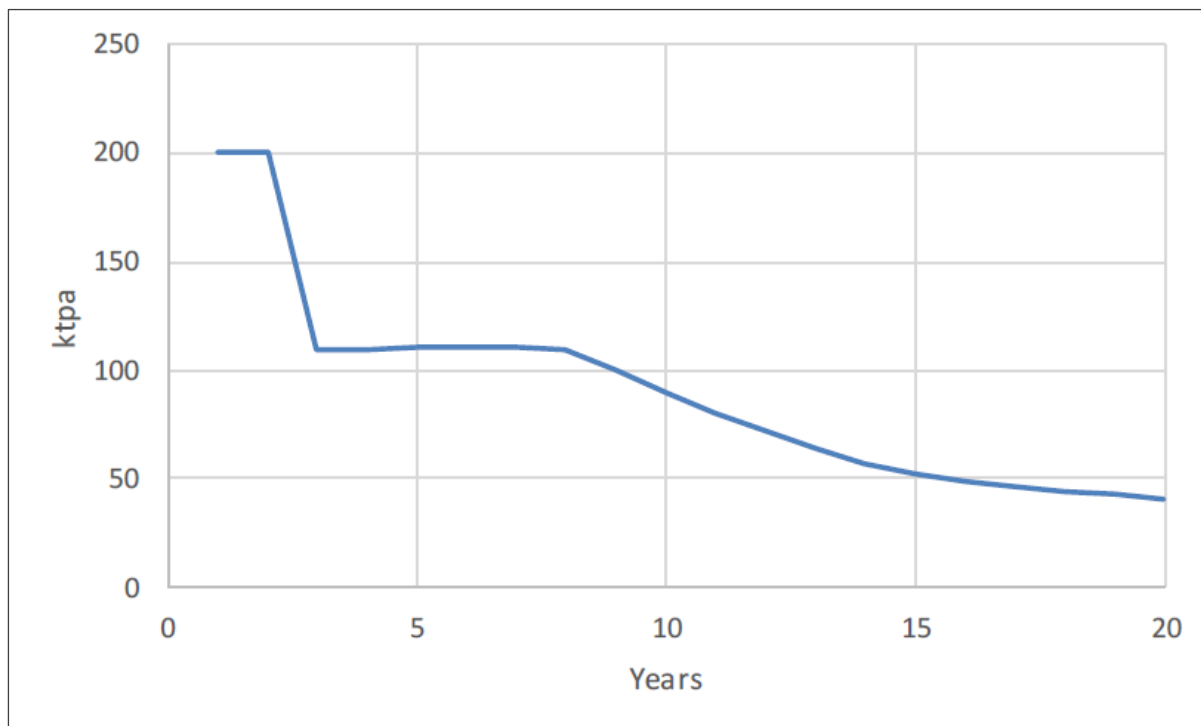


Figure 15: Simulated annual rate of SOP abstraction from trenches (Advisian 2021)

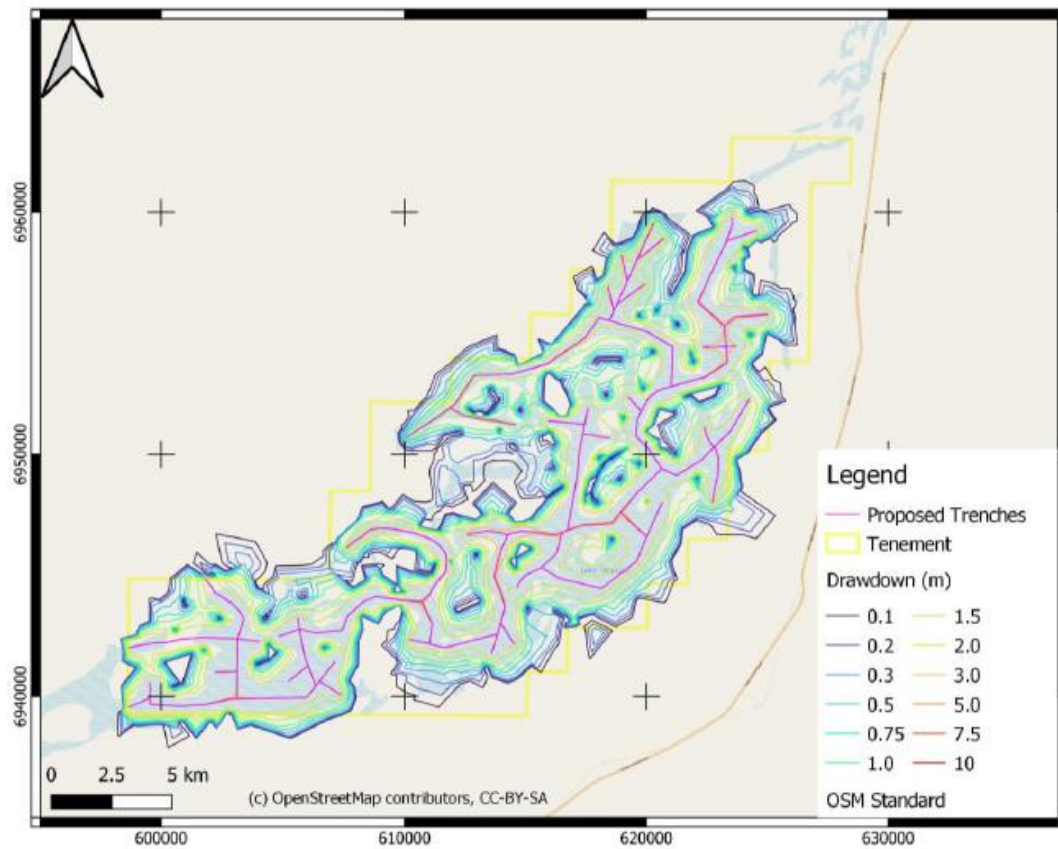


Figure 16: Simulated drawdown around trenches for year 5 (Advisian 2021)

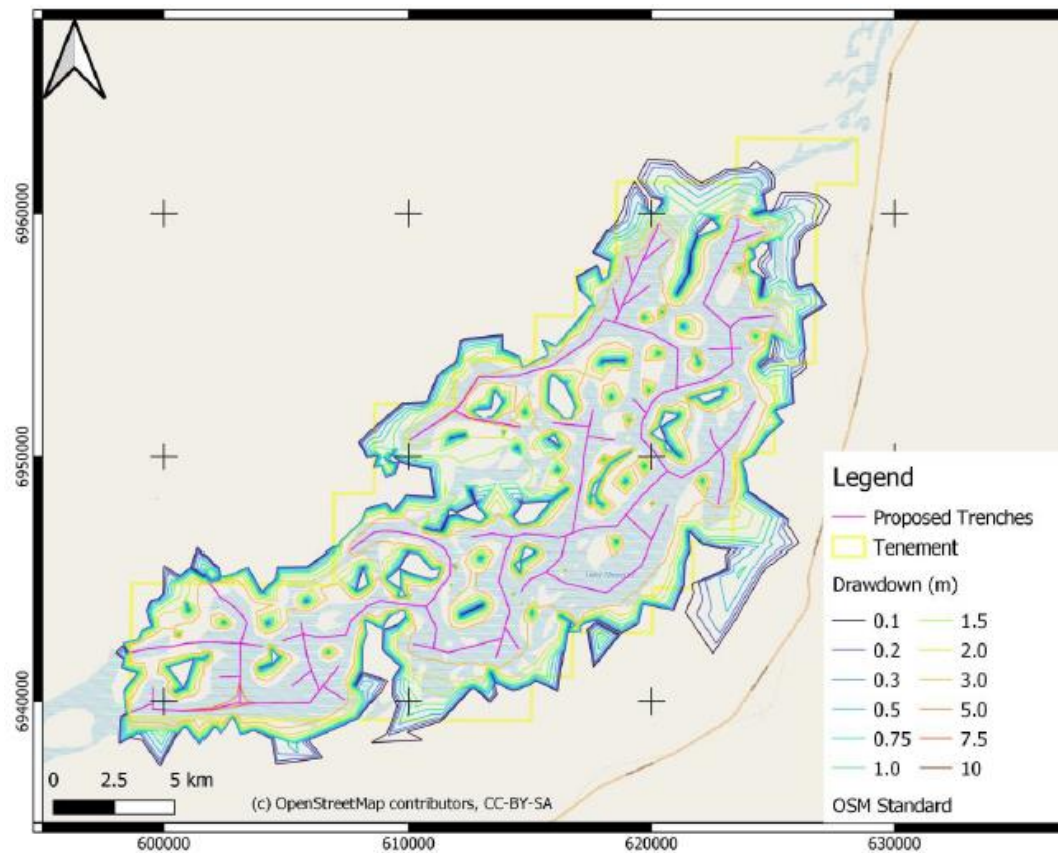


Figure 17: Simulated drawdown around trenches for year 20 (Advisian 2021)

9.3. Production Bore Abstraction Simulation

103 potential abstraction bore locations were identified from the Sand and Gravel zones in the basal aquifer, located on the shorelines of islands or lake edge. All bores were simulated as either multi-layer bores for all layers below the clay aquitard or as specified head boundary conditions with abstraction rate limits and minimum head levels. All bores were assigned a production rate of 7 L/s, with the exception of the two north eastern most bores, which were assigned rates of 5 L/s, due to lower aquifer thickness in that section. The total achieved production rate in the model in year 1 was 692 L/s (average bore yield of 6.7 L/s), by year 25 this had reduced to 646 L/s (average bore yield of 6.3 L/s). The average production bore abstraction rate over 25 years is 6.6 L/s at 5,010 mg/L potassium (11.2 kg/m³ SOP).

The results of the modelling show that the annual rate of equivalent SOP (K₂SO₄) production was relatively constant from the bores, initially as high as 250 ktpa declining to 227 ktpa over 25 years. The total volume of equivalent SOP (K₂SO₄) produced from the simulation was 5,977 kt.

The abstraction volume and drawdown in the deep aquifer is shown in Figure 18 to Figure 20.

The results indicate that the drawdown is mostly confined to the tenement area, with major drawdown occurring in the centre of the tenement. Notably, with the aquifer properties used in the simulation the production bore average flow rates were reasonably sustained over the 25 year period.

The simulation results are based on the geology and grade of the Resource Model and are considered low confidence. However, the results give confidence in the scale of the basal aquifer to produce volumes of SOP for a mine plan, but further drilling and installation of test production bores and extended test pumping is required to increase confidence in the model results to warrant potential Ore Reserve determination.

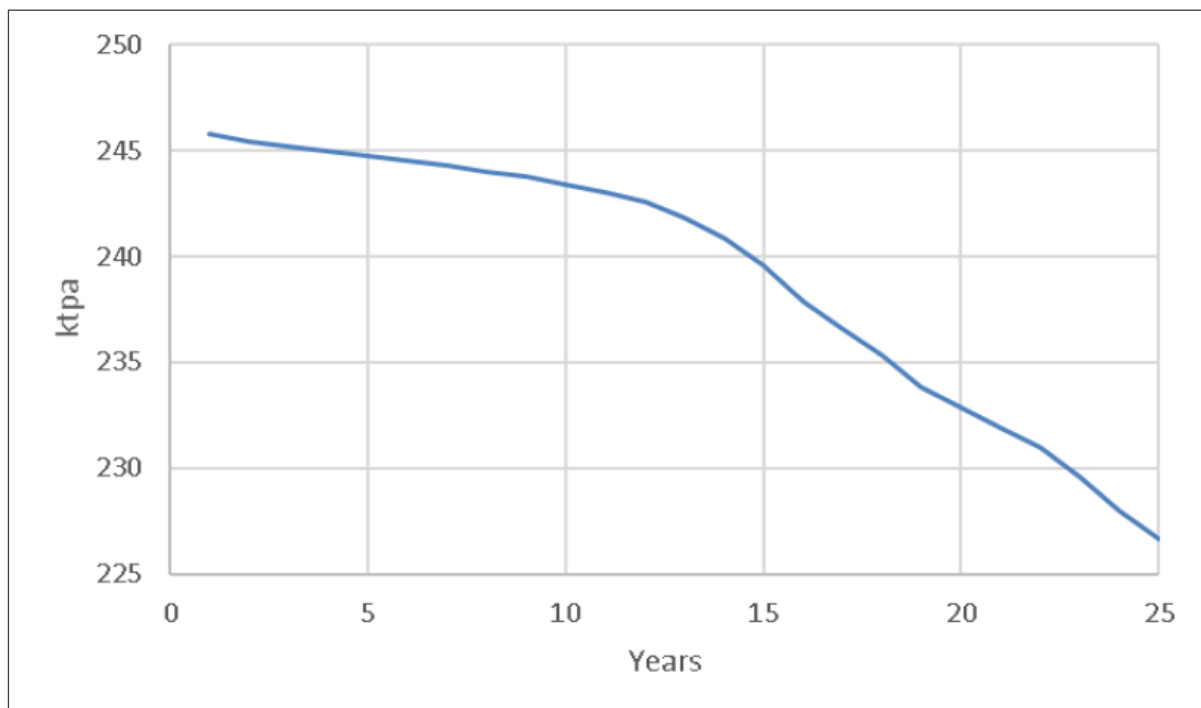


Figure 18: Simulated annual rate of SOP abstraction from production bores (Advisian 2021)

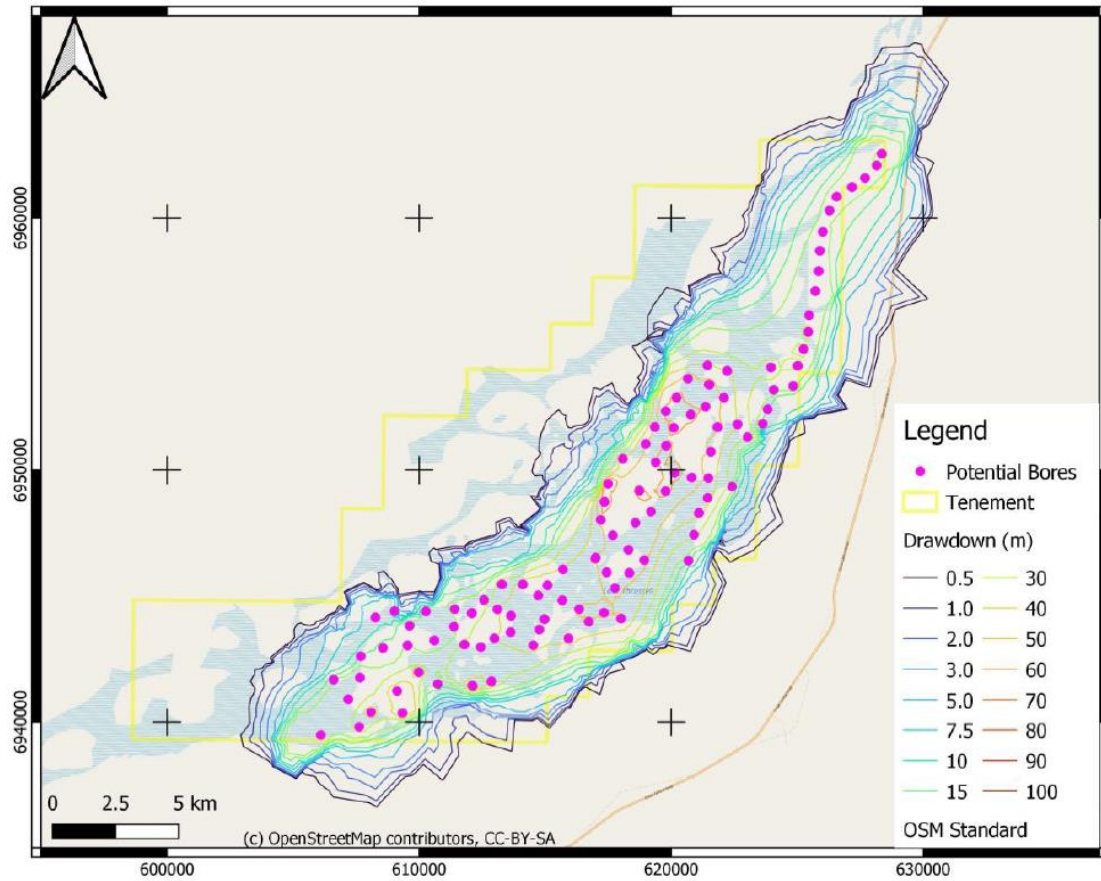


Figure 19: Simulated drawdown in basal aquifer after 5 years (Advisian 2021)

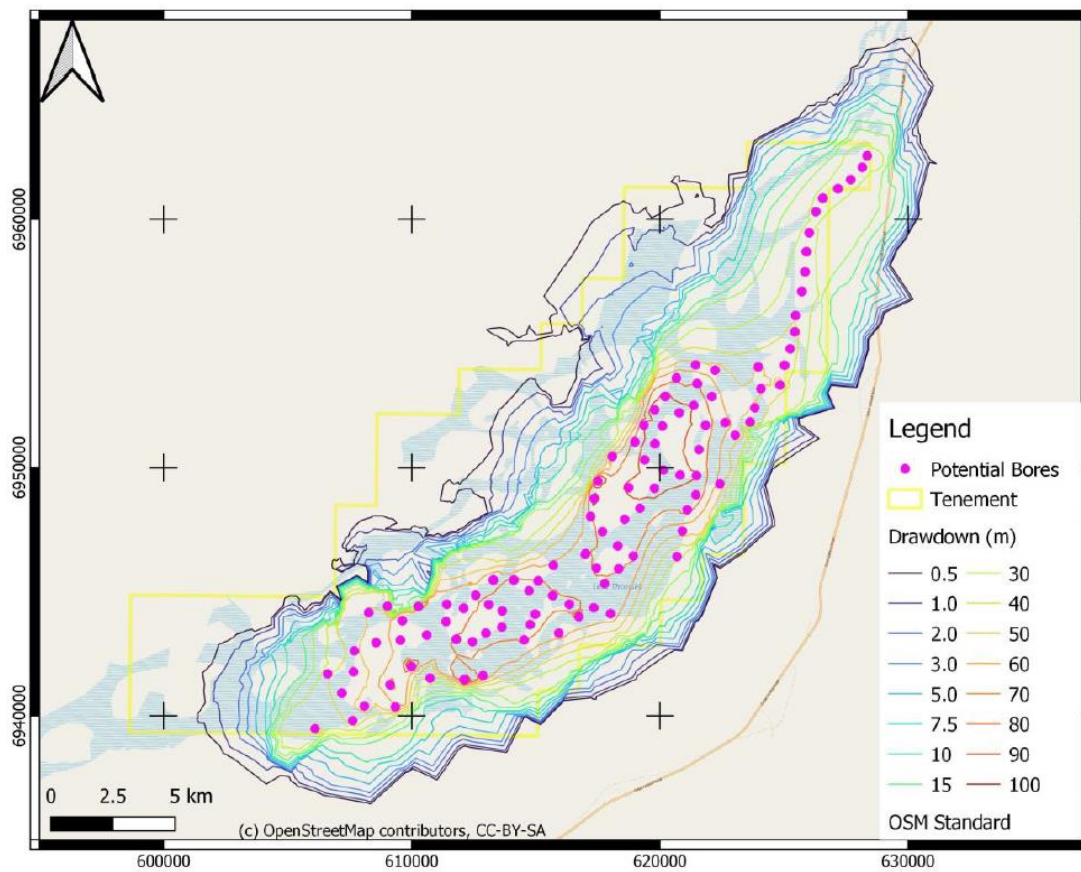


Figure 20: Simulated drawdown in basal aquifer after 20 years (Advisian 2021)

9.4. Model Summary

The results of the combined modelling simulations show that abstraction of SOP from the surficial and basal aquifers at Lake Throssell may vary between 445 ktpa and 226 ktpa over a 20 year mine life (not including process recovery losses) based on 110 km of trench and up to 103 production bores.

The modelling results indicate that SOP abstraction from the deep bores remains relatively steady over the 20 years simulated decreasing by less than 13 kt between year 1 and year 20. The rate of SOP production from the trench system diminishes substantially over time. It is noted that no recharge to the lake surface or grade beneath the islands is included in the trench simulations. This provides a conservative estimate of the recovery from the lake sediments. Large rainfall (recharge) events may replenish storage and increase yields from the trenches post such events, with an associated grade change which will need to be assessed in future modelling. The total SOP abstraction over 20 years is presented in Figure 21.

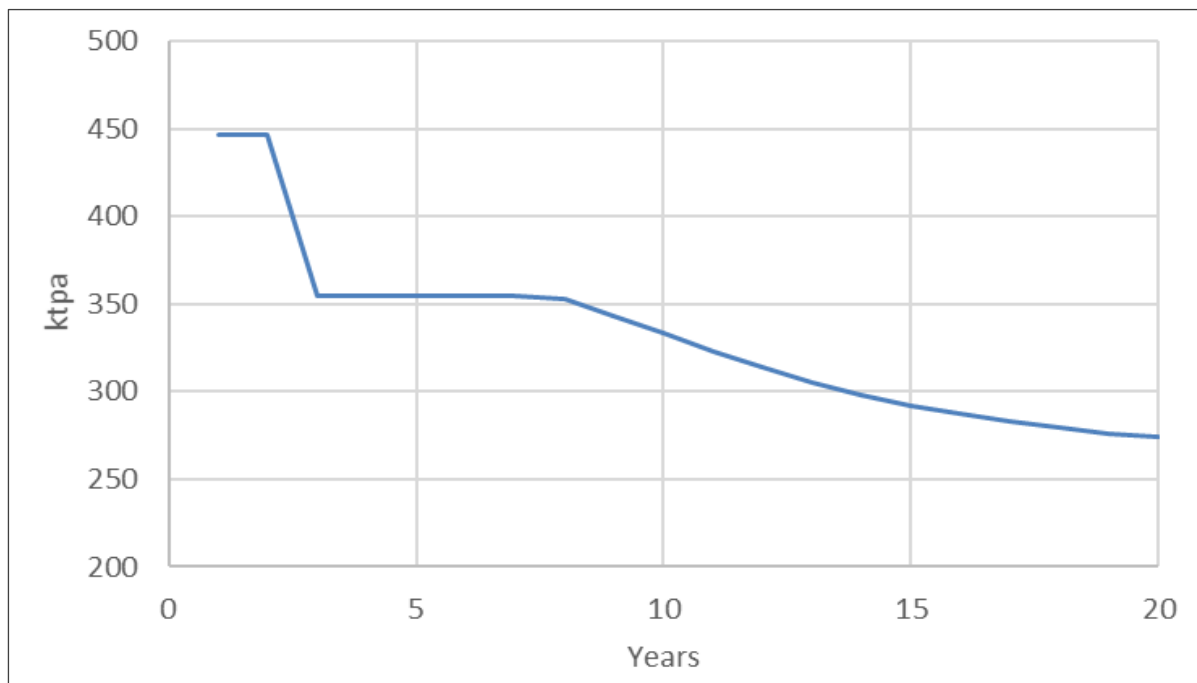


Figure 21: Simulated annual rate of SOP abstraction from Lake Throssell (Advisian 2021)

10. Mineral Resource Estimation Methodology

The MRE is constrained by the available data, geological confidence, drilling density, sampling intervals and tenement boundaries. This MRE covers the following updates:

- New Indicated Mineral Resources have been estimated for the basal aquifer based upon review and updated mapping of the high permeability aquifer zones and positive modelling outcomes.
- The Inferred Mineral Resource for the basal aquifer has been updated as a result of the above.
- The basal aquifer has been split in to Inferred and Indicated Resource zones.
- The surficial aquifer and confining layer remain unchanged.
- No Measured Mineral Resources or Ore Reserves have been estimated.

The geology model was constructed in Leapfrog Geo v6 implicit modelling software. The model used all available drilling data, surface mapping and geophysical data to model the geology across Lake Throssell and the Palaeovalley sequence. The topography of the model was derived from 1 second Shuttle Radar Tomography Mission (**SRTM**) derived hydrological digital elevation model. All drill holes were levelled to this topography in the model.

All brine assays (355) for potassium, sulphate and magnesium were brought into the model as intervals where taken from drilling, rotary auger, hand-auger and test pumping.

The Edge module in Leapfrog Geo v6 was used for numerical estimation and block modelling. The variography of the deposit was modelled using the major axis and radial plot for guidance. Estimators were set up for potassium, sulphate and magnesium for the below water table domain. The domain was clipped to boundaries of the tenements and the island perimeters (Surficial aquifer only) as hard boundaries. The base of the domain was defined as 226 m Australian Height Datum (AHD). Standard parent block sizes of 1,000 m in the x and y direction and 10 m in the z direction were used. Sub blocking was used to refine the block model in areas where geological surfaces intersect blocks. Parent blocks were split by automated sub-blocking by up to two sub-blocks in the x and y direction. Parameter concentrations were estimated across the blocks using Ordinary Kriging, ellipsoid search parameters were assigned following review of the variography of each parameter.

The search parameters for the block model are listed below:

Ellipsoid Ranges – Max. = 4500 m, Int. = 2,900 m, Min. = 185 m

No. of Samples – Max = 20, Min = 1.

The block model grade distributions are presented in Figure 22 and Figure 23 with cross sections presented in Figure 24 to Figure 27.

An inverse distance squared (ID2) estimator was run for potassium to check the accuracy of the calculation. The average grade of each model swath (average cell value in one plane) and the plots of each model have been reviewed. These plots show that the model adopted is appropriate when plotted against the ID2 method and assayed values.

Specific yield for the lake surface was estimated from the weighted average of the core analysis and trench pumping analysis. For all other stratigraphy's PSD analysis of disturbed lithological samples using field capacity regression calculations at 33 kPa (Saxton Rawls 2006) and comparisons to publicly available data from similar geological settings. The adopted specific yield and total porosity for each stratigraphy of the model is presented in Table 9 and Table 10.

SOP grade from potassium concentrations were calculated using a conversion of 2.23, accounting for the atomic weight of sulphate (sulphur and oxygen) in the K_2SO_4 formula.

Resource tonnages were calculated by multiplying the volume of the block model in each lithology by the specific yield and SOP grade to obtain the drainable SOP volume.

The Indicated Mineral Resource has been calculated based on the following:

Surficial Aquifer

- Drilling and testing have confirmed local site geology and aquifer geometry;
- Aquifer hydraulic properties (hydraulic conductivity and specific yield) have been determined by two independent methods;
- Test pumping has been completed to demonstrate extractability;

- Brine samples have been collected from a denser sample pattern to confirm brine concentration distribution;
- These conditions are only met for the top six metres of the lake surface of the surficial aquifer.

Basal Aquifer

- Drilling and testing have confirmed local site geology and aquifer geometry;
- Review of air-core logs has enabled mapping of the higher permeability sand and gravel zones;
- Brine samples have been collected from a denser sample pattern to confirm brine concentration distribution;
- Groundwater modelling has shown that using reasonable aquifer properties from publicly available information from local projects in lieu of test pumping data suggests that abstraction from the most permeable zones of the aquifer is likely to be achievable;
- No confined aquifer specific storage has been estimated as part of the Mineral Resources.

The basal aquifer resource zones are presented in Figure 28.

The Inferred Mineral Resource has been calculated based on the following:

- Geological evidence exists to imply but not verify the existence of brine grade and aquifer geometry for the entire deposit due to some wide drill and sample spacing;
- Proven geophysical techniques have been used to infer palaeovalley extents away from the main drilling areas and extend the estimate into the pending tenements; and
- Aquifer properties can be calculated from limited laboratory tests, PSD and other publicly available data in comparative geological settings.

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 is significantly higher than reporting drainable brine volumes. The drainable brine volume represents the amount of SOP that can be abstracted from the deposit which is dependent on underlying porosity, permeability and specific yield of the deposit. For economic production, the drainable brine volume is the most important volume because only a proportion of brine present can be typically abstracted from the deposit.

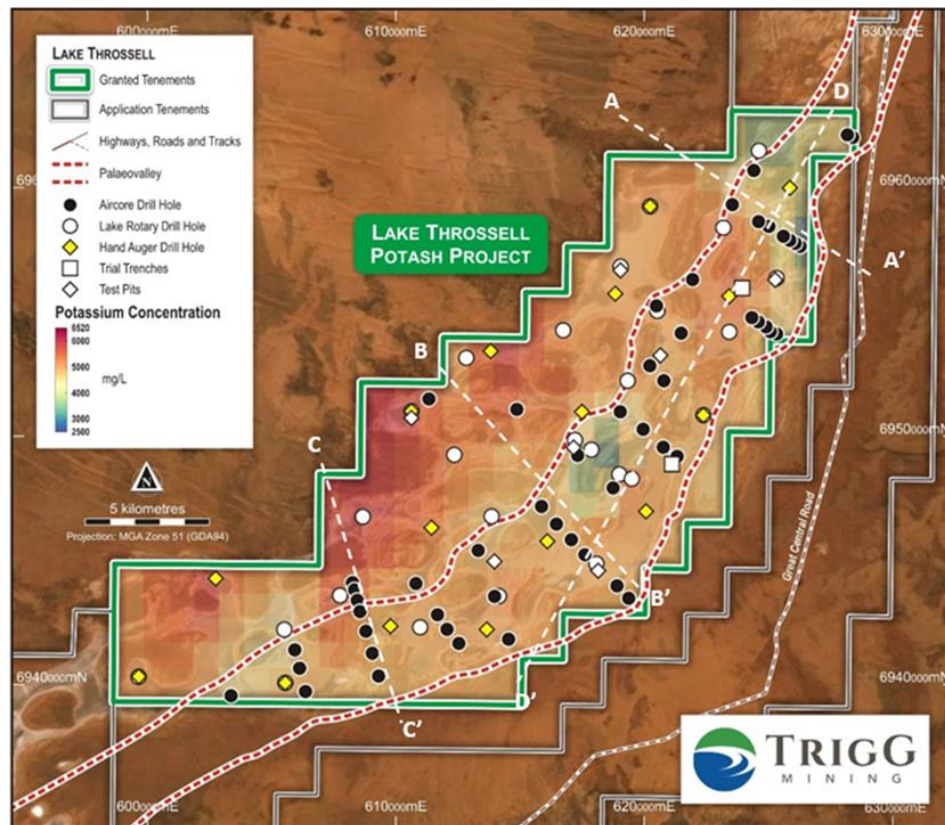


Figure 22: Lake Throssell shallow potassium grade distribution and sample points (370 m RL depth slice)

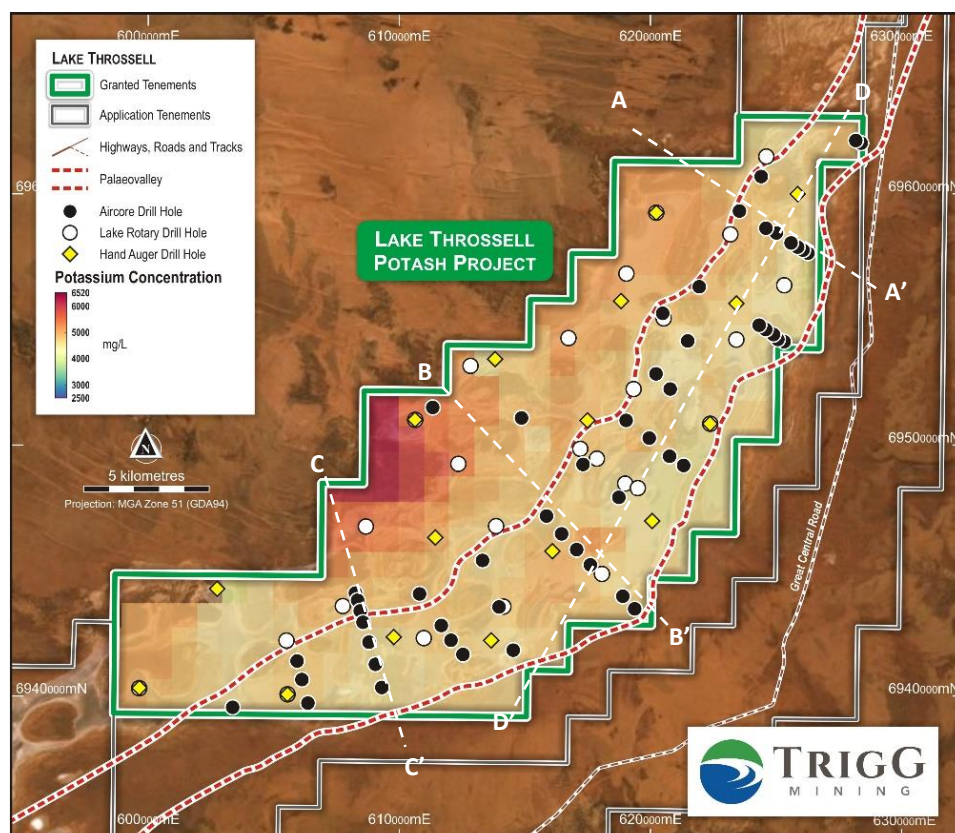


Figure 23: Lake Throssell deep potassium grade distribution and sample points (280 m RL depth slice)

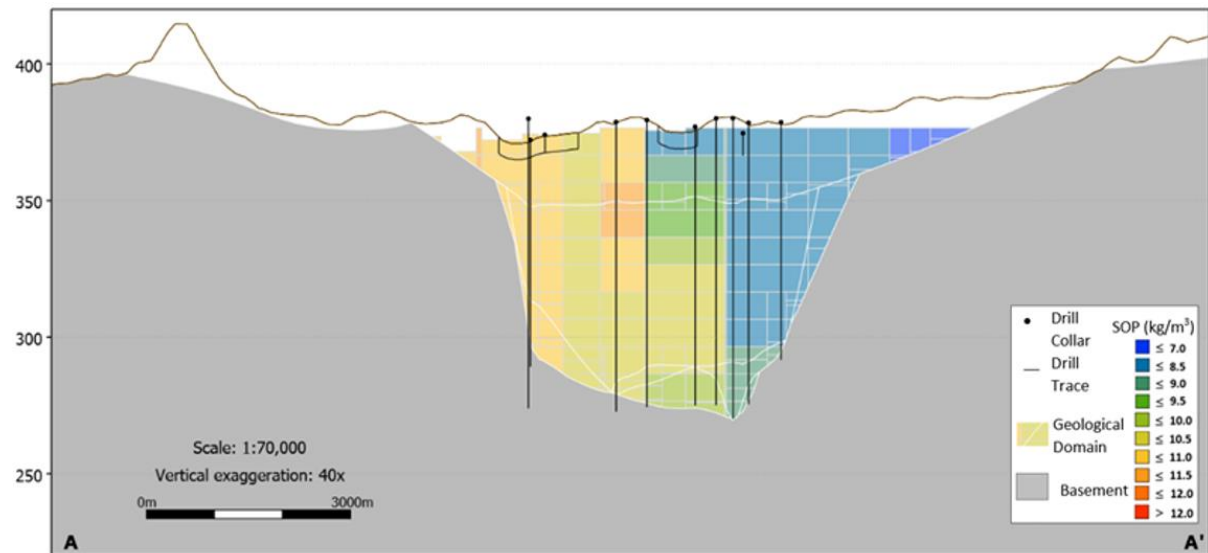


Figure 24: Block model cross section A-A'

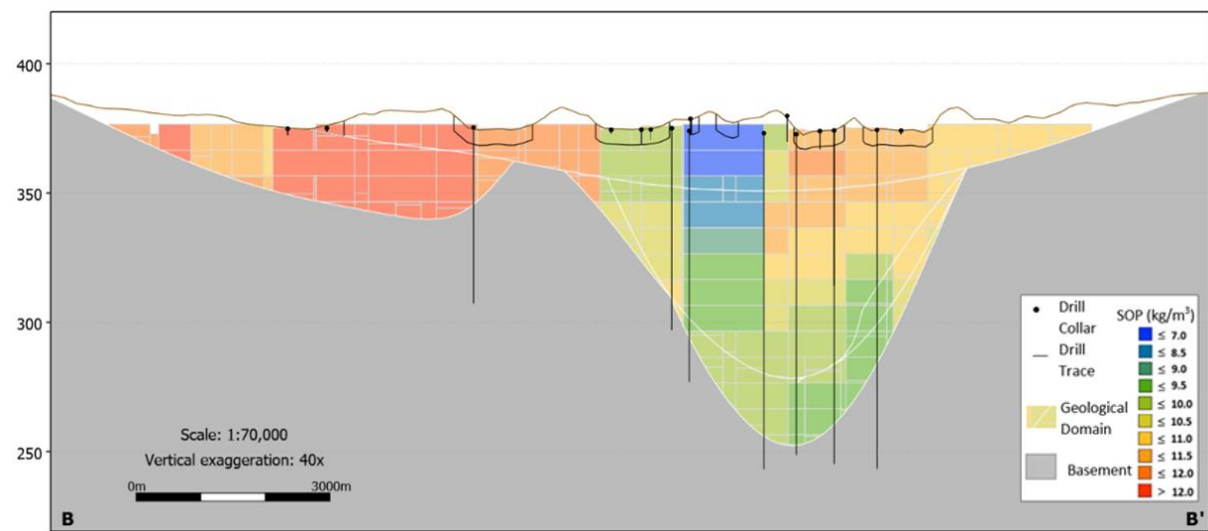


Figure 25: Block model cross section B-B'

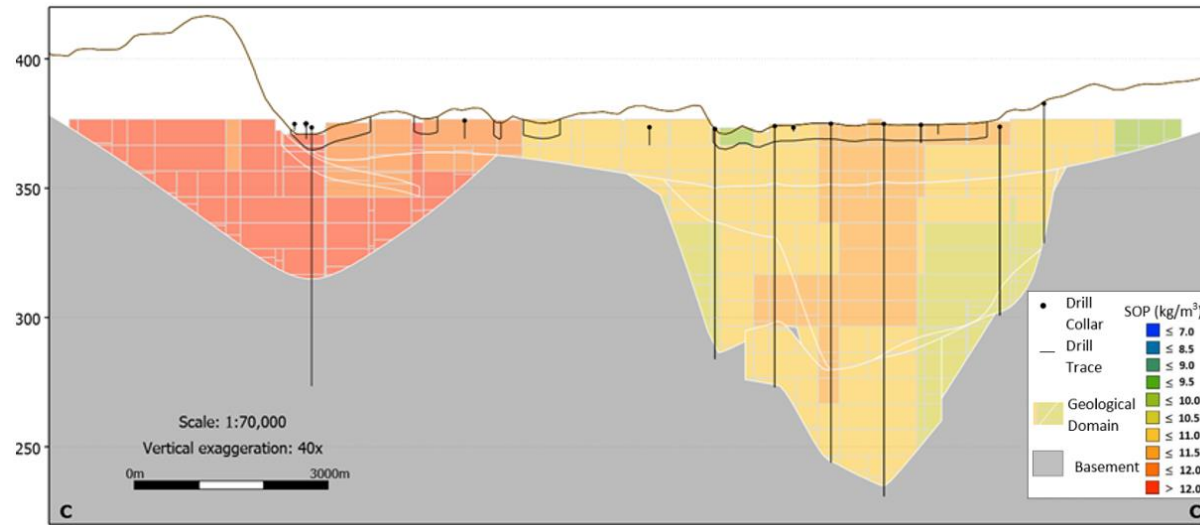


Figure 26: Block model cross section C-C'

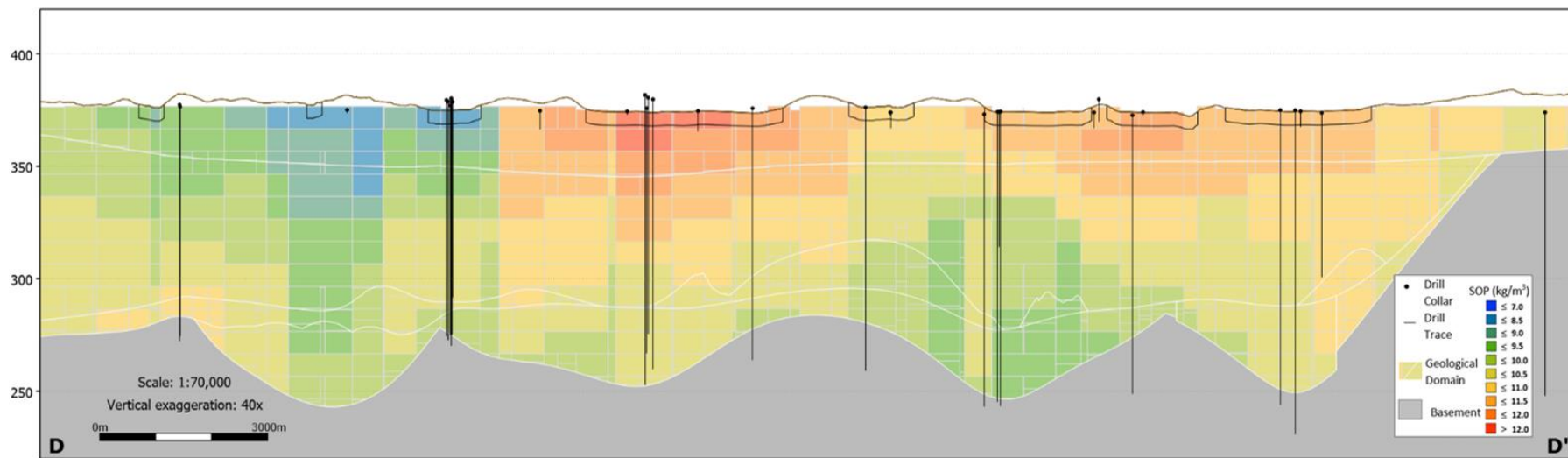


Figure 27: block model long section D-D'

Lake Throssell Potash Project

Lake Throssell July 2021 Resource Estimate Reported in Accordance with JORC Code 2012

Table 9: Lake Throssell Indicated Mineral Resource Estimate

Resource Domain	Volume (10 ⁶ m ³)	Total Porosity (-)	Brine Volume (10 ⁶ m ³)	Specific Yield (-)	Drainable Brine Volume (10 ⁶ m ³)	K Grade (mg/L)	K Mass (Mt)	SO ₄ Grade (mg/L)	SO ₄ Mass (Mt)	Mg Grade (mg/L)	Mg Mass (Mt)	Equivalent SOP Grade (K ₂ SO ₄) (kg/m ³)	Drainable Brine SOP Mass (Mt)	Total Brine SOP Mass (Mt)
Surficial Aquifer	1,008	0.40	403	0.17	170	4,985	0.8	22,125	3.8	7,764	1.32	11.1	1.9	4.5
Basal Aquifer	1,150	0.29	329	0.19	225	4,605	1.0	24,420	5.5	8,735	1.97	10.3	2.3	3.4
Total Indicated Resources	2,159	0.34	732	0.18	395	4,770	1.9	23,430	9.3	8,320	3.29	10.6	4.2	7.9

Note: Errors may be present due to rounding

Table 10: Lake Throssell Inferred Mineral Resource Estimate

Resource Domain	Volume (10 ⁶ m ³)	Total Porosity (%)	Brine Volume (10 ⁶ m ³)	Specific Yield (%)	Drainable Brine Volume (10 ⁶ m ³)	K Grade (mg/L)	K Mass (Mt)	SO ₄ Grade (mg/L)	SO ₄ Mass (Mt)	Mg Grade (mg/L)	Mg Mass (Mt)	Equivalent SOP Grade (K ₂ SO ₄) (kg/m ³)	Drainable Brine SOP Mass (Mt)	Total Brine SOP Mass (Mt)
Surficial Aquifer	3,074	0.43	1,313	0.10	310	4,605	1.4	21,910	6.8	7,820	2.4	10.3	3.2	13.5
Confining Layer	8,793	0.45	3,957	0.04	350	4,595	1.6	23,140	8.1	8,240	2.9	10.3	3.6	40.6
Basal Aquifer	3,524	0.40	1,394	0.09	330	4,675	1.5	22,920	7.6	8,134	2.7	10.4	3.4	14.5
Total Inferred Resource	15,391		6,664		990	4,625	4.5	22,680	22.5	8,073	8.0	10.3	10.2	68.6

Note: Errors may be present due to rounding, approximately 2.90Mt of Drainable SOP Mass is present in Exploration Licence Applications E38/3544, E38/3483, E38/3458, and E38/3537.

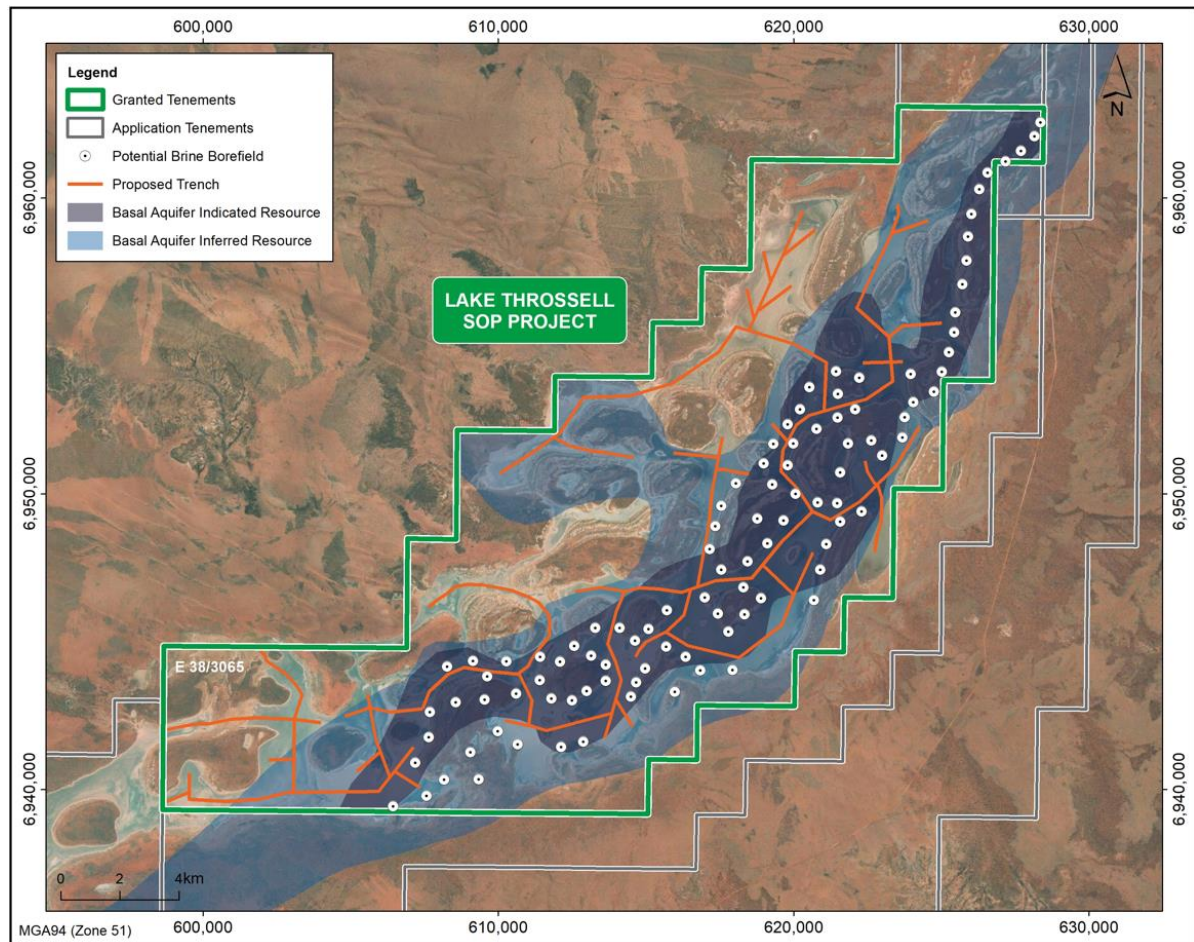


Figure 28: Basal aquifer resource zones

11. Exploration Target

The Exploration Target is an estimate of the exploration potential of a mineral deposit is presented in Table 11. In a brine hosted deposit, the Exploration Target determines a lower and upper estimate by varying the geological extent, drainable porosity, and brine grade within reasonable bounds based upon the information available.

The geological extent (area and thickness) is determined from a combination of the modelled geological, the gravity model, the mapped outcropping geology and the conceptual model of regionally described palaeovalley systems.

Islands on the lake surface have been removed from the lake surface and alluvial clay sediment volume calculation. Brine grade range is based on the average brine grades from the Resource Tables, with the upper and lower estimates factored for the pending tenements where no data is presently available.

The Exploration Target encompasses the granted tenement E38/3065 and the surrounding pending tenements currently under application. There has been no work completed on the pending tenements meaning that all estimates are based upon reasonable extrapolation from the work completed on E38/3065. At the time of reporting Trigg sees no reason why these tenements will not be granted in the future.

Table 11: Lake Throssell Exploration Target

Resource Domain	Thickness (m)	Area (km ²)	Sediment Volume (10 ⁶ m ³)	Specific Yield (-)	Drainable Brine (10 ⁶ m ³)	K Grade (mg/L)	K Mass (Mt)	Equiv. SOP Grade (K ₂ SO ₄) (kg/m ³)	Drainable Brine SOP Mass (Mt)
Surficial Aquifer	19	70	656	0.09	61	3,739	0.2	8.3	0.5
Confining Layer	60	68	4,050	0.03	122	4,356	0.5	9.7	1.2
Basal Aquifer	20	144	1,101	0.10	106	3,961	0.4	8.8	0.9
Total Lower Estimate		282	5,807		288	4,081	1.2	9.1	2.6
Surficial Aquifer	26	88	1,156	0.12	134	4,526	0.6	10.1	1.4
Confining Layer	70	90	6,300	0.05	315	4,740	1.5	10.6	3.3
Basal Aquifer	35	269	3,469	0.14	496	4,277	2.1	9.5	4.7
Total Upper Estimate		447	10,925		945	4,466	4.2	10.0	9.4

Note: Errors may be present due to rounding, approximately 2.5 Mt in the lower estimate and 8.8 Mt in the upper estimate of equivalent SOP is present in Exploration Licence Applications E38/3544, E38/3483, E38/3458 and E38/3537. SOP is calculated by multiplying potassium by 2.23.

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.

12. Mine Plan

Groundwater modelling results, presented in Section 9 have simulated flow rate, grade and equivalent SOP tonnes per annum over a 21 year period from a trench network and brine borefield. The results of the simulations have been used to determine a preliminary mine plan and production target for the project of up to 245 ktpa at 82% process recovery.

The mine plan for the surficial aquifer is based on abstraction from the 110 km trench network from year 1. For the first 5 years of abstraction a rate of 200 ktpa SOP is achieved from the trenches, this reduces from year 6 to 100ktpa and then by year 10 to 50 ktpa, and by year 20 to 40 ktpa to reflect the model results. In total, the trench network produces 1,785 kt of SOP over the 20-year period. Peak flow rate from the trench is approximately 550 L/s at 5,180 mg/L potassium (11.6 kg/m³ SOP) during the first 5 years. Abstraction from the trench network is 100% from the Indicated Resources.

To achieve the 245 ktpa SOP production rate at 82% recovery, abstraction from the basal aquifer using production bores is required to make up the shortfall from the trench abstraction. Production bores are added over time as the trench flow rate reduces. The initial borefield during year 1 and 2 produces between 50 and 70 ktpa from up to 30 production bores. By year 4, 100 ktpa is produced from the basal aquifer and by year 6 the borefield has grown to 86 production bores and abstraction of 200 ktpa. From year 7 onwards the borefield progressively increases to 112 production bores and 260 ktpa abstraction by year 17. In total, the basal aquifer produces 4,085 kt of SOP over the 20 year period. The peak flow rate from the borefield is 751 L/s at 4,920 mg/L potassium (11.0 kg/m³ SOP) in year 17. The average per bore flow rate is 6.7 L/s at 4,920 mg/L potassium (11.0 kg/m³ SOP), reflecting

that of the modelling results. Abstraction from the basal aquifer is from Indicated and Inferred Resources. The Mine Plan schedule is presented in Figure 29.

The abstraction rates described above are pre-recovery losses. Assuming process recovery loss of 82% this equates to a production target of 219 ktpa for the first 5 years of production and then 245 ktpa from year 6 onwards, over the mine life.

The first 5 years of the mine plan consists of 82% Indicated Resources and 18% Inferred Resources. Over the life-of-mine the mine plan consists of an average of 70% Indicated Resources and 30% Inferred Resources. The Mine Plan utilises 97% of the Total Indicated Resource and 18% of the Total Inferred Resource.

Future studies will look to extend the mine life well beyond 21 years once test production bores are installed and test pumping completed in the basal aquifer and additional Measured and Indicated Mineral Resources is established to support the mine schedule.

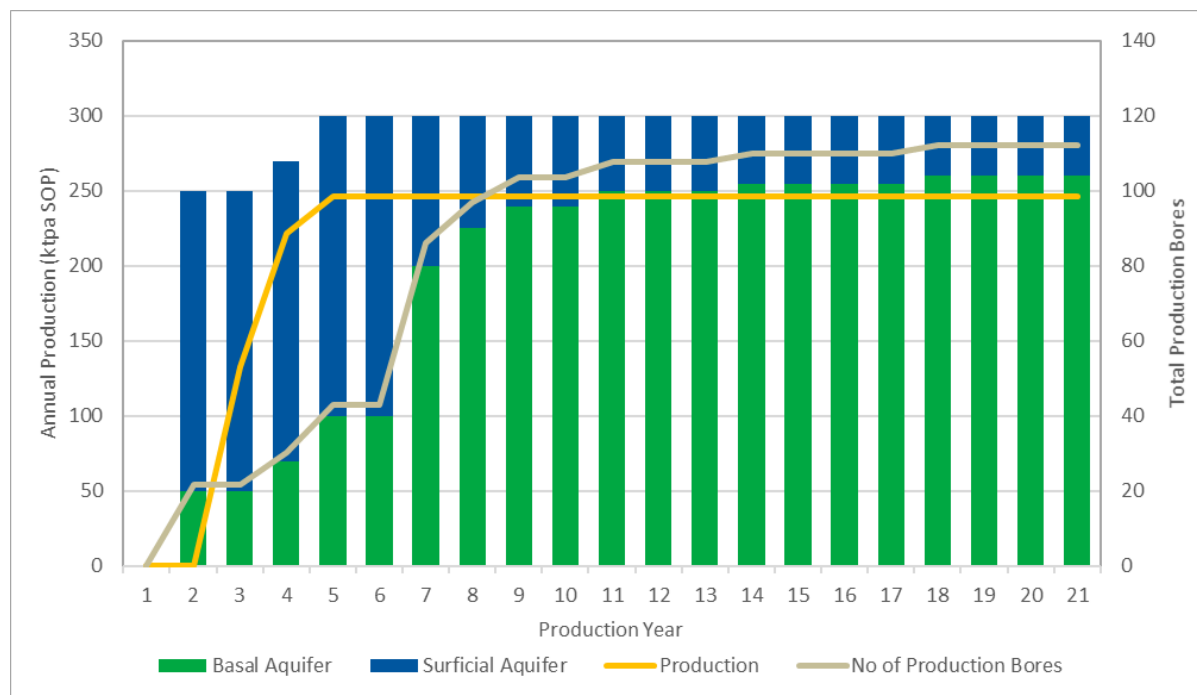


Figure 29: Mine Plan Schedule

13. References

- Advisian, 2021 – Memo on Lake Throssell Resource Assessment, HG_MEMO_0002 August 2021
- AQ2, 2019 - Lake Wells Sulphate of Potash Project: H3 Hydrogeological Assessment for the Abstraction of Brine. Report prepared for Australian Potash Ltd, October 2019, 155pp.
- Bunting et. al., 1978 – Throssell Western Australian, Sheet SG/51-15 International Index 1:250 000 Geological Series – Explanatory Notes, Department of Mines, Western Australia, GSWA.
- Pennington Scott, 2016a - Hydrogeology Summary: Gruyere Gold Project. A report to Gold Road Resources Limited, Report 2088 Rev 1, 25 Feb 2016, 26pp.
- Pennington Scott, 2016b - Hydrogeological Modelling Synopsis for API: Gruyere Gold Project. A report to Gold Road Resources Limited, Report 2088 Rev 0, 30 Sep 2016, 14pp.

APPENDIX 1 – Drill hole and brine analysis tables

Lake Throssell hand auger collar location and assay result

Site ID	Easting	Northing	Hole depth (m)	K (mg/L)	SOP Equiv. ¹ (K ₂ SO ₄) (kg/m ³)	Mg (mg/L)	Na (mg/L)	SO ₄ (mg/L)	TDS (mg/L)
LT001	625,864	6959997	1.20	3,840	8.56	5,440	57,600	13,700	187,000
LT002	620,233	6959250	1.10	5,120	11.42	9,750	85,800	25,000	284,000
LT003	618832	6955734	1.20	5,090	11.35	6,740	75,900	20,600	237,000
LT004	623424	6955635	1.20	5,610	12.51	7,830	88,500	20,900	276,000
LT005	622383	6950849	1.10	5,150	11.48	6,510	82,700	18,000	256,000
LT006	617496	6950979	1.20	4,910	10.95	4,920	69,900	15,300	220,000
LT007	610629	6951011	1.10	6,580	14.67	7,180	81,000	23,900	259,000
LT008	620071	6946977	1.20	5,240	11.69	8,250	89,100	20,300	280,000
LT009	616099	6945768	1.20	4,820	10.75	5,910	78,200	18,800	235,000
LT010	611438	6946320	1.20	5,600	12.49	6,740	89,500	20,300	272,000
LT011	613656	6942220	1.20	5,040	11.24	8,170	84,900	21,700	269,000
LT012	609780	6942352	1.10	4,840	10.79	7,420	84,400	23,000	263,000
LT013	605549	6940072	1.20	4,880	10.88	7,220	72,100	20,500	231,000
LT014	599651	6940332	1.00	5,370	11.98	12,100	92,900	30,300	317,000
LT015	602745	6944274	1.10	5,980	13.34	13,300	91,900	32,400	322,000
LT016	613817	6953422	0.80	6,660	14.85	10,300	92,100	28,200	308,000

Lake Throssell heli-rotary auger location and assay results

Site ID	Easting	Northing	Sample depth (m)	K (mg/L)	SOP equiv. ¹ (K ₂ SO ₄) (kg/m ³)	Mg (mg/L)	Na (mg/L)	SO ₄ (mg/L)	TDS (mg/L)
LTAG01	623221	6954229	0	5,720	12.76	8,260	93,300	21,800	284,000
			2.5	5,460	12.18	7,600	82,600	20,100	269,000
LTAG02	625430	6956409	0	4,670	10.41	8,730	84,300	19,700	270,000
			0.5	4,750	10.59	8,810	84,000	20,300	267,000
			2.5	4,630	10.32	8,380	80,400	19,800	253,000
			4	4,550	10.15	8,140	78,700	19,200	256,000
			5.5	4,560	10.17	8,280	79,700	19,300	250,000
LTAG03	619489	6948228	0	5,180	11.55	7,720	84,400	21,200	270,000
			2.5	5,450	12.15	7,800	89,800	21,600	284,000
			4	5,660	12.62	8,310	92,100	22,300	290,000
LTAG06	617249	649900	0	4,720	10.53	5,950	76,900	17,800	230,000
			1	4,720	10.53	5,780	75,300	17,700	230,000
			2.5	4,570	10.19	5,840	73,400	17,100	225,000
LTAG07	618264	6944914	0	5,050	11.26	8,310	83,100	20,200	265,000
			1	5,070	11.31	7,510	83,100	21,000	266,000

¹ SOP equivalent (K₂SO₄) is calculated by multiplying potassium by 2.23.

Lake Throssell Potash Project

Lake Throssell Sept 2021 Resource Estimate Reported in Accordance with JORC Code 2012

Site ID	Easting	Northing	Sample depth (m)	K (mg/L)	SOP equiv. ¹ (K ₂ SO ₄) (kg/m ³)	Mg (mg/L)	Na (mg/L)	SO ₄ (mg/L)	TDS (mg/L)
			2.5	5,180	11.55	7,790	86,600	21,300	268,000
			4	5,160	11.51	7,690	85,500	20,600	264,000
			5.5	4,930	10.99	7,390	79,700	20,000	263,000
LTAG08	613965	6946765	0	4,510	10.06	9,850	96,600	24,500	301,000
			1	4,670	10.41	10,300	97,900	24,900	299,000
			2.5	4,540	10.12	10,200	95,000	24,800	300,000
			4	4,660	10.39	10,300	96,900	25,700	305,000
LTAG09	614144	6943570	1	5,640	12.58	7,360	90,100	20,800	278,000
			2.5	4,930	10.99	7,170	80,100	18,800	285,000
			4	5,990	13.36	8,640	94,700	23,200	290,000
LTAG10	610882	6942305	1	5,360	11.95	6,920	83,400	22,700	259,000
			2.5	5,050	11.26	6,040	80,500	21,400	244,000
			4	4,900	10.93	5,980	79,100	21,500	244,000
LTAG11	603216	6942167	0	4,030	8.99	11,800	88,900	27,500	283,000
			1	3,950	8.81	11,400	83,200	25,400	285,000
LTAG12	605545	6940077	0	4,470	9.97	6,790	66,500	19,900	234,000
			1	4,680	10.44	7,320	71,400	20,700	236,000
			2.5	4,890	10.90	7,330	73,700	22,000	230,000
LTAG13	599494	6940005	0	4,960	11.06	11,800	91,500	31,800	311,000
LTAG14	607702	6943633	0	5,970	13.31	7,070	82,600	23,000	265,000
			1	6,000	13.38	7,240	85,300	23,600	266,000
			2.5	6,080	13.56	7,390	85,100	23,500	274,000
			5.5	5,810	12.96	7,060	81,700	23,000	267,000
LTAG15	608710	6946765	0	6,200	13.83	8,330	92,500	23,800	314,000
			1	6,520	14.54	8,560	98,100	26,000	308,000
			4	6,050	13.49	6,240	82,300	21,600	257,000
LTAG16	612341	6949239	0	5,390	12.02	5,600	75,000	18,400	232,000
			2.5	5,330	11.89	5,520	75,500	18,300	231,000
LTAG17	610629	6951013	0	6,350	14.16	7,220	79,900	25,100	261,000
			1	6,430	14.34	7,310	81,900	25,200	252,000
			4	6,350	14.16	7,590	81,900	25,500	265,000
			5.5	6,400	14.27	7,670	83,300	26,000	263,000
LTAG18	612830	6953124	0	4,240	9.46	6,930	55,800	21,700	184,000
			1	4,260	9.50	7,370	56,700	21,100	193,000
LTAG19	616742	6954229	0	5,110	11.40	5,660	70,200	18,500	221,000
			1	5,180	11.55	5,500	71,900	18,400	217,000
			2.5	5,110	11.40	5,690	68,400	18,500	220,000
LTAG20	619339	6952229	0	5,280	11.77	7,070	89,400	20,900	259,000
			1	5,120	11.42	6,750	85,400	19,800	262,000
			2.5	5,090	11.35	6,390	84,900	19,800	264,000
			4	5,200	11.60	6,620	86,400	20,300	266,000
LTAG21	622383	6950850	0	5,090	11.35	6,450	79,000	19,900	253,000

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Lake Throssell Sept 2021 Resource Estimate Reported in Accordance with JORC Code 2012

Site ID	Easting	Northing	Sample depth (m)	K (mg/L)	SOP equiv. ¹ (K ₂ SO ₄) (kg/m ³)	Mg (mg/L)	Na (mg/L)	SO ₄ (mg/L)	TDS (mg/L)
			1	5,010	11.17	6,150	80,500	19,400	247,000
LTAG22	620534	6955035	0	5,080	11.33	6,120	76,100	18,700	234,000
			3.25	5,010	11.17	5,800	76,200	18,500	231,000
			4	5,100	11.37	6,000	78,600	18,600	233,000
			5.5	5,190	11.57	6,070	77,600	18,700	235,000
			7	5,140	11.46	5,700	73,300	18,100	237,000
			8.5	5,310	11.84	5,640	74,900	18,300	237,000
LTAG23	619041	6956827	0	4,710	10.50	6,450	66,700	20,800	218,000
			1	4,650	10.37	6,550	67,900	21,000	216,000
			4	5,050	11.26	7,400	74,000	23,600	235,000
			5.5	4,990	11.13	7,660	72,400	24,100	237,000
LTAG24	620233	6959251	0	4,890	10.90	9,020	79,900	25,600	280,000
			1	5,080	11.33	9,190	83,900	26,300	274,000
			2.5	5,220	11.64	9,290	81,800	26,300	276,000
			4	5,310	11.84	9,270	84,800	27,400	280,000
LTAG25	623191	6958379	0	5,730	12.78	6,790	82,400	20,900	260,000
			1	5,300	11.82	6,330	76,400	19,700	257,000
LTAG26	624624	6961485	2.5	2,810	6.27	5,040	38,100	13,200	127,000
			4	2,890	6.44	5,400	38,800	14,400	130,000
			5.5	2,930	6.53	5,510	39,000	14,500	136,000

Lake Throssell Trial Trench and Test Pit locations, dimensions and pumping details

ID	Type	Easting (GDA94 Z51)	Northing (GDA94 Z51)	Length (m)	Depth (m)	Max Draw-down (m)	Pumping Duration	Average Pumping Rate (L/s)	Kh (m/d)	Kv (m/d)	Specific Yield (-)
LTTT01	Trial Trench	623935	6955953	100	4.5	1.9	10 Days	1.0	1.5	0.2	0.40
LTTT02	Trial Trench	621117	6948873	100	4.5	2.6	11 Days	1.2	0.5	0.1	0.40
LTTP01	Test Pit	619044	6956671	6.5	3.7	2.4	2 Hours	1.2	0.2	0.02	0.01
LTTP02	Test Pit	625277	6956289	8.3	3	1.9	3 Hours	2.1	0.8	0.1	0.02
LTTP03	Test Pit	617157	6949545	6.3	4	2.8	2.5 Hours	1.4	0.6	0.1	0.01
LTTP04	Test Pit	620646	6953250	8.6	3	1.9	1.5 Hours	1.7	1.9	1.9	0.05
LTTP05	Test Pit	610629	6950730	9	3	0.1	2 Hours	4.2	340	340	0.40
LTTP06	Test Pit	618148	6944582	6.3	3.8	1.6	4 Hours	2.6	32	3.2	0.10
LTTP07	Test Pit	613967	6944956	7.2	3.8	1.8	2.5 Hours	1.9	0.9	0.1	0.15

Lake Throssell test pumping brine assays

Date	Trench ID	Ca (mg/L)	K (mg/L)	SOP equiv. ¹ (kg/m ³)	Na (mg/L)	Mg (mg/L)	SO ₄ (mg/L)	TDS (mg/L)
30/05/2021	LTTP01	696	5050	11.26	69600	6730	20700	235100
30/05/2021	LTTP01	681	4920	10.97	71700	6500	20200	227500

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Lake Throssell Sept 2021 Resource Estimate Reported in Accordance with JORC Code 2012

Date	Trench ID	Ca (mg/L)	K (mg/L)	SOP equiv. ¹ (kg/m ³)	Na (mg/L)	Mg (mg/L)	SO ₄ (mg/L)	TDS (mg/L)
16/05/2021	LTTP02	516	5400	12.04	85800	9260	19500	304700
16/05/2021	LTTP02	514	5330	11.89	89000	9120	19600	309900
29/05/2021	LTTP03	717	5060	11.28	78100	6440	17000	251300
29/05/2021	LTTP03	736	5030	11.22	78300	6430	17300	243600
17/05/2021	LTTP04	582	4850	10.82	79900	7520	21300	265300
17/05/2021	LTTP04	586	4860	10.84	81300	7560	21300	269800
2/06/2021	LTTP05	605	6070	13.54	77700	7010	24000	248100
2/06/2021	LTTP05	611	5870	13.09	75400	6900	23900	238000
27/05/2021	LTTP06	606	5130	11.44	87500	7550	19700	278450
27/05/2021	LTTP06	632	4970	11.08	83200	7180	18900	267300
28/05/2021	LTTP07	585	5140	11.46	80000	6930	21700	265850
28/05/2021	LTTP07	613	5070	11.31	82400	6770	20500	257300
15/05/2021	LTTT01	483	5050	11.26	76800	8600	21100	297250
17/05/2021	LTTT01	500	5660	12.62	85000	9460	23600	372100
20/05/2021	LTTT01	491	5730	12.78	83300	9560	24600	319900
23/05/2021	LTTT01	477	5610	12.51	82700	9370	23900	346350
25/05/2021	LTTT01	488	5700	12.71	82900	9410	24200	292150
21/05/2021	LTTT02	612	4920	10.97	82000	7610	19400	275100
24/05/2021	LTTT02	606	4920	10.97	82200	7670	19400	275100
27/05/2021	LTTT02	571	4610	10.28	80100	7240	18600	276800
30/05/2021	LTTT02	608	4970	11.08	86100	7630	19400	270400
31/05/2021	LTTT02	597	4930	10.99	83600	7620	18300	269200

Lake Throssell air-core drill hole locations

Collar ID	Easting (GDA94 Z51)	Northing (GDA94 Z51)	Azimuth	Dip	RL (mAHD)	Depth (m)
LTAC001	628388	6962021	0	-90	372	105
LTAC002	628176	6962125	0	-90	372	102
LTAC003	625859	6957880	0	-90	383	105
LTAC004	626076	6957761	0	-90	387	110
LTAC005	626271	6957639	0	-90	380	103
LTAC006	625599	6958044	0	-90	375	102
LTAC007	625013	6958442	0	-90	374	105
LTAC008	625073	6954204	0	-90	380	120
LTAC009	624590	6954598	0	-90	370	109
LTAC010	624330	6954770	0	-90	381	129
LTAC011	624900	6954397	0	-90	344	105
LTAC012	625321	6954113	0	-90	378	120
LTAC013	626684	6957399	0	-90	376	87
LTAC014	624598	6958634	0	-90	374	106
LTAC015	619031	6950979	0	-90	370	97
LTAC016	619951	6950276	0	-90	369	130
LTAC017	620753	6949534	0	-90	368	60
LTAC018	620767	6949553	0	-90	367	129
LTAC019	621325	6949188	0	-90	372	131
LTAC020	618904	6943976	0	-90	376	73

Lake Throssell Potash Project

Lake Throssell Sept 2021 Resource Estimate Reported in Accordance with JORC Code 2012

Collar ID	Easting (GDA94 Z51)	Northing (GDA94 Z51)	Azimuth	Dip	RL (mAHD)	Depth (m)
LTAC021	619372	6943476	0	-90	372	54
LTAC022	614538	6941828	0	-90	372	126
LTAC023	609051	6941266	0	-90	379	108
LTAC024	608793	6942149	0	-90	377	108
LTAC025	605931	6941400	0	-90	370	106
LTAC026	606360	6939722	0	-90	371	108
LTAC027	606125	6940664	0	-90	374	104
LTAC028	603361	6939557	0	-90	381	105
LTAC029	608342	6943819	0	-90	374	100
LTAC030	608554	6942945	0	-90	378	104
LTAC031	609306	6940345	0	-90	383	107
LTAC032	608445	6943398	0	-90	372	102
LTAC033	608235	6944107	0	-90	370	95
LTAC034	612058	6942224	0	-90	366	105
LTAC035	612537	6941660	0	-90	381	106
LTAC036	611676	6942812	0	-90	376	111
LTAC037	610808	6944073	0	-90	375	101
LTAC038	613975	6943553	0	-90	378	129
LTAC039	613316	6945407	0	-90	364	62
LTAC040	617061	6945835	0	-90	365	131
LTAC041	615865	6947171	0	-90	372	89
LTAC042	616463	6946466	0	-90	373	101
LTAC043	617612	6945228	0	-90	374	144
LTAC044	618747	6947918	0	-90	372	124
LTAC045	617320	6949225	0	-90	367	78
LTAC046	614871	6951078	0	-90	371	68
LTAC047	611333	6951499	0	-90	351	100
LTAC048	620788	6952231	0	-90	372	117
LTAC049	620226	6952834	0	-90	377	128
LTAC050	621488	6954148	0	-90	375	112
LTAC051	620493	6955247	0	-90	374	68
LTAC052	621948	6956306	0	-90	371	99
LTAC053	623545	6959320	0	-90	378	83
LTAC054	624413	6960692	0	-90	378	106

Lake Throssell air-core assay results

Hole ID	From	To	Ca	K	SOP equiv. ²		Na	Mg	S	SO ₄	TDS
	(m)	(m)	(mg/L)	(mg/L)	(mg/L)	(kg/m ³)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LTAC001	102	102	570	4,420	9,848	9.85	77,000	8,000	7,470	22,400	248,000
LTAC001	105	105	555	4,700	10,472	10.47	79,700	8,420	7,550	22,700	258,000
LTAC002	0	3	1,090	4,150	9,246	9.25	51,000	5,270	4,380	13,100	161,000
LTAC002	90	90	828	4,730	10,538	10.54	64,700	6,930	5,820	17,500	204,000
LTAC002	96	96	454	5,170	11,519	11.52	89,300	9,420	8,400	25,200	284,000
LTAC002	99	99	560	4,670	10,405	10.41	81,600	8,420	7,630	22,900	261,000

² SOP equivalent (K₂SO₄) is calculated by multiplying potassium by 2.23.

Lake Throssell Potash Project

Lake Throssell Sept 2021 Resource Estimate Reported in Accordance with JORC Code 2012

Hole ID	From	To	Ca	K	SOP equiv. ²		Na	Mg	S	SO ₄	TDS
	(m)	(m)	(mg/L)	(mg/L)	(mg/L)	(kg/m ³)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LTAC002	102	102	450	5,070	11,296	11.30	87,500	9,250	8,310	24,900	288,000
LTAC003	54	54	646	4,770	10,628	10.63	81,900	7,810	6,310	18,900	257,000
LTAC003	93	93	617	4,430	9,870	9.87	78,800	8,420	7,040	21,100	255,000
LTAC003	96	96	605	4,430	9,870	9.87	76,000	8,300	7,010	21,000	252,000
LTAC003	99	99	609	4,370	9,736	9.74	78,300	8,390	6,990	21,000	251,000
LTAC004	12	12	1,120	2,210	4,924	4.92	40,400	4,100	4,010	12,000	128,000
LTAC004	96	96	601	4,340	9,670	9.67	78,600	8,500	7,290	21,900	257,000
LTAC004	99	99	662	4,160	9,268	9.27	77,100	8,220	7,050	21,200	244,000
LTAC004	102	102	624	4,130	9,202	9.20	73,600	8,100	7,000	21,000	246,000
LTAC004	108	108	575	4,410	9,825	9.83	80,400	8,400	7,290	21,900	258,000
LTAC005	75	75	700	3,580	7,976	7.98	67,700	7,210	6,460	19,400	216,000
LTAC005	90	90	692	3,750	8,355	8.36	69,400	7,560	6,700	20,100	225,000
LTAC005	93	93	600	4,070	9,068	9.07	74,200	8,190	7,150	21,500	249,000
LTAC005	99	99	584	4,230	9,424	9.42	74,400	8,390	7,100	21,300	253,000
LTAC005	102	102	610	4,030	8,979	8.98	70,300	8,070	6,930	20,800	248,000
LTAC006	87	87	576	4,890	10,895	10.90	78,800	8,010	6,450	19,400	273,000
LTAC006	90	90	579	4,480	9,981	9.98	77,300	8,490	6,890	20,700	258,000
LTAC006	93	93	593	4,480	9,981	9.98	78,400	8,410	7,080	21,200	257,000
LTAC006	96	96	583	4,510	10,048	10.05	75,300	8,460	7,060	21,200	259,000
LTAC007	90	90	586	4,480	9,981	9.98	76,800	8,090	7,240	21,700	255,000
LTAC007	93	93	582	4,490	10,004	10.00	77,200	8,030	7,290	21,900	252,000
LTAC007	99	99	589	4,360	9,714	9.71	73,900	7,930	6,990	21,000	252,000
LTAC007	102	102	581	4,410	9,825	9.83	75,000	8,080	7,220	21,700	271,000
LTAC008	75	75	589	4,390	9,781	9.78	75,400	8,280	6,970	20,900	256,000
LTAC008	81	81	597	4,300	9,580	9.58	75,000	8,200	6,880	20,600	253,000
LTAC008	99	99	639	4,020	8,957	8.96	72,300	7,760	6,560	19,700	261,000
LTAC008	105	105	621	4,160	9,268	9.27	73,300	7,880	6,760	20,300	249,000
LTAC008	108	108	618	4,250	9,469	9.47	75,900	8,120	7,130	21,400	250,000
LTAC008	111	111	621	4,170	9,291	9.29	73,000	8,060	6,740	20,200	255,000
LTAC008	114	114	640	4,140	9,224	9.22	75,200	7,890	6,780	20,300	263,000
LTAC008	117	117	643	4,120	9,179	9.18	75,000	7,790	6,680	20,000	260,000
LTAC009	72	72	578	4,230	9,424	9.42	73,600	8,240	7,020	21,100	256,000
LTAC009	75	75	595	4,250	9,469	9.47	75,800	8,220	7,080	21,200	269,000
LTAC009	78	78	587	4,260	9,491	9.49	74,200	8,300	6,920	20,800	269,000
LTAC009	81	81	564	4,370	9,736	9.74	76,000	8,710	7,360	22,100	267,000
LTAC009	87	87	589	4,280	9,536	9.54	75,100	8,510	7,310	21,900	260,000
LTAC009	90	90	596	4,240	9,447	9.45	75,600	8,300	7,070	21,200	254,000
LTAC009	96	96	596	4,220	9,402	9.40	75,500	8,270	6,790	20,400	256,000
LTAC009	105	105	543	4,390	9,781	9.78	81,900	8,750	7,350	22,100	265,000
LTAC010	120	120	515	4,440	9,892	9.89	81,300	9,160	7,630	22,900	272,000

Lake Throssell Potash Project

Lake Throssell Sept 2021 Resource Estimate Reported in Accordance with JORC Code 2012

Hole ID	From	To	Ca	K	SOP equiv. ²		Na	Mg	S	SO ₄	TDS
	(m)	(m)	(mg/L)	(mg/L)	(mg/L)	(kg/m ³)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LTAC010	126	126	529	4,440	9,892	9.89	80,300	9,180	7,900	23,700	269,000
LTAC011	15	15	539	4,230	9,424	9.42	77,600	7,960	7,090	21,300	250,000
LTAC011	72	72	618	4,250	9,469	9.47	73,200	8,120	6,710	20,100	251,000
LTAC011	81	81	636	4,250	9,469	9.47	74,800	8,140	6,870	20,600	249,000
LTAC012	75	75	668	4,160	9,268	9.27	73,800	7,780	6,580	19,700	242,000
LTAC012	78	78	674	4,180	9,313	9.31	73,600	8,060	6,690	20,100	243,000
LTAC012	81	81	562	4,430	9,870	9.87	80,300	8,520	6,970	20,900	262,000
LTAC012	96	96	645	4,150	9,246	9.25	72,400	7,860	6,670	20,000	247,000
LTAC012	99	99	672	4,140	9,224	9.22	74,900	7,810	6,490	19,500	245,000
LTAC012	105	105	626	4,340	9,670	9.67	77,900	8,180	6,890	20,700	254,000
LTAC012	108	108	554	4,480	9,981	9.98	81,100	8,680	7,070	21,200	269,000
LTAC012	114	114	680	4,130	9,202	9.20	73,700	7,790	6,440	19,300	243,000
LTAC012	120	120	681	4,110	9,157	9.16	73,800	7,770	6,510	19,500	242,000
LTAC014	36	36	520	4,990	11,118	11.12	81,300	8,740	7,640	22,900	270,000
LTAC014	51	51	555	4,630	10,316	10.32	77,900	8,260	7,450	22,400	270,000
LTAC014	60	60	555	4,520	10,071	10.07	77,800	8,150	7,380	22,100	260,000
LTAC014	99	99	536	4,670	10,405	10.41	79,200	8,750	8,050	24,200	268,000
LTAC015	60	60	482	5,110	11,385	11.39	84,400	9,010	8,310	24,900	280,000
LTAC015	84	84	517	4,750	10,583	10.58	81,700	8,890	8,260	24,800	271,000
LTAC015	87	87	544	4,710	10,494	10.49	79,400	8,610	8,170	24,500	265,000
LTAC015	90	90	455	4,910	10,939	10.94	86,500	9,110	8,620	25,900	285,000
LTAC015	93	93	536	4,630	10,316	10.32	81,800	8,580	8,130	24,400	264,000
LTAC016	99	99	458	4,900	10,917	10.92	88,500	9,430	8,460	25,400	285,000
LTAC016	102	102	482	4,920	10,962	10.96	89,900	9,580	8,670	26,000	286,000
LTAC016	117	117	517	4,620	10,293	10.29	81,400	9,000	7,800	23,400	274,000
LTAC016	123	123	495	4,680	10,427	10.43	88,900	9,090	8,100	24,300	276,000
LTAC016	126	126	495	4,510	10,048	10.05	81,900	8,780	7,930	23,800	271,000
LTAC016	129	129	499	4,560	10,160	10.16	83,200	8,590	8,010	24,000	271,000
LTAC018	72	72	565	4,270	9,522	9.52	82,300	8,820	7,320	22,000	267,000
LTAC018	75	75	553	4,260	9,500	9.50	81,600	8,650	7,150	21,500	267,000
LTAC018	78	78	564	4,230	9,433	9.43	79,400	8,680	7,290	21,900	267,000
LTAC018	81	81	558	4,410	9,834	9.83	84,400	9,120	7,680	23,000	271,000
LTAC018	84	84	569	4,290	9,567	9.57	85,500	8,910	7,530	22,600	269,000
LTAC018	87	87	561	4,330	9,656	9.66	84,100	8,720	7,440	22,300	269,000
LTAC018	90	90	547	4,200	9,366	9.37	82,600	8,540	7,230	21,700	265,000
LTAC018	93	93	548	4,270	9,522	9.52	83,900	8,680	7,590	22,800	268,000
LTAC018	99	99	548	4,130	9,210	9.21	80,100	8,370	7,370	22,100	264,000
LTAC018	102	102	543	4,220	9,411	9.41	82,700	8,640	7,300	21,900	269,000
LTAC018	105	105	470	4,270	9,522	9.52	83,400	8,680	7,590	22,800	283,000
LTAC018	111	111	502	4,210	9,388	9.39	83,900	8,590	8,040	24,100	275,000

Lake Throssell Potash Project

Lake Throssell Sept 2021 Resource Estimate Reported in Accordance with JORC Code 2012

Hole ID	From	To	Ca	K	SOP equiv. ²		Na	Mg	S	SO ₄	TDS
	(m)	(m)	(mg/L)	(mg/L)	(mg/L)	(kg/m ³)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LTAC018	114	114	533	4,160	9,277	9.28	83,500	8,540	7,760	23,300	268,000
LTAC018	117	117	513	4,240	9,455	9.46	82,000	8,560	7,760	23,300	272,000
LTAC018	120	120	549	4,160	9,277	9.28	82,400	8,460	7,660	23,000	265,000
LTAC018	123	123	535	4,170	9,299	9.30	81,500	8,630	7,830	23,500	270,000
LTAC018	126	126	525	4,220	9,411	9.41	82,400	8,770	7,730	23,200	272,000
LTAC019	42	42	553	4,330	9,656	9.66	85,900	9,030	7,760	23,300	269,000
LTAC019	45	45	576	4,160	9,277	9.28	78,900	8,790	6,960	20,900	263,000
LTAC019	48	48	553	4,260	9,500	9.50	83,200	8,830	7,320	22,000	271,000
LTAC019	66	66	552	4,240	9,455	9.46	81,600	8,680	7,660	23,000	268,000
LTAC019	69	69	540	4,260	9,500	9.50	83,400	8,570	7,510	22,500	268,000
LTAC019	72	72	549	4,180	9,321	9.32	81,600	8,670	7,590	22,800	267,000
LTAC019	75	75	549	4,220	9,411	9.41	82,100	8,590	7,840	23,500	268,000
LTAC019	78	78	545	4,230	9,433	9.43	82,700	8,670	7,450	22,400	267,000
LTAC019	81	81	560	4,270	9,522	9.52	81,500	8,790	7,480	22,400	267,000
LTAC019	87	87	532	4,180	9,321	9.32	76,900	7,960	7,360	22,100	262,000
LTAC019	90	90	537	4,210	9,388	9.39	83,700	8,470	7,870	23,600	264,000
LTAC019	93	93	542	3,980	8,875	8.88	79,700	8,240	7,220	21,700	264,000
LTAC019	96	96	544	3,980	8,875	8.88	79,200	8,380	7,430	22,300	263,000
LTAC019	99	99	551	4,040	9,009	9.01	79,700	8,460	7,600	22,800	261,000
LTAC019	102	102	557	4,030	8,987	8.99	80,700	8,530	7,870	23,600	262,000
LTAC019	105	105	532	3,950	8,809	8.81	78,900	8,150	7,420	22,300	263,000
LTAC019	108	108	558	4,050	9,032	9.03	82,600	8,600	7,700	23,100	262,000
LTAC019	111	111	556	4,060	9,054	9.05	84,000	8,700	8,020	24,100	263,000
LTAC019	117	117	554	4,040	9,009	9.01	81,300	8,590	8,040	24,100	265,000
LTAC019	120	120	552	4,090	9,121	9.12	82,000	8,660	7,740	23,200	263,000
LTAC019	123	123	524	4,140	9,232	9.23	79,600	8,430	7,520	22,600	265,000
LTAC019	126	126	546	4,110	9,165	9.17	80,200	8,470	7,570	22,700	264,000
LTAC019	129	129	549	4,150	9,255	9.26	80,100	8,600	7,600	22,800	265,000
LTAC020	72	72	551	4,430	9,879	9.88	83,300	8,780	7,710	23,100	270,000
LTAC022	99	99	497	4,330	9,656	9.66	82,800	8,790	8,510	25,500	273,000
LTAC022	111	111	468	4,490	10,013	10.01	86,200	9,080	9,070	27,200	281,000
LTAC022	117	117	498	4,470	9,968	9.97	88,900	9,170	8,940	26,800	278,000
LTAC022	126	126	503	4,350	9,701	9.70	84,100	8,890	8,740	26,200	274,000
LTAC023	105	105	557	4,200	9,366	9.37	77,900	8,460	8,900	26,700	N/A
LTAC023	108	108	544	4,170	9,299	9.30	78,800	8,510	8,860	26,600	258,000
LTAC024	102	102	520	4,220	9,411	9.41	75,700	8,360	8,570	25,700	263,000
LTAC024	108	108	547	4,350	9,701	9.70	80,700	8,760	8,590	25,800	264,000
LTAC025	102	102	428	4,940	11,016	11.02	86,900	9,770	10,300	30,900	287,000
LTAC025	105	105	443	4,780	10,659	10.66	81,800	9,270	9,500	28,500	282,000
LTAC025	106	106	491	4,680	10,436	10.44	81,100	8,960	9,220	27,700	272,000

Lake Throssell Potash Project

Lake Throssell Sept 2021 Resource Estimate Reported in Accordance with JORC Code 2012

Hole ID	From	To	Ca	K	SOP equiv. ²		Na	Mg	S	SO ₄	TDS
	(m)	(m)	(mg/L)	(mg/L)	(mg/L)	(kg/m ³)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LTAC026	0.3	0.3	458	5,030	11,217	11.22	78,900	9,020	8,380	25,100	276,000
LTAC026	96	96	459	4,730	10,548	10.55	80,700	9,400	9,780	29,300	276,000
LTAC026	99	99	493	4,570	10,191	10.19	81,200	9,240	9,780	29,300	271,000
LTAC026	108	108	478	4,520	10,080	10.08	81,600	9,090	9,410	28,200	269,000
LTAC027	87	87	467	4,620	10,303	10.30	79,500	8,910	9,300	27,900	273,000
LTAC027	90	90	479	4,660	10,392	10.39	83,500	9,150	9,300	27,900	271,000
LTAC027	93	93	489	4,700	10,481	10.48	84,200	9,170	9,500	28,500	271,000
LTAC027	96	96	438	4,850	10,816	10.82	87,200	9,410	9,780	29,300	285,000
LTAC027	102	102	483	4,660	10,392	10.39	81,100	9,140	9,410	28,200	274,000
LTAC027	104	104	478	4,650	10,370	10.37	82,800	8,980	9,300	27,900	271,000
LTAC028	102	102	520	4,480	9,990	9.99	77,200	9,020	9,410	28,200	265,000
LTAC028	105	105	498	4,460	9,946	9.95	78,200	8,890	9,270	27,800	265,000
LTAC029	75	75	458	4,820	10,749	10.75	88,200	9,300	9,150	27,500	286,000
LTAC029	78	78	456	4,740	10,570	10.57	85,500	9,130	9,280	27,800	282,000
LTAC029	81	81	475	4,710	10,503	10.50	83,800	9,170	9,030	27,100	280,000
LTAC029	84	84	444	4,580	10,213	10.21	78,600	8,670	8,630	25,900	276,000
LTAC029	87	87	447	4,730	10,548	10.55	84,700	9,050	9,580	28,700	281,000
LTAC029	90	90	463	4,560	10,169	10.17	82,400	8,840	8,770	26,300	278,000
LTAC029	93	93	452	4,660	10,392	10.39	84,400	8,930	9,220	27,700	280,000
LTAC029	99	99	452	4,700	10,481	10.48	85,600	8,880	9,410	28,200	280,000
LTAC030	81	81	453	4,660	10,392	10.39	85,700	8,790	9,010	27,000	262,000
LTAC030	84	84	535	4,280	9,544	9.54	75,900	8,410	8,820	26,500	254,000
LTAC030	87	87	549	4,290	9,567	9.57	75,800	8,760	8,500	25,500	259,000
LTAC030	90	90	526	4,360	9,723	9.72	76,100	8,400	8,910	26,700	259,000
LTAC031	102	102	534	4,150	9,255	9.26	77,700	8,320	8,340	25,000	258,000
LTAC031	105	105	547	4,070	9,076	9.08	75,000	8,080	8,340	25,000	254,000
LTAC032	84	84	462	4,660	10,392	10.39	86,000	8,830	8,880	26,600	279,000
LTAC032	87	87	469	4,650	10,370	10.37	83,300	8,760	8,700	26,100	281,000
LTAC032	96	96	479	4,620	10,303	10.30	84,600	8,650	8,630	25,900	278,000
LTAC032	99	99	483	4,800	10,704	10.70	88,300	9,200	9,600	28,800	284,000
LTAC032	102	102	479	4,810	10,726	10.73	86,600	9,020	9,060	27,200	281,000
LTAC033	87	87	456	4,930	10,994	10.99	83,400	9,150	9,600	28,800	284,000
LTAC033	90	90	431	4,970	11,083	11.08	87,300	9,450	10,100	30,300	292,000
LTAC033	93	93	425	4,710	10,503	10.50	83,200	9,050	9,130	27,400	279,000
LTAC033	95	95	485	4,970	11,083	11.08	82,600	8,040	8,500	25,500	270,000
LTAC034	78	78	479	4,630	10,325	10.33	84,800	8,550	8,650	26,000	274,000
LTAC034	102	102	506	4,530	10,102	10.10	81,200	8,610	8,260	24,800	273,000
LTAC035	93	93	509	4,680	10,436	10.44	82,800	9,140	8,450	25,400	279,000
LTAC035	99	99	509	4,680	10,436	10.44	82,800	9,140	8,450	25,400	279,000
LTAC035	106	106	509	4,680	10,436	10.44	82,800	9,140	8,450	25,400	279,000

Lake Throssell Potash Project

Lake Throssell Sept 2021 Resource Estimate Reported in Accordance with JORC Code 2012

Hole ID	From	To	Ca	K	SOP equiv. ²		Na	Mg	S	SO ₄	TDS
	(m)	(m)	(mg/L)	(mg/L)	(mg/L)	(kg/m ³)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LTAC034	90	90	509	4,680	10,436	10.44	82,800	9,140	8,450	25,400	279,000
LTAC034	96	96	509	4,680	10,436	10.44	82,800	9,140	8,450	25,400	279,000
LTAC034	99	99	510	4,610	10,280	10.28	83,600	8,700	8,260	24,800	276,000
LTAC034	102	102	511	4,640	10,347	10.35	83,000	8,870	8,330	25,000	279,000
LTAC034	105	105	543	4,660	10,392	10.39	83,500	9,300	8,510	25,500	279,000
LTAC034	108	108	504	4,650	10,370	10.37	83,900	8,700	8,250	24,800	274,000
LTAC037	75	75	480	4,850	10,816	10.82	86,900	9,160	8,640	25,900	286,000
LTAC037	78	78	454	4,690	10,459	10.46	82,700	8,610	8,260	24,800	282,000
LTAC037	81	81	475	4,860	10,838	10.84	85,000	9,020	8,480	25,400	282,000
LTAC037	84	84	478	4,750	10,593	10.59	81,400	8,790	8,300	24,900	280,000
LTAC037	87	87	486	4,780	10,659	10.66	86,400	8,920	8,650	26,000	276,000
LTAC037	90	90	501	4,800	10,704	10.70	86,600	9,170	8,570	25,700	276,000
LTAC037	93	93	486	4,770	10,637	10.64	82,800	8,870	8,560	25,700	276,000
LTAC037	96	96	471	4,900	10,927	10.93	87,000	9,290	8,600	25,800	283,000
LTAC037	99	99	478	4,910	10,949	10.95	86,400	9,470	8,960	26,900	280,000
LTAC038	87	87	491	4,580	10,213	10.21	83,800	9,490	8,870	26,600	281,000
LTAC038	90	90	420	4,790	10,682	10.68	88,000	9,570	9,220	27,700	290,000
LTAC038	93	93	431	4,740	10,570	10.57	89,500	10,100	9,100	27,300	292,000
LTAC038	105	105	421	4,770	10,637	10.64	89,500	9,500	9,350	28,100	291,000
LTAC038	108	108	422	4,780	10,659	10.66	92,200	9,700	9,460	28,400	291,000
LTAC038	111	111	451	4,590	10,236	10.24	86,500	9,420	9,220	27,700	284,000
LTAC038	117	117	439	4,810	10,726	10.73	88,600	9,720	9,190	27,600	288,000
LTAC038	120	120	460	4,650	10,370	10.37	88,200	9,460	9,180	27,500	283,000
LTAC038	123	123	434	4,760	10,615	10.62	89,800	9,690	8,970	26,900	289,000
LTAC038	129	129	440	4,810	10,726	10.73	89,700	9,820	9,030	27,100	290,000
LTAC039	48	48	563	4,340	9,678	9.68	77,400	8,150	7,580	22,700	250,000
LTAC040	99	99	361	5,800	12,934	12.93	95,800	11,200	10,100	30,300	319,000
LTAC040	105	105	458	4,750	10,593	10.59	83,600	8,860	8,280	24,800	275,000
LTAC040	108	108	457	4,690	10,459	10.46	85,200	8,830	8,220	24,700	276,000
LTAC040	111	111	447	4,630	10,325	10.33	84,200	8,720	8,230	24,700	274,000
LTAC040	114	114	473	4,900	10,927	10.93	88,200	9,220	8,710	26,100	283,000
LTAC040	117	117	458	4,780	10,659	10.66	87,500	8,980	8,220	24,700	277,000
LTAC040	120	120	462	4,820	10,749	10.75	86,000	9,070	8,130	24,400	277,000
LTAC040	126	126	466	4,870	10,860	10.86	85,700	9,080	8,360	25,100	277,000
LTAC040	129	129	459	4,760	10,615	10.62	86,700	9,040	8,440	25,300	276,000
LTAC040	131	131	463	4,800	10,704	10.70	84,800	9,020	8,170	24,500	276,000
LTAC041	72	72	516	4,670	10,414	10.41	85,500	8,830	8,110	24,300	269,000
LTAC041	75	75	505	4,720	10,526	10.53	83,800	8,690	8,110	24,300	272,000
LTAC041	78	78	498	4,630	10,325	10.33	82,100	8,550	7,880	23,600	268,000
LTAC041	81	81	493	4,700	10,481	10.48	85,600	8,530	8,080	24,200	270,000

Lake Throssell Potash Project

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Hole ID	From	To	Ca	K	SOP equiv. ²		Na	Mg	S	SO ₄	TDS
	(m)	(m)	(mg/L)	(mg/L)	(mg/L)	(kg/m ³)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LTAC041	84	84	517	4,570	10,191	10.19	83,600	8,530	8,310	24,900	262,000
LTAC041	87	87	532	4,640	10,347	10.35	82,400	8,950	8,460	25,400	267,000
LTAC042	78	78	463	4,880	10,882	10.88	82,200	8,320	8,030	24,100	271,000
LTAC042	81	81	509	4,800	10,704	10.70	81,000	9,080	8,290	24,900	270,000
LTAC042	84	84	445	4,730	10,548	10.55	79,600	7,980	8,090	24,300	268,000
LTAC042	87	87	444	4,780	10,659	10.66	81,900	8,100	7,970	23,900	272,000
LTAC042	90	90	444	4,830	10,771	10.77	82,800	8,140	8,130	24,400	271,000
LTAC042	93	93	455	4,940	11,016	11.02	85,900	8,420	8,220	24,700	271,000
LTAC042	96	96	457	4,770	10,637	10.64	81,700	8,380	8,280	24,800	272,000
LTAC042	99	99	458	4,690	10,459	10.46	80,900	8,450	8,040	24,100	276,000
LTAC043	90	90	512	4,680	10,436	10.44	85,100	8,650	8,320	25,000	272,000
LTAC043	99	99	482	4,670	10,414	10.41	85,200	8,610	8,270	24,800	276,000
LTAC043	105	105	467	4,660	10,392	10.39	86,100	8,770	8,370	25,100	279,000
LTAC043	108	108	463	4,670	10,414	10.41	86,800	8,690	8,550	25,700	280,000
LTAC043	111	111	461	4,650	10,370	10.37	86,600	8,710	8,290	24,900	278,000
LTAC043	114	114	473	4,650	10,370	10.37	85,400	8,740	8,320	25,000	278,000
LTAC043	117	117	479	4,810	10,726	10.73	88,100	8,920	8,380	25,100	279,000
LTAC043	120	120	470	4,700	10,481	10.48	85,800	8,860	8,670	26,000	278,000
LTAC043	123	123	464	4,650	10,370	10.37	81,400	8,550	8,350	25,100	277,000
LTAC043	126	126	469	4,730	10,548	10.55	87,800	8,720	8,460	25,400	279,000
LTAC043	132	132	468	4,760	10,615	10.62	85,400	8,670	8,520	25,600	281,000
LTAC043	135	135	459	4,760	10,615	10.62	84,000	8,540	8,380	25,100	278,000
LTAC043	141	141	482	4,690	10,459	10.46	84,200	8,690	8,570	25,700	279,000
LTAC044	90	90	575	4,230	9,433	9.43	81,800	8,510	7,530	22,600	264,000
LTAC044	93	93	560	4,170	9,299	9.30	80,900	8,310	7,700	23,100	262,000
LTAC044	96	96	530	4,110	9,165	9.17	80,900	8,220	7,340	22,000	264,000
LTAC044	99	99	550	4,090	9,121	9.12	81,700	8,300	7,590	22,800	265,000
LTAC044	102	102	530	4,100	9,143	9.14	80,900	8,290	7,660	23,000	265,000
LTAC045	75	75	578	4,550	10,147	10.15	83,200	8,100	7,700	23,100	267,000
LTAC048	87	87	526	4,340	9,678	9.68	83,200	8,700	8,080	24,200	269,000
LTAC048	90	90	514	4,370	9,745	9.75	82,700	8,790	8,010	24,000	271,000
LTAC048	93	93	551	4,350	9,701	9.70	81,100	8,770	7,980	23,900	273,000
LTAC048	96	96	528	4,320	9,634	9.63	83,100	8,360	8,100	24,300	271,000
LTAC048	114	114	494	4,340	9,678	9.68	83,700	8,730	7,890	23,700	277,000
LTAC048	117	117	514	4,260	9,500	9.50	83,000	8,550	8,010	24,000	271,000
LTAC049	99	99	524	4,320	9,634	9.63	80,000	8,520	8,170	24,500	266,000
LTAC049	105	105	549	4,310	9,611	9.61	82,100	8,740	8,390	25,200	265,000
LTAC049	108	108	550	4,390	9,790	9.79	87,400	8,830	8,580	25,700	268,000
LTAC049	117	117	570	4,370	9,745	9.75	80,900	9,070	8,790	26,400	268,000
LTAC049	125	125	534	4,310	9,611	9.61	78,600	8,500	8,080	24,200	265,000

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Hole ID	From	To	Ca	K	SOP equiv. ²		Na	Mg	S	SO ₄	TDS
	(m)	(m)	(mg/L)	(mg/L)	(mg/L)	(kg/m ³)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LTAC050	96	96	529	4,310	9,611	9.61	82,400	9,040	8,260	24,800	272,000
LTAC050	99	99	507	4,340	9,678	9.68	84,900	8,950	8,360	25,100	272,000
LTAC052	69	69	497	4,760	10,615	10.62	83,800	8,710	7,770	23,300	284,000
LTAC052	84	84	517	4,850	10,816	10.82	89,800	8,930	8,120	24,400	285,000
LTAC052	87	87	510	4,960	11,061	11.06	88,700	8,930	8,280	24,800	288,000
LTAC053	83	83	535	4,880	10,882	10.88	85,000	8,210	7,200	21,600	281,000
LTAC054	105	105	476	4700	10,481	10.48	83,600	8,690	8,130	24,400	278,000

Lake Throssell PSD Analysis Results

Hole ID	Depth (m)		% Sand	% Silt	% Clay	Stratigraphy	Specific Yield (%)	Saturated Hydraulic Conductivity (m/d)
	From	To						
LTAC017	59	68	64	31	4	Lacustrine Clay	19	0.61
LTAC036	87	90	47	44	9	Lacustrine Clay	12	0.15
LTAC043	87	90	13	81	5	Lacustrine Clay	3	0.01
LTAC043	90	93	54	31	16	Lacustrine Clay	11	0.09
LTAC019	69	77	80	16	4	Basal Sand	24	1.02
LTAC043	96	99	83	9	8	Basal Sand	23	0.67
LTAC043	99	102	86	6	8	Basal Sand	23	0.73
LTAC049	96	99	84	9	6	Basal Sand	25	0.91
LTAC050	93	96	64	28	8	Basal Sand	17	0.35
LTAC050	96	99	86	9	5	Basal Sand	26	1.12
LTAC027	90	93	88	5	7	Glacial Fluvial	25	0.90
LTAC027	93	96	94	4	2	Glacial Fluvial	32	4.36
LTAC027	99	102	83	3	13	Glacial Fluvial	19	0.36
LTAC033	84	87	69	26	6	Glacial Fluvial	20	0.63
LTAC033	87	90	38	56	6	Glacial Fluvial	11	0.13
LTAC033	90	93	54	36	10	Glacial Fluvial	14	0.19
LTAC033	93	95	65	27	8	Glacial Fluvial	18	0.39
LTAC035	96	99	81	16	3	Glacial Fluvial	26	1.33
LTAC035	103	106	71	20	9	Glacial Fluvial	19	0.44
LTAC036	93	96	83	10	7	Glacial Fluvial	23	0.73
LTAC036	96	99	76	16	8	Glacial Fluvial	21	0.55
LTAC036	99	102	62	26	12	Glacial Fluvial	15	0.20
LTAC036	105	108	55	35	10	Glacial Fluvial	14	0.20
LTAC036	108	111	55	32	13	Glacial Fluvial	13	0.14
LTAC038	84	87	77	14	9	Glacial Fluvial	20	0.49
LTAC038	102	105	84	9	6	Glacial Fluvial	24	0.87
LTAC038	108	111	55	34	11	Glacial Fluvial	13	0.16
LTAC038	117	120	67	26	7	Glacial Fluvial	19	0.46
LTAC038	123	126	73	15	12	Glacial Fluvial	17	0.30
LTAC040	96	99	88	8	4	Glacial Fluvial	27	1.25
LTAC040	102	105	89	5	5	Glacial Fluvial	27	1.17
LTAC040	105	108	77	5	18	Glacial Fluvial	15	0.17
LTAC040	108	111	82	7	11	Glacial Fluvial	20	0.48
LTAC040	111	114	85	5	10	Glacial Fluvial	22	0.59
LTAC040	114	117	68	20	12	Glacial Fluvial	16	0.27
LTAC040	117	120	64	24	11	Glacial Fluvial	16	0.25
LTAC040	120	123	76	13	10	Glacial Fluvial	19	0.42
LTAC040	123	126	55	30	15	Glacial Fluvial	12	0.11
LTAC040	126	129	70	15	15	Glacial Fluvial	14	0.18
LTAC040	129	132	76	10	14	Glacial Fluvial	17	0.28
LTAC042	75	78	73	20	7	Glacial Fluvial	21	0.61
LTAC042	78	81	84	10	5	Glacial Fluvial	25	1.04

Lake Throssell Potash Project

Lake Throssell Sept 2021 Resource Estimate Reported in Accordance with JORC Code 2012

Hole ID	Depth (m)		% Sand	% Silt	% Clay	Stratigraphy	Specific Yield (%)	Saturated Hydraulic Conductivity (m/d)
	From	To						
LTAC042	81	84	86	9	5	Glacial Fluvial	26	1.12
LTAC042	84	87	87	6	7	Glacial Fluvial	25	0.89
LTAC042	87	90	82	11	7	Glacial Fluvial	24	0.83
LTAC042	90	93	70	23	7	Glacial Fluvial	20	0.54
LTAC042	93	96	74	15	11	Glacial Fluvial	18	0.37
LTAC042	96	99	80	11	9	Glacial Fluvial	22	0.59
LTAC043	105	108	69	20	11	Glacial Fluvial	17	0.29
LTAC043	108	111	46	47	8	Glacial Fluvial	12	0.16
LTAC043	117	120	63	28	9	Glacial Fluvial	17	0.32
LTAC043	120	123	51	37	12	Glacial Fluvial	12	0.13
LTAC043	123	126	49	39	12	Glacial Fluvial	12	0.12
LTAC043	126	129	68	26	6	Glacial Fluvial	20	0.55
LTAC043	129	132	46	42	12	Glacial Fluvial	11	0.10
LTAC043	132	135	60	30	10	Glacial Fluvial	15	0.25
LTAC043	135	138	48	40	12	Glacial Fluvial	11	0.10
LTAC043	138	141	44	41	14	Glacial Fluvial	10	0.07
LTAC035	90	93	39	55	6	Perm Saprolite	11	0.14
LTAC049	105	108	51	37	12	Perm Saprolite	12	0.13
LTAC049	114	117	39	50	10	Perm Saprolite	10	0.08
LTAC049	123	126	39	50	11	Perm Saprolite	9	0.07

APPENDIX 2 – JORC Tables

Section 1: Sampling Techniques and Data		
Criteria	JORC Code explanation	Commentary
Sampling techniques	- Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. - Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. - Aspects of the determination of mineralisation that are Material to the Public Report. - In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	- During test pumping brine samples were collected from a sample tap on the discharge line down gradient of the pump. Field analysis of Salinity, pH and SG were completed daily. A calibrated mechanical flow meter was used to measure average flow rates, these measurements were validated with bucket and stopwatch estimates. - During Air-core drilling brine sampling was carried out via airlifting during drilling at specific depths governed by the geology and brine inflow encountered. Brine samples were collected in a bucket, with approximate flow rates measured during sample collection. Fine sediment was allowed to settle prior to the brine sample being collected by decanting from the top of the bucket. - Brine samples from air-core drilling are considered indicative of the zone directly above the current drill depth, but maybe skewed due the geology and potential for minor volumes to flow down hole in low permeability zones. - Geological core samples were collected during the heli-rotary auger program using Lexan tubes at specific intervals. - Brine samples were collected from bailing the auger hole at known intervals. - A hand auger was used to complete holes to the target depth of ~1.2 metres. The brine was allowed to stand for several minutes to allow fine suspended sediment to settle. The final sample was obtained by decanting from the top of the water column.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	- Trenches were excavated with a 15-tonne amphibious excavator to as deep as possible with the plant. Shallower excavations generally being limited by denser geology. - Air core drilling was at 3.5" diameter. - The rotary auger holes were drilled at 7" hollow stem. - Hand auger holes were augered with 8" solid flight augers. - All holes were drilled vertically.
Drill sample recovery	- Method of recording and assessing core and chip sample recoveries and results assessed. - Measures taken to maximise sample recovery and ensure representative nature of the samples. - Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	- Lithological sample recovery was very good from air core drilling, indicated by large piles of lithological sample with little contamination. - Lexan tube recovery was near >90%.
Geologic Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource	All excavation faces were visually logged qualitatively by a qualified geologist. A tape measure was used to confirm dimensions of

Section 1: Sampling Techniques and Data		
Criteria	JORC Code explanation	Commentary
	estimation, mining studies and metallurgical studies. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. - The total length and percentage of the relevant intersections logged.	the excavations and distances between test pits and monitoring pits. - All geological samples collected during all forms of drilling are qualitatively logged by a qualified geologist at 1m intervals, to gain an understanding of the variability in aquifer materials hosting the brine. - Geological logging and other hydrogeological parameter data is recorded within a database. - Drilling lithological samples are washed and stored in chip trays for future reference.
Subsampling techniques and sample preparation	- If core, whether cut or sawn and whether quarter, half or all core taken. - If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. - For all sample types, the nature, quality and appropriateness of the sample preparation technique. - Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. - Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/ second-half sampling. - Whether sample sizes are appropriate to the grain size of the material being sampled.	- During test pumping, brine samples were collected at the start and end of pumping as a minimum at all test pits. Trial trenches were sampled daily for field parameters (pH, Salinity, and SG) and approximately every second day for laboratory submitted samples. Bulk samples were obtained for process test work. - Core samples from the hollow auger drilling were collected at various intervals using Lexan tubes. - All samples have been stored in core trays and secured for transport back to Perth. - Core plugs have been taken by cutting the lexan tubes and taking a vertical plug through the centre of the core. All samples were frozen in dry ice prior to trimming and then length and diameter were measured to calculate bulk volume. All samples were kept frozen in dry ice prior then mounted in Nickel sleeving with screens at each end to prevent material loss.
Quality of assay data and laboratory tests	- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. - For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. - Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	- All samples are being submitted to Bureau Veritas Pty Ltd in Perth for analysis. - Brine samples (250ml bottles) have been submitted for determination of Ca, Mg, K and S (as SO₄) via ICP-AES analysis. - Other parameters including TDS (Gravimetric), pH, chloride and SG will also be determined. - Selected samples have also been submitted for a comprehensive multi-element suite via ICP-MS determination. - Field duplicates have been collected and lab repeats completed at a rate of 1 in 10 samples for QA/QC purposes. - All QA/QC stats are within acceptable limits for an Inferred and Indicated Resource.
Verification of sampling and assaying	- The verification of significant intersections by either independent or alternative company personnel. - The use of twinned holes. - Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. - Discuss any adjustment to assay data.	- Duplicates and lab repeats have been reviewed and all primary samples remain unchanged. - All sample and field measurements have been kept in a database.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys),	Hole location coordinates obtained by handheld GPS.

Section 1: Sampling Techniques and Data		
Criteria	JORC Code explanation	Commentary
	<i>trenches, mine workings and other locations used in Mineral Resource estimation.</i> • Specification of the grid system used. • Quality and adequacy of topographic control.	• The grid system used was MGA94, Zone 51.
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• Drilling to date in the surface sediments has resulted in an average drill spacing of approximately 2.1km, with a maximum separation of approximately 3.5km. • Within the confining layer and deeper basal aquifer drilling to date drilling has resulted in nominal drill hole spacing of between 300-500m along drill transects and between 3-5km along strike. • Data gathered and drill spacing is sufficient for the Mineral Resource. No Ore Reserves have been estimated.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• Not applicable, considering the deposit type. • All drill holes are vertical. • Trench excavations have provided the best possible mode of logging the lake surface sediments. Pumping data gathered has demonstrated that the bulk aquifer properties of the sequence can yield brine.
Sample security	• The measures taken to ensure sample security.	• Samples collected during the work programs were delivered directly from site to the laboratory by field personnel.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• None.

Section 2: Reporting of Exploration Results		
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• EL38/3065 is 100% owned by Trigg Mining's 100% owned subsidiary K2O Minerals Pty Ltd. • E38/3544, E38/3483, E38/3458 and E38/3537 have been applied for by K2O Minerals Pty Ltd, a 100% owned subsidiary of Trigg Mining Limited., and are pending. • Trigg Mining has an Exploration Access Agreement with the Ngaanyatjarra, traditional owners of the Lake Throssell area.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• No previous drilling has been completed on Lake Throssell.
Geology	• Deposit type, geological setting and style of mineralisation.	• Shallow unconfined surficial lake playa and deep confined palaeo-drainage system as discussed in the report. • The deposit is a brine containing potassium and sulphate ions that could form a potassium sulphate salt. The brine is contained within saturated sediments.
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar;	• Information has been included in Appendix 1 and within this Mineral Resource Report. • All holes are vertical.

Section 2: Reporting of Exploration Results		
Criteria	JORC Code explanation	Commentary
	- elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar; - dip and azimuth of the hole; - downhole length and interception depth; and - hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	- In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. - Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. - The assumptions used for any reporting of metal equivalent values should be clearly stated.	- Weighted averages have been derived for the Sy of the test pumping results. These are weighted by the area of the sampled material (m2). The data exhibits high heterogeneity therefore the lowest and highest samples have been discounted from the calculation. - All brine sample intervals are stated in the brine tables. - No cut offs have been applied. - The potassium to K₂SO₄ (SOP) conversion is 2.23 as described in the report. This value has been rounded to decimal points.
Relationship between mineralisation widths and intercept lengths	- These relationships are particularly important in the reporting of Exploration Results. - If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. - If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').	The mineralisation appears to be continuous in the vicinity of the lake. Grade change laterally away from the lake has not been confirmed by drilling.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to figures/tables in this announcement.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All pertinent results have been reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	- All meaningful and pertinent exploration results are presented in the report. - Bulk brine samples have been collected to commence preliminary brine and evaporation salt analysis.

Section 2: Reporting of Exploration Results		
Criteria	JORC Code explanation	Commentary
Further work	- The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). - Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	- Infill air-core drilling at sites identified by the geophysical surveys. - Installation of test production bores and hydraulic testing of the aquifer to determine aquifer properties, brine grade and allow estimates of sustainable pumping rates. - Groundwater modelling and recharge studies. - Additional exploration on tenements as they become granted.

Section 3: Estimation of Mineral Resources		
Criteria	JORC Code explanation	Commentary
Database integrity	- Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. - Data validation procedures used.	- Cross-check of laboratory assay reports and the resource database. - Review of sample histograms used in Resource models. - QA/QC analysis using Ionic balance and relative percent differences using duplicate samples and lab repeats.
Site visits	- Comment on any site visits undertaken by the Competent Person and the outcome of those visits. - If no site visits have been undertaken indicate why this is the case.	No site visits have been completed as wet weather prohibited the planned site visit in December 2020.
Geological interpretation	- Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. - Nature of the data used and of any assumptions made. - The effect, if any, of alternative interpretations on Mineral Resource estimation. - The use of geology in guiding and controlling Mineral Resource estimation. - The factors affecting continuity both of grade and geology.	- The resource is contained within brine hosted in Cenozoic Palaeovalley stratigraphy and the underlying weathered Permian bedrock. - The geological model is considered adequately constrained for an Inferred and Indicated Resource. Drilling transects have confirmed a geological sequence based on well understood stratigraphic depositional processes. The deposit is not structurally complex; it is alluvial fill in a palaeovalley depo-centre, within a sedimentary trough. Weathering profiles within the Permian sediments have complicated the geological model. - The geological model for the lake surface sediments is shown to be highly heterogeneous, therefore using a statistical method of determining a bulk S_y has been applied. This heterogeneity does not appear to have much effect on brine grades. - The geological model for the saprolite of the weathered Permian is less certain. The Paterson Formation contains thick unconsolidated sand and gravel sequences derived from weathered sandstone and conglomerate within the Paterson Formation. The continuity and controls on these lenses are not well mapped but has been encountered in a number of the deeper exploration holes.

Section 3: Estimation of Mineral Resources		
Criteria	JORC Code explanation	Commentary
		- The geological interpretation informs the volume of the resource host. - Grade variability appears to be largely controlled by recharge runoff and windblown accumulation of surface water at the surface. As well as buffering at depth by vertical recharge around the palaeovalley from outcrop.
<i>Dimensions</i>	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	- The Mineral Resource extends approximately 50 km along the strike of the lake surface and palaeovalley. The depth of the model is constrained by the depth of investigation and the search parameters used. - The thickness of the aquifer hosting the brine Mineral Resource has been based on the groundwater elevation (measured as depth below surface) and a sediment thickness above the impermeable bedrock or depth of investigation when open at depth. - The volume of brine that can be abstracted has been based on the adopted specific yields of each lithological category. The specific yields are determined from a combination of test pumping, laboratory PSD analysis, core analysis and comparisons with publicly available data from equivalent geological settings as described in the report.
<i>Estimation and modelling techniques</i>	- The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. - The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. - The assumptions made regarding recovery of by-products. - Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). - In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. - Any assumptions behind modelling of selective mining units. - Any assumptions about correlation between variables. - Description of how the geological interpretation was used to control the resource estimates. - Discussion of basis for using or not using	- Modelling procedures and parameters are discussed in the Mineral Resource Estimate Report. Additional details are presented below were relevant. - The Resource zone is constrained by the tenement boundaries, island perimeters of the lake surface, search parameters and sampling intervals. - The block model cell sizes took into account the density of the sample spacing within the Resource. The block spacing of the z direction considered the vertical variability of the brine within lithologies, increases and decreases in grade with depth are observed across lithologies therefore higher resolution z component (10m) was selected to allow for pinching geology, to enable this trend in grade variability to be reasonably represented. - The average sample spacing at shallow depths inclusive of test pits and auger holes is approximately 2.1km. At depths greater than 6m the average sample spacing is less than 3.5km, between transects and less than 1km along transects. - Selective mining units have not been considered. - There are no assumptions about correlation between variables. - No cut-off grade has been used.

Section 3: Estimation of Mineral Resources		
Criteria	JORC Code explanation	Commentary
	<i>grade cutting or capping.</i> The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages of potassium have been estimated on a dry, weight volume basis (%w/v). For example, 10 kg SOP per cubic metre of brine.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	No grade cut-off parameters have been used.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	- The mining method is likely to be via pumping of brine from the aquifers by submersible bore pumps targeting the basal aquifers and shallow trenches targeting the surficial aquifer. - Abstracted brine will be concentrated, crystallised and purified to produce a product which will have additional recovery factors. - Though specific yield and total porosity provide a measure of the volume of brine present in an aquifer system hydraulic conductivity, transmissivity and confined storage controls are the main factor in defining mining factors and are addressed during Ore Reserve estimating. - It is not possible to extract all the drainable porosity contained brine with these methods, due to the natural physical dynamics of abstraction from an aquifer. - Ore Reserves are required to quantify the economically extractable portion of the Mineral Resources.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	- Initial test work has been completed using brine from Lake Throssell at Nagrom, Western Australia, to determine the salting path of brine to kainite type mixed salt (KTMS). - Limited downstream metallurgical test work has been completed on the brine to confirm plant design criteria. - Hatch Engineering was engaged by Trigg Mining and industry accepted criteria from similar SOP Projects was used to derive the process design used in the Scoping Study. - Comparisons with peer group brine studies suggest that a SOP product can be obtained from the average composition of the Lake Throssell brine. However further evaporation tests and simulations are ongoing. - An overall metallurgical recovery of 82% has been used from initial abstraction of brine through to final SOP product.

Section 3: Estimation of Mineral Resources		
Criteria	JORC Code explanation	Commentary
<i>Environmental factors or assumptions</i>	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	- In this early stage of the project it is not possible to quantify environmental impacts. The project is assumed to have a limited, localized environmental impact, associated with minor impacts on surface disturbance associated with excavation of trenches, water quality changes of adjacent "fresher" aquifer systems, stock piling of salt by-products and potentially groundwater dependent vegetation. - The degree of abstraction from the trench network may be limited by drawdown constraints on the islands, which will be the subject to future impact assessments.
<i>Bulk density</i>	- Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. - The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. - Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	- Tonnages of potassium have been estimated on a dry, weight volume basis (%w/v). For example, 10kg SOP per cubic metre of brine. - As the resource is a brine, bulk density is not applicable. - The resource has been calculated using specific yield (drainable porosity) determined using a combination of test pumping analysis, PSD analysis, core analysis and comparisons to publicly available data.
<i>Classification</i>	- The basis for the classification of the Mineral Resources into varying confidence categories. - Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). - Whether the result appropriately reflects the Competent Person's view of the deposit.	- At this stage of the project Indicated and Inferred Mineral Resources are defined. The methodology for defining each category is presented in the report. - The JORC (2012) Code including the Association of Mining and Exploration Companies (AMEC) Brine Guideline were used to determine the confidence category.
<i>Audits or reviews</i>	The results of any audits or reviews of Mineral Resource estimates.	none
<i>Discussion of relative accuracy/ confidence</i>	- Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. - The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which	- The Mineral Resource contains aqueous potassium, sulphate and other ions, existing as a brine in a sub-surface aquifer. The JORC code deals predominantly with solid minerals and does not deal with liquid solutions as a resource. The relative accuracy of the stated resource considers the geological and hydrogeological uncertainties of dealing with a brine. Rounding has occurred to represent the degree of accuracy implied. - The Association of Mining and Exploration Companies (AMEC) has developed guidelines to define a brine Mineral Resource and Ore Reserve. The brine

Section 3: Estimation of Mineral Resources		
Criteria	JORC Code explanation	Commentary
	<i>should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i> <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	specific guidance to interpretation of the JORC Code was published by AMEC and accepted by JORC in April 2019. These guidelines are adhered to in this Resource Estimate. - Specific yield estimates are used to determine drainable brine volume across all domains. In a brine resource this is considered to be the most relevant measure of brine abstraction under reasonable prospects for eventual economic extraction. Given the confine the nature of the basal aquifer a proportion of the resource is not determined due to overburden pressure and compressibility of the brine and aquifer material. - The basal aquifer has Indicated Resources where no test pumping has been completed. The conversion from Inferred Resources is considered reasonable due to the magnitude of the brine available within the basal aquifer and high prospectivity of abstraction determined from groundwater flow modelling using reasonable aquifer properties.