SALT LAKE POTASH LTD

OUTSTANDING BANKABLE FEASIBILITY RESULTS FOR LAKE WAY

Salt Lake Potash Limited (SO4 or Company) is pleased to report the results of its Bankable Feasibility Study (BFS) for the commercial scale development of its 245,000t per annum Sulphate of Potash (SOP) project at Lake Way (Project).

HIGHLIGHTS

The results of the BFS demonstrate that the Project will generate outstanding returns through:

Strong financial results

- Exceptional economics with estimated project post-tax NPV_8 of **A$479 million** (pre-tax NPV_8 of A$696 million) and post-tax IRR of **28%** (pre-tax IRR 38%)
- Steady state Project EBITDA of **A$111 million** annually and average annual after tax free cash flow of **A$78 million** (A$83 million during first 5 years)
- Strong cash flow and low capital costs result in early payback period of **3.5 years**

Low capital and operating costs

- First quartile operating costs for global SOP producers with a C1 cash cost estimate of **A$302/t** (US$205/t)
- Low development capital requirements of approximately **A$254 million** (US$173 million), including contingency of A$21 million, which is supported by the close proximity to infrastructure

Significant Lake Way Ore Reserve

- High-grade Probable Ore Reserve of **5.4Mt SOP** (2.4Mt contained potassium at an initial grade of 6.8kg/m^3) underpins a 20-year life of mine
- Increase in the paleochannel basal sands Mineral Resource Estimate of ~57% to **6.0Mt SOP** in Total Porosity (2.2Mt in Drainable Porosity) supports additional production bores
- Excess sulphates at Lake Way enables production of an estimated **245,000t per annum** of premium grade SOP with the addition of 42,360t per annum KCl

Premium product

- Very high grade potassium **(>53% K_2O)** product confirmed, with a low chloride (<0.1% Cl) and insoluble particle (<0.1%), content and dissolution rate of 95% in one minute
- Premium grade specifications from pilot plant testwork support premium pricing
- BFS completed using a modelled sales price of **US$550/t**

Fast-tracked production

- Existing Mining Leases on Lake Way tenements has provided an advanced permitting pathway for early development activity
- Completion of the first stage of evaporation ponds has enabled dewatering of super saturated brine **(25kg/m^3 SOP)** from the Williamson Pit to commence
- Plant commissioning forecast Q4 2020, utilising salts from Williamson Pit brine

TONY SWIERICZUK
SO4 Chief Executive Officer

“We are extremely excited to release the Lake Way Project BFS with such outstanding economic results. Significant work has been undertaken by the Company since the Lake Way Scoping Study which has further strengthened the Project fundamentals. The BFS demonstrates the ability to significantly increase the production rate and optimise development capital while maintaining our position as a low cost producer.

SO4 has completed the first stage of on-lake construction and will continue with progressive development of remaining commercial scale evaporation ponds planned from Q4 2019.”

SALT LAKE POTASH LTD

BANKABLE FEASIBILITY RESULTS FOR

LAKE WAY

ASX ANNOUNCEMENT
11th OCTOBER 2019

STUDY PERFORMANCE

Strengthening the Scoping Study results

The BFS incorporates a number of changes to the previous Scoping Study, including a revised processing methodology to include the addition of potassium chloride (KCl) which has increased the annual production rate to 245,000t and delivered improved economic outcomes. While the addition of KCl to the process plant has increased the C1 cash cost from the previous estimate in the Scoping Study, SO4 estimates it will achieve better capital intensity and maintain its position as a low cost producer at US$205/t while significantly improving project economics.

Changes in key financial metrics for the Project from the Scoping Study to the BFS are summarised in Table 1.

Table 1: Comparison of key financial metrics

Metric	Unit	Scoping Study	BFS	% change
Production	tpa	200,000	245,000	22.5%
Life of mine	years	20	20	–
First production	Qtr	Q4 2020	Q4 2020	–
C1 cash cost	A$/t	264	302	14.4%
Capital cost	A$m	237	254	7.2%
Capital intensity	A$/t	1,185	1,038	(12.6%)
NPV_8 (post-tax)	A$m	381	479	25.7%
IRR (post-tax)	%	27%	28%	3.7%
NPV_8 (pre-tax)	A$m	580	696	20.0%
IRR (pre-tax)	%	33%	38%	15.2%
EBITDA[1]	A$m	90	111	23.3%
Payback period	years	3.2	3.5	7.9%
Probable Ore Reserve	Mt K	-	2.4	–

Note 1: Refers to average annual Project cash flows during steady-state production.

SO4 has significantly advanced development of the Project since the Scoping Study, including completion of 125ha of evaporation ponds which are now filled with high grade brine (25kg/m^3 SOP) from the Williamson Pit. This has provided the Company with additional insight into the critical evaporation processes and provided opportunities to further improve design and construction of the remaining evaporation pond network.

Fast tracked production to maximise value

The optimised capital expenditure plan has considered a staged approach to pond construction that aligns with the plant ramp-up schedule and steady-state production requirements, enabling some initial capital expenditure to be deferred for a period of up to 12 months. The first stage of solar evaporation ponds (125ha), that are now complete, are shown in Figure 1.

Figure 1: Completed solar evaporation ponds

Lowest quartile operating costs

The results of the BFS demonstrate the potential for very low operating costs. It is estimated that the Project will have one of the lowest operating costs of any SOP operation globally with a C1 cash cost of A$302/t (US$205/t).

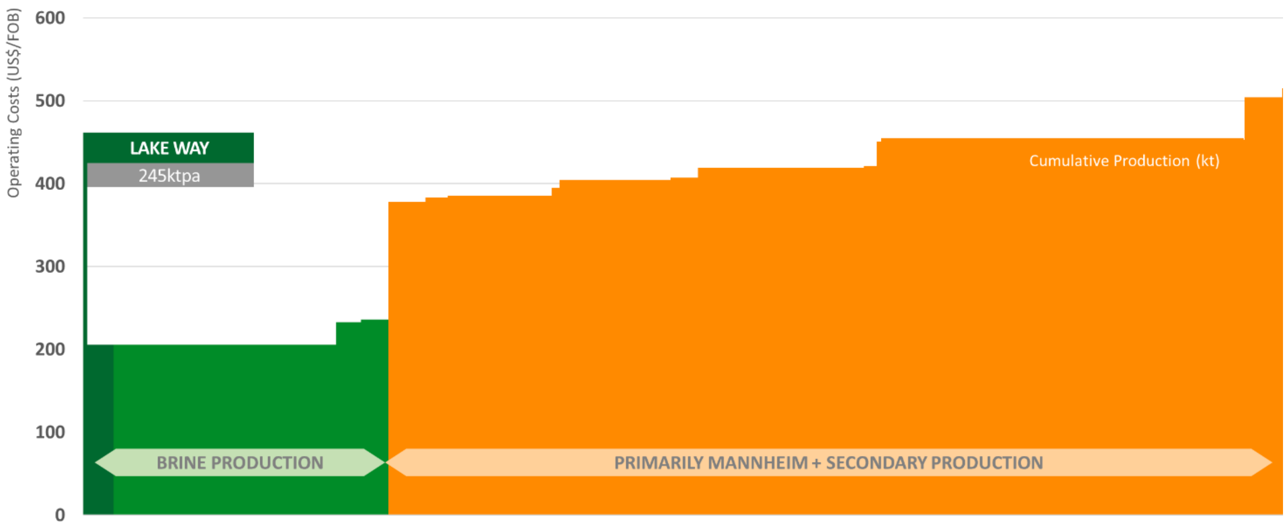

Figure 2: SOP Global Cost Curve[1]

[1] Source: SO4 Estimates and Argus Media Group

Robust economics

The BFS further demonstrates the potential for the Project to support an exceptionally high margin over a 20-year life of mine through the production of high grade, premium SOP. This combined with the low capital intensity delivers very strong returns with a post-tax IRR of 28%.

Market analysis by CRU Consulting and Argus Media Group, supported by internal SOP sales and marketing expertise, indicates a significant opportunity for SO4 to capture additional pricing upside associated with the premium potassium grade and solubility properties of the specifications produced during pilot plant testwork.

Table 2: Comparison of key financial metrics[1]

SOP price	Breakeven US$307/t	US$400/t	US$450/t	US500/t	Base US$550/t	US$600/t	US$650/t
NPV_8 (post tax)	-	187	285	382	**479**	575	672

Note 1: Equivalent adjustment to the value of potassium assumed for KCl input cost.

The BFS demonstrates that, even in the most extreme downside pricing scenarios, the Project continues to deliver robust economic returns. The breakeven pricing scenario of US$307/t is at a significant decrease to the current SOP price.

Project funding advanced

SO4 has previously announced that it reached an agreement with Taurus Funds Management (Taurus) for financing up to US$150m for the Project. The Company has commenced drawdown of the initial US$30m tranche of this facility. SO4 is working with Taurus to finalise documentation of the full facility and access the remaining portion of funding, with completion of the BFS being one of the key conditions precedent.

Next steps

With the successful completion of the BFS, SO4 will accelerate development of the full commercial scope for the Project. The Company is quickly advancing on multiple fronts with several key developments over the coming months:

- Detailed design and documentation has commenced with the appointment of: GR Engineering Services for the process plant; Coffey Tetra Tech, Tetra Tech Proteus and Cardno for on-lake infrastructure
- Continued construction on Lake Way with the commencement of the next stage of evaporation ponds and brine extraction infrastructure
- Procurement of long lead items
- Execution of key offtake agreements with preferred partners

KEY PROJECT METRICS

Table 3: Key Project Metrics

Element	Unit	Value
Physical		
Life of mine	years	20
Annual SOP production	tpa	245,000
Production plan		
Ore reserve		
Brine volume	GL	474
Brine grade (LOM average)	kg/m^3 K	5.0
Contained potassium	Mt	2.4
Production method[1]		
Trenches	km	132
Bores	No.	18
Evaporation ponds		
Halite ponds	ha	686
Harvest ponds	ha	96
Recovery of potassium from brine	%	91%
Process plant		
Operating time	hours/yr	7,600
Harvest salt to plant	Mtpa	2.27
KCl addition	tpa	42,360
Recovery of potassium from harvest salt	%	84%
Operating and capital costs		
Operating costs		
Mine gate cash operating cost	A$/t	240
Transport and handling cost	A$/t	62
C1 cash cost	A$/t	302
Capital costs		
Direct cost	A$m	157
Indirect cost	A$m	76
Contingency	A$m	21
Total capital cost	A$m	254
Financial performance		
Price (FOB)	US$/t	550
Exchange rate	A$/US$	0.68
Discount rate	%	8%
NPV_8 (post-tax)	A$m	479
IRR (post-tax)	%	28%
NPV^8 (pre-tax)	A$m	696
IRR (pre-tax)	%	38%
EBITDA[2]	A$m	111
Post tax annual cash flow[2]	A$m	78
Payback	years	3.5

Note 1: Refers to initial trench and bore development included in the capital cost estimate.
Note 2: Refers to average annual Project cash flows during steady-state production.

PROJECT OVERVIEW

Lake Way is located in the Northern Goldfields Region of Western Australia, less than 15km south of Wiluna. The Lake Project tenements comprise approximately 280km[2].

SO4 currently holds nine Mining Leases and six Exploration Licences[2] which cover the whole of the Lake Way surface and key strategic areas off-lake, including the extensive paleochannel and proposed process plant and village area. The Company has secured several Miscellaneous Licenses within the surrounding Lake Way area to support key infrastructure including process water bore fields, gas pipelines and access roads.

The recently completed transaction with Blackham Resources Ltd (Blackham), the owner of the adjacent Matilda-Wiluna Gold Operation, has secured access to process water rights in the Southern Borefield, in addition to key tenement acquisitions.

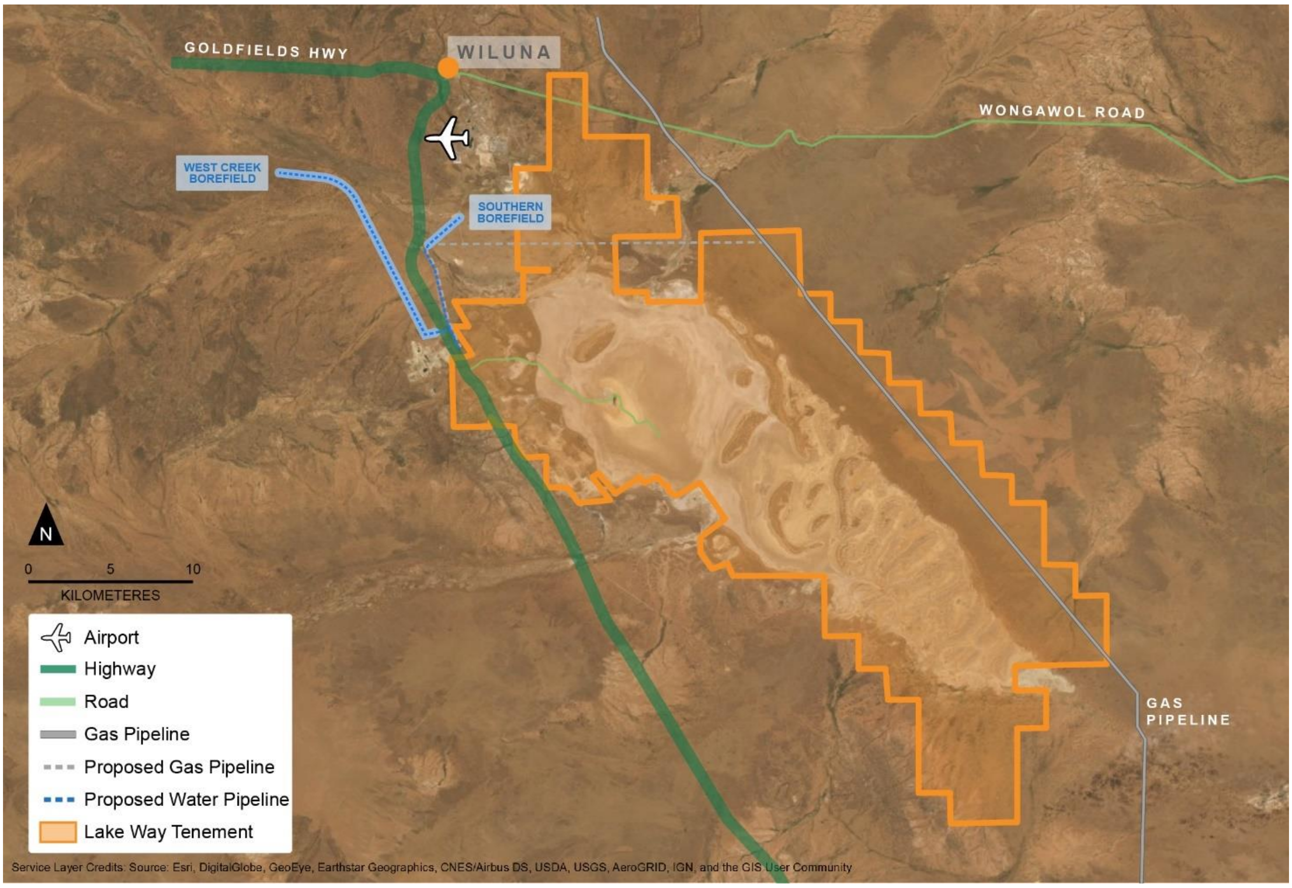

Figure 3: Key Project Infrastructure and Tenements

2 In accordance with the Blackham Transaction, refer ASX Announcements dated 23 July 2019 and 8 October 2019.

Lake Way has a number of compelling advantages which make it an ideal site for SO4's initial SOP operation, including:

- Granted Mining Leases with approvals to undertake the initial long lead construction items (Stage 1 evaporation ponds complete, Stage 2 evaporation ponds targeted to commence in Q4 2019)
- The site has excellent freight solutions being adjacent to the Goldfields Highway, which is permitted for heavy haulage that supports direct access of quad trailer road trains to Geraldton
- The Goldfields Gas Pipeline is adjacent to SO4 tenements, running past the eastern side of the Lake
- Existing site haul roads and service roads including the Williamson Pit Causeway that connects the proposed process plant area to the on-lake production ponds
- The Wiluna Airport which is located 5km south of the main township and provides foundational infrastructure to support operations
- Access to an exceptionally high grade brine of 25kg/m^3 of SOP from the Williamson Pit, which has enabled the Company to fill the Stage 1 evaporation ponds and commence on lake production
- The high grade brines at Lake Way will deliver lower capital and operating costs due to lower extraction and evaporation requirements
- The presence of clays in the upper levels of the lake which are amenable to low cost, on-lake evaporation pond construction

CONTRIBUTORS TO THE STUDY

The BFS has been developed and managed by a high-qualified internal team from SO4, with support from leading independent consultants and contractors as required. Table 4 outlines key contributors to respective areas of the BFS.

Table 4: BFS Contributors

Study area	Contributor
Industry Analysis and Marketing	SO4, Argus Media Group, CRU Consulting
Resource and Reserve Estimate	SO4, Groundwater Science, HydroGeoEnviro
Mine Planning	SO4, Ad-Infinitum
Brine Extraction	SO4, Cardno, Coffey Tetra Tech, Tetra Tech Proteus
Brine Evaporation	SO4, Ad-Infinitum, Coffey Tetra Tech, Tetra Tech Proteus, Knight Piésold
Process Plant	SO4, CPPC Ltd, Saskatchewan Research Council, Wood Group, GR Engineering Services
Non-process Infrastructure	SO4, GR Engineering Services
Product Logistics	SO4
Environment & Approvals	SO4, Bamford Consulting Ecologists, Botanica Consulting, Bennelongia Environmental Consultants, Pendragon Environmental Solutions
Land Access, Native Title, Heritage and Social Responsibility	SO4

Study area	Contributor
Project Implementation	SO4, GR Engineering Services
Operations Management	SO4
Capital and Operating Costs	SO4, GR Engineering Services, Turner & Townsend
Risk Analysis	SO4, EPM Group
Economic Analysis	SO4, CAM Financial Modelling

MINERAL RESOURCES AND ORE RESERVES

A Mineral Resource Estimate for the whole of Lake Way was first reported to the ASX 18 March 2019. The Lake Way mineral resource consists of a potassium rich brine contained in the superficial lake bed sediment (or lake playa) and underground paleochannel.

Since publication of the March 2019 Mineral Resource Estimate, additional test pumping and passive seismic geophysical surveys have enhanced understanding of the route and dimensions of the paleochannel. This has led to a significant increase in the volume of the Indicated resource within the paleochannel, as well as an upgrade of a portion of the paleochannel resource to the Measured category.

HydroGeoEnviro completed a number of column leach tests to substantiate the leaching potential of potassium from the retained porosity of the lake bed sediments. This testing supports the modelling of changes in potassium grade over the life of mine, in particular the effects of rainfall recharge and lake filling events.

The resource estimate has been converted to a Probable Ore Reserve with the development of a complex numerical hydrogeological model. The model is based on results from the extensive field programme and considers modifying factors such as recharge and evapotranspiration to develop the life of mine production plan.

Paleochannel Indicated Resource Increase

The initial paleochannel model reported in the March 2019 Mineral Resource Estimate was developed using data from a number of sources including:

- Historic Western Australian Mineral Exploration (WAMEX) reports
- 2018 sterilisation drilling program completed by Blackham
- SO4 test pits and trenches (where they intersect the base of the lake bed sediments)
- Test pumping of two historical boreholes installed by Western Mining Corporation (WMC) in 1992
- Preliminary passive seismic geophysical surveys.

Recent geological modelling has incorporated additional passive seismic lines which has significantly improved accuracy in both the horizontal and vertical domains. This has led to an increase of approximately 60% in the paleochannel volume.

The stratigraphy from boreholes that were part of the 1992 WMC Mount Keith water supply investigation drilling programme[3] provides a log of the depth to basement and a thickness of the overlaying the paleochannel basal sands, as shown in Figure 4. The stratigraphy has been used to calibrate the geophysical results for depth to basement and provides a basis for proportioning the channel volume.

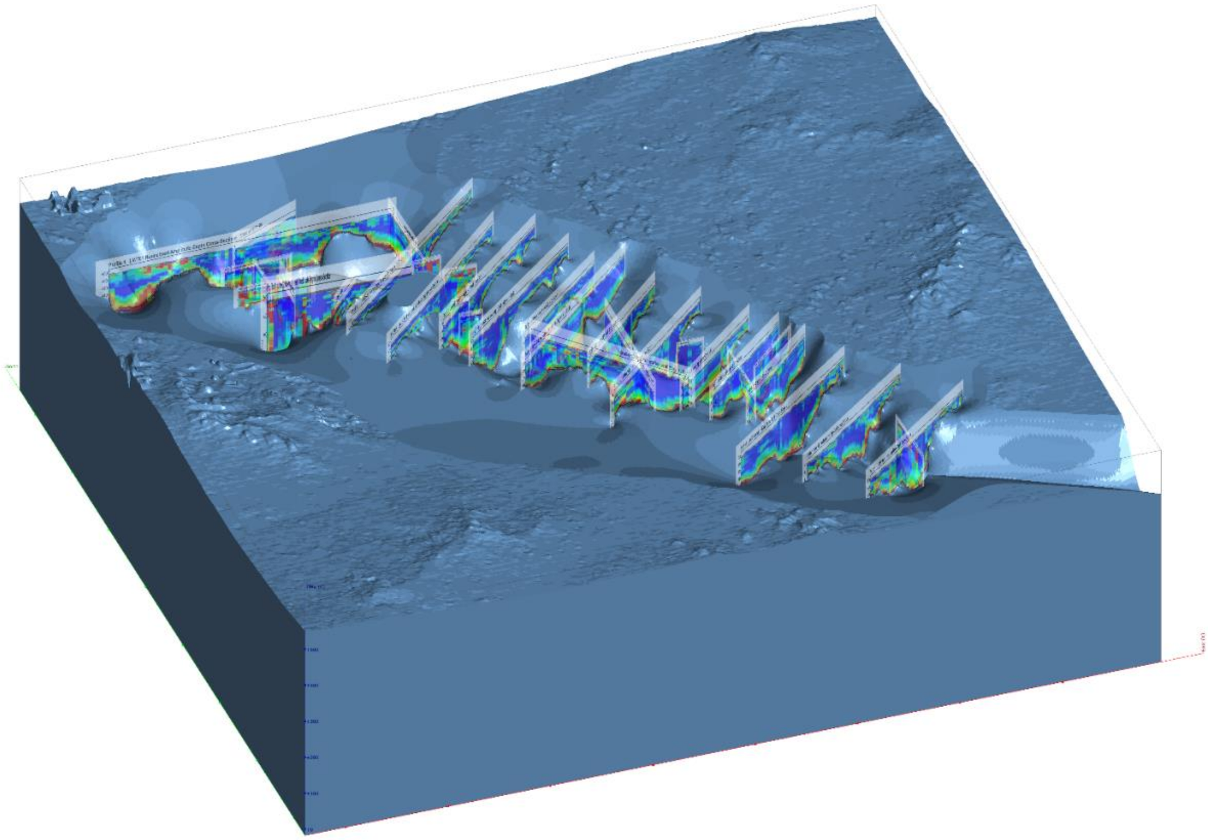

Figure 4: Calibration of depth to basement and incorporation of geophysical response

The top elevation of the paleochannel basal sands has been updated in the model to reflect data from available bores reported in the WAMEX database. This shows a consistent location of the top elevation and provides a more comprehensive picture of the paleochannel basal sand aquifer (refer Figure 5); with a clear thickening of lake bed sediments to the east and a paleochannel basal sands volume 60% greater than the March 2019 estimate.

[3] Woodward-Clyde, 1992

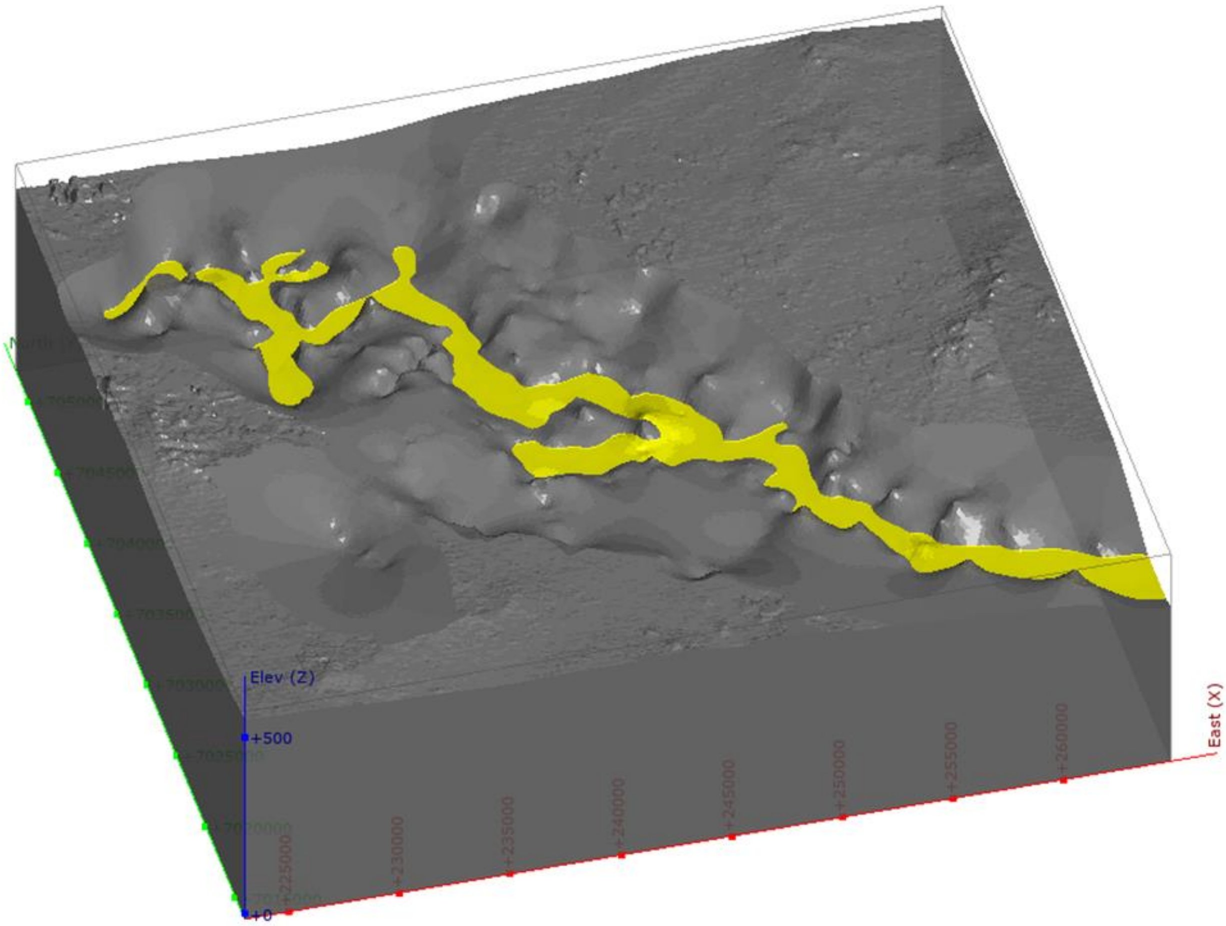

Figure 5 Geological model of depth to basement and top of the basal sand layer

Paleochannel Hydraulic Performance

The phased aquifer testing program has been completed at Lake Way using two of the 1992 WMC production bores, TB3-4 and TB 5-7. These bores were initially tested at constant pumping rates between 2L/s and 5L/s for a 24 hour duration (refer ASX announcement March 2019). TB3-4 was subsequently retested at a flow rate of 5L/s for a duration of 10 days.

The water level responses to pumping indicated no apparent connection between the shallow lake bed sediments and the paleochannel aquifer. This has confirmed that the shallow lake bed sediments and paleochannel sands at Lake Way make up two broadly distinct aquifer units, separated by the very low permeability lake bed sediments. Refer to Appendix C for recent test results.

Lake Bed Sediment Grade

Brine leaching tests were completed to improve understanding of how (and how much) mineral salt contained within the retained porosity of the lake bed will be mobilised as a result of recharge events. This is critical to inform overall extractability of the resource and modelling of potassium grade over the life of mine.

Brine Leaching Tests

HydroGenEnviro (2019) completed twelve column tests on lake bed samples retrieved from Lake Way. The samples were tested in the laboratory to understand the effect on potassium grade at increasing pore volumes of water flushing through the sediments, to approximate potassium grade during rainfall recharge. Results are presented in Appendix C.

Total potassium flushed from the samples equated to an average of 3.0kg potassium per cubic metre of sediment (range 2.3 to 3.7). Mobilisation was achieved quickly, with most potassium leached within 2 to 3 pore volumes. These values are consistent with the Mineral Resource Estimate and the parameters applied in brine grade depletion modelling incorporated into the production plan.

The testwork validates the mechanism for mobilisation of potassium held in the retained porosity by rainfall and run-off to the playa surface.

Reporting of Mineral Resources

The Company engaged Groundwater Science Pty Ltd, an independent hydrogeological consultant with substantial salt lake brine expertise, to review the updated Mineral Resource Estimate reported in this announcement in accordance with the JORC Code (2012 Edition) and the AMEC Guidelines for Resource and Reserve Estimation for Brines (AMEC Brine Guidelines) as accepted by the JORC.

Figure 6 provides an indicative cross-sectional view of the geological setting at Lake Way.

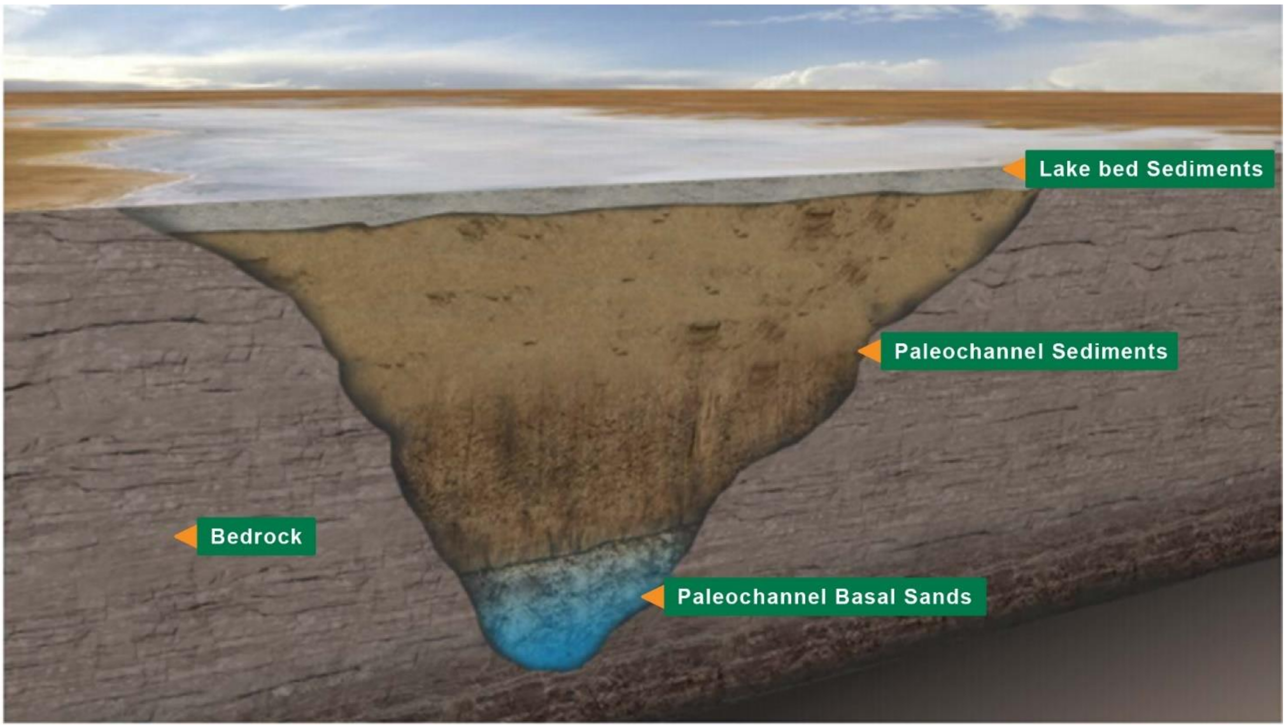

Figure 6: Geological setting

Lake Bed Sediments

The lake bed sediments remain as reported in the March 2019 Mineral Resource Estimate with the north zone of the lake being classified in the Measured category and the southern zone classified in the Inferred category.

Williamson Pit

Brine from the Williamson Pit has been pumped into the Stage 1 evaporation ponds and the resource is now considered to be largely depleted.

Paleochannel Sediments

Volume

The volume of the clays above the basal sands that infill the paleochannel has been calculated in the geological model. The volume is 15,200Mm^3 which represents an increase of 54% over the March 2019 estimate.

Porosity

The total porosity and drainable porosity remain unchanged from the March 2019 estimate, where the total porosity applied is 40%. Drainable porosity is applied as a low value of 3%, based on the fine-grained lithology of the host sediment which will retain much of the contained brine.

Brine Grade

Brine grade is inferred to be continuous from the lake playa to the base of the paleochannel sediment. The average grade is 15.2kg/m^3 SOP. The assumption is based on observed brine grade continuity at two sites where bores in the paleochannel basal sand report brine grades consistent with the grades in the overlying lake bed sediment.

Paleochannel Basal Sand

Volume

The extent and thickness of the paleochannel basal sand resource is defined by the geological model. The total volume of the unit is estimated to be 1,100Mm^3 which represents a 60% increase from the March 2019 estimate.

Porosity

The total porosity and drainable porosity remain unchanged from the March 2019 estimate, where the total porosity applied is 40% and drainable porosity applied is 15%.

Brine grade

Brine grade is derived as the average value of the samples taken during pumping tests completed in bore TB3-4 and TB5-7. The average SOP grade for both the Measured and Indicated components is 13.6kg/m^3 SOP. No spatial interpolation was completed.

Reported Mineral Resource

The total Measured Mineral Resources Estimate from the northern lake bed and the paleochannel calculated using Drainable Porosity is estimated at 2.0Mt, an increase of 15% from the March 2019 estimate, and 7.6Mt using Total Porosity, an increase of 11% from the March 2019 estimate.

The total Indicated Mineral Resource Estimate within the remaining portion of the paleochannel calculated using Drainable Porosity is estimated at 2.0Mt, an increase of 43%, and 5.3Mt using Total Porosity, a 43% increase.

The remaining lake bed and paleochannel clay resource is classified as Inferred.

The Mineral Resource estimate for Lake Way (inclusive of the Ore Reserve reported in Table 6) is detailed in Table 5.

Table 5: Lake Way Mineral Resource

Resource component	Total volume	Brine grade			Mineral Tonnage *from total porosity*			Mineral Tonnage *from drainable porosity*		
	(Mm^3)	K (kg/m^3)	Mg (kg/m^3)	SO_4 (kg/m^3)	Total porosity %	Brine volume (Mm^3)	SOP tonnage (Mt)	Drainable porosity %	Brine volume (Mm^3)	SOP tonnage (Mt)
Measured										
North lake bed sediment (0.4-8.0m)	1,060	6.8	8.0	27.6	0.43	452	6.9	0.11	117	1.8
Paleochannel basal sands	119	6.1	8.2	25.0	0.40	48	0.7	0.15	18	0.2
Indicated										
Paleochannel basal sands	981	6.1	8.2	25.0	0.40	384	5.3	0.15	147	2.0
Inferred										
South lake bed sediment (0.4-8.0m)	316	6.8	8.0	27.6	0.43	135	2.0	0.11	35	0.5
Paleochannel sediment	15,200	6.8	8.0	27.6	0.40	6,080	92.2	0.03	456	6.9
Total							**107.1**			**11.4**

Brines by their nature are not a static resource as they are subject to groundwater movement, dilution and grade depletion over time. Reporting both Total Porosity and Drainable Porosity allows the reflection of this dynamic resource environment, including the consideration of the recharge, leaching and physical diffusion impacts on the mine plan and production output.

The impact of the recharge and physical diffusion in the development and long term abstraction of a brine resource is discussed in subsequent sections.

Reporting of Ore Reserves

The Ore Reserve estimate is based on the brine volume and grade that will be produced for a defined period and a specific abstraction scheme. The grade of produced brine will change over time as leakage, mixing and rainfall-recharge occurs within the aquifer.

The Ore Reserve is based on a production plan comprising a combination of surface trenches and bores. The brine pumping rate and brine grade incorporated in the production plan is based on the results of detailed numerical modelling of the lake bed sediments and paleochannel. The model outlines the brine production profile from a combination of surface trenches and bores, capable of delivering 118,700t per annum of contained potassium to the evaporation ponds. Figure 7 shows the tenement, surface trench and bore locations relative to the respective classifications for the Lake Way Mineral Resource.

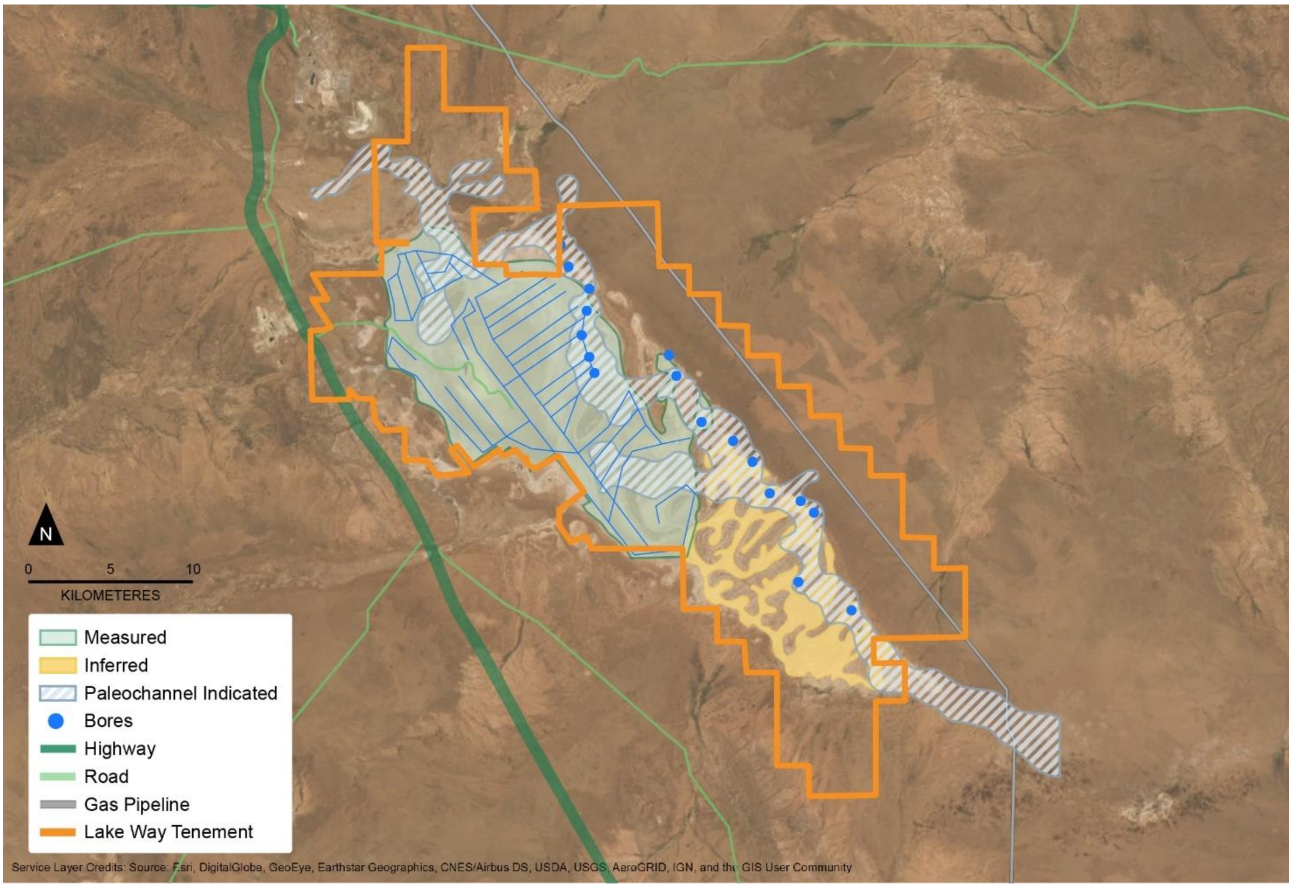

Figure 7: Brine extraction proportioned by volume over life of mine

The initial brine extraction rate after a 12-month ramp-up period is 18.2GL per annum with 71% of brine to be sourced from trenches and the remaining 29% from bores. Over time the production plan will shift to compensate a decline in brine grade within the lake playa and maintain the steady-state production requirements of 118,700t per annum of contained potassium to the evaporation ponds, with increased brine sourced from bores. During the final years of the mine plan, an expanded network of bores will be used to source 47% of the total brine from the paleochannel as shown in Figure 8.

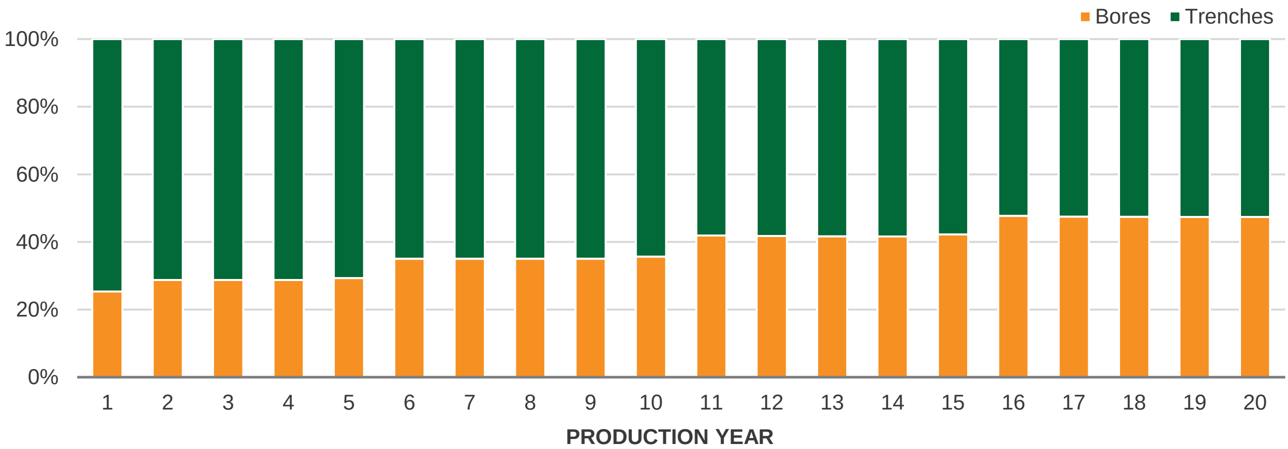

Figure 8: Brine extraction proportioned by volume over life of mine

The numerical model used to simulate the production plan employs the aquifer properties used in the Mineral Resource Estimate and incorporates other modifying factors (such as recharge and evapotranspiration) to predict brine production and brine grade over the life of mine. A steady state calibration and extensive sensitivity analysis was undertaken.

Two models were developed to simulate production of the resource:

- A regional groundwater flow model was developed to simulate the combined brine production from a trench network and a paleochannel borefield to meet the proposed production target of 118,700ktpa of contained potassium at Lake Way for 20 years.
- Cross-sectional flow and transport models were developed to estimate the decline of brine grade with time, and to test the dependence of the predictions on density and viscosity.

The models were used to define the base case production plan that will achieve annual brine abstraction of 118,700kt of contained potassium, delivered to the evaporation pond network.

To test the robustness of the model, an approach of testing assumptions to failure was employed and the predicted scenario stress-tested monthly for a total length of 20 years (representing the projected mine life). Annual production scenarios were simulated to understand the volume of brine required on a year by year basis.

The cross-sectional flow and transport models indicated that the brine grade in the lake playa begins to decline during the early years of operation. Given the grade decline modelled in the trench network, the annual production rate is achieved by increasing flow from the paleochannel (where the grade remains constant) and holding flow from the lake playa constant (where the grade declines).

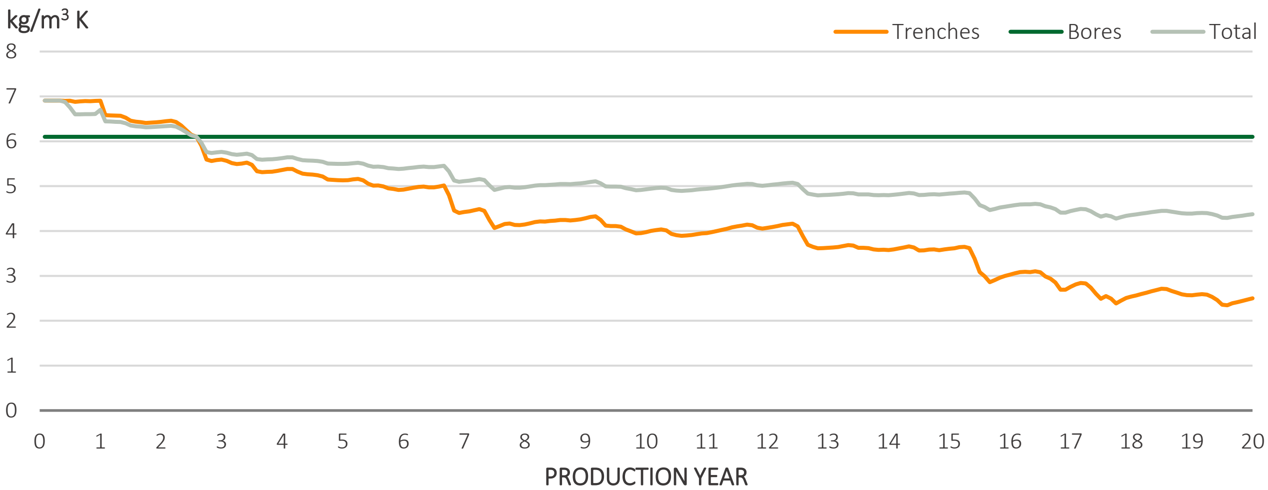

Figure 9: Brine grade profile over life of mine

To extract 2.4Mt of contained potassium over the life of mine, a total volume of 474GL will be pumped from the total porosity within the lake playa and paleochannel at an average grade of 5.0kg/m^3 contained potassium over the life of mine. Figure 10 shows the the total mass of contained potassium delivered to the evaporation pond network over the life of mine from trenches and bores.

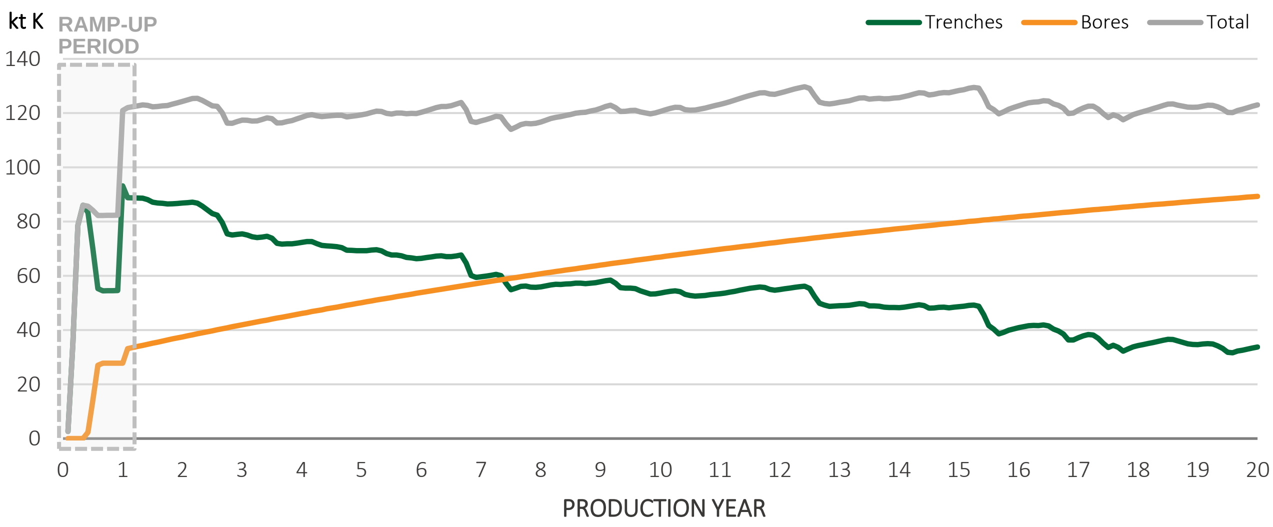

Figure 10: Potassium delivered to the ponds over life of mine

The sustaining capital plan includes allowance for additional trenches and bores required to maintain the production rate as brine grade declines.

No cut-off grade has been applied given the large potential of the paleochannel, the manageable dilution rate and the excess of sulphate with respect to potassium (enabling the addition of KCl to the production process).

The Ore Reserve estimate for Lake Way is detailed in Table 6. The brine flow rate and grade estimates are based on modelling and extrapolation of testwork which provides an Ore Reserve classed as Probable.

Table 6: Lake Way Probable Reserve

Mine duration	Brine volume	Potassium tonnage	Potassium grade[1]
(years)	(GL)	(Mt)	(kg/m^3)
20	474	2.4	5.0

Note 1: Average grade to be sourced from trenches and bores over LOM.

2.4Mt of contained potassium includes 60% produced from the Measured resource category, and 40% produced from the Indicated resource category. No brine from the Inferred resource category is included in the Ore Reserve.

The results of the test pumping and the consistent nature of the brine grade within the paleochannel mean that the Measured and Indicated Mineral Resource Estimates have been converted to a Probable Ore Reserve.

The northern zone of the lake playa has been classified as a Measured Mineral Resource Estimate for the initial 8m at surface. This resource has been converted to a Probable Ore Reserve given the effects of variable recharge, dilution and liberation of the mineral salts contained within the retained porosity across the lake bed surface.

PRODUCTION PLAN

The life of mine production target of 245,000t per annum of SOP is supported by an annual salt harvest of 2.27Mt per annum (which provides direct feed to the process plant) and KCl addition.

Brine required to produce these harvest salts will be sourced from a network of trenches constructed in the superficial lake bed sediments and bores that pump brine from the underground paleochannel. 132km of surface trenches and 18 bores will provide an initial brine abstraction rate of 18.2GL per annum to deliver 118,700t per annum of contained potassium to the evaporation pond network. Construction of additional bores and ongoing trench management provides for efficient abstraction that manages changes in brine grade and consistently delivers the required 118,700t per annum of contained potassium over the life of mine. This supports the production rate of 245,000t per annum with the addition of 42,360t per annum KCl as shown in Figure 11.

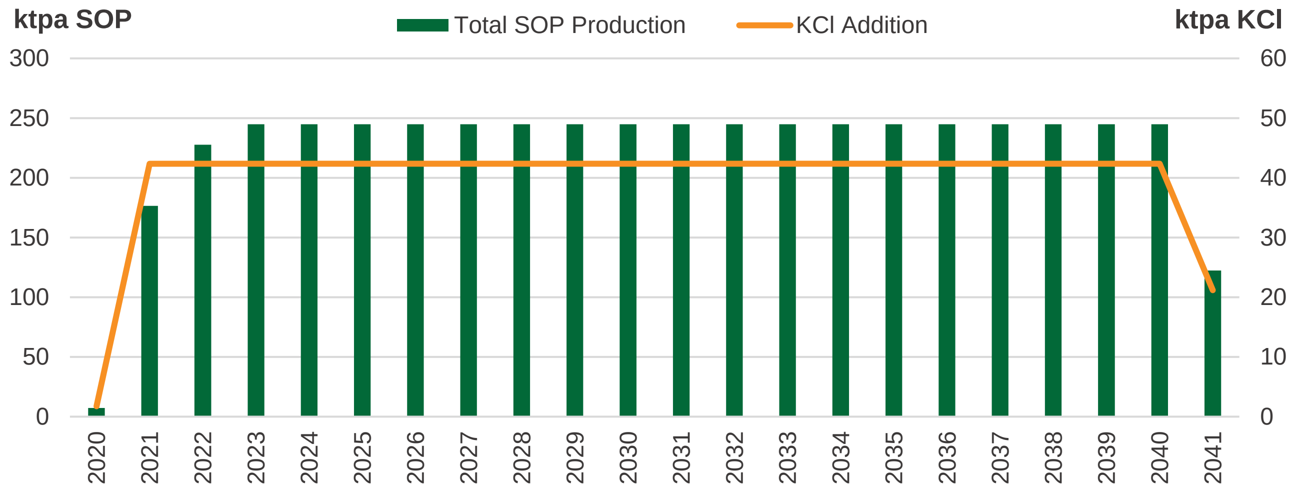

Figure 11: SOP production over life of mine

The brine transfer system (BTS) will deliver brine from trenches and bores to the evaporation ponds and facilitate efficient movement of brine. The pond network comprises a series of evaporation ponds that are designed to manage various forms of salt that precipitate as water is evaporated and brine concentration increases. The production plan utilises six ‘trains’ of primary evaporation ponds in sequence to maintain a continuous supply of harvest salt that delivers approximately 107,200t per annum of contained potassium to the plant. This provides for a recovery rate greater than 91% for the primary pond network.

In addition to the primary pond network, a recovery pond network is used to recover and recycle potassium contained in the brine stream from the process plant (i.e. potassium not captured during initial processing cycle) and supply additional harvest salts to the plant.

Brine Extraction

Brine will be extracted from Lake Way using the two methods of surface trenching and vertical bores, depicted in the conceptual site model shown in Figure 12.

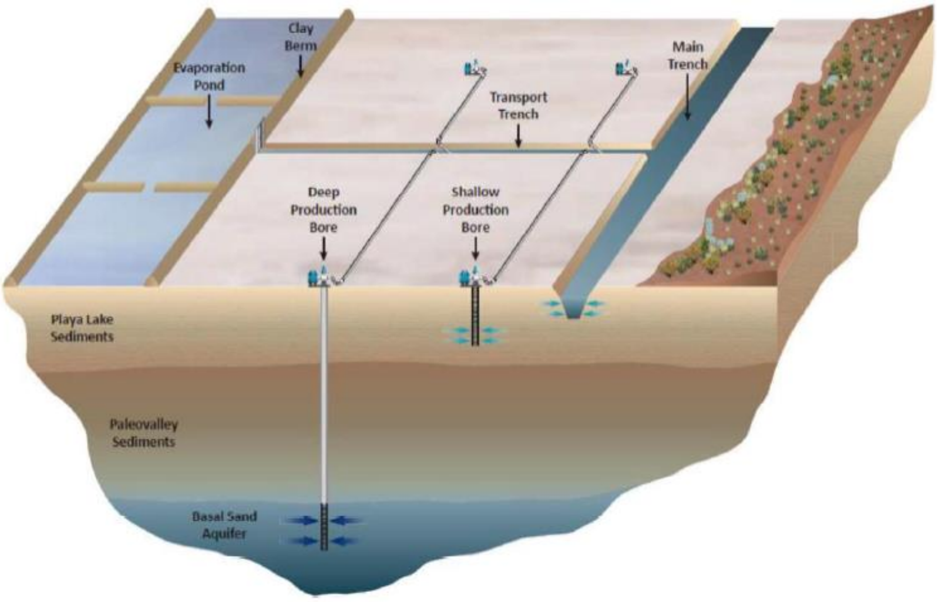

Figure 12: Conceptual model of brine extraction

Brine abstraction requirements and system design is based on numerical hydrogeological modelling (SO4), hydraulic design and civil engineering studies (Cardno Engineering), geotechnical investigations and stability analysis (Coffey Tetra Tech) and BTS design and specification (Proteus Tetra Tech).

The trench and bore layouts consider the presence of deeper lake bed sediments in the middle and east of the lake and location of the paleochannel along the eastern lake edge. Key features of the brine extraction and transfer network, shown in Figure 13, include:

- Paleochannel bores located along the northern and eastern edges of the lake
- North-south pipeline to collect borefield brine and route it into the trench network for transfer to the pond network. Some bores are piped directly into nearby trenches where possible.
- Trenches located along the eastern and middle parts of the lake, where lake bed sediments are deeper with higher yield
- Trench network flow is generally east to west with a northern collection sump east of the Williamson Pit
- Trenches in the south of the lake flow northward, to a southern collection sump near Halite Pond H1 (refer Figure 16)
- Brine collected at the northern and southern sumps is pumped into a brine channel network for conveyance to the Halite ponds
- Positioning of evaporation ponds in areas with thin lake bed sediments and shallow basement rock, where low brine yield is expected, to reduce the resource sterilised by the evaporation ponds.

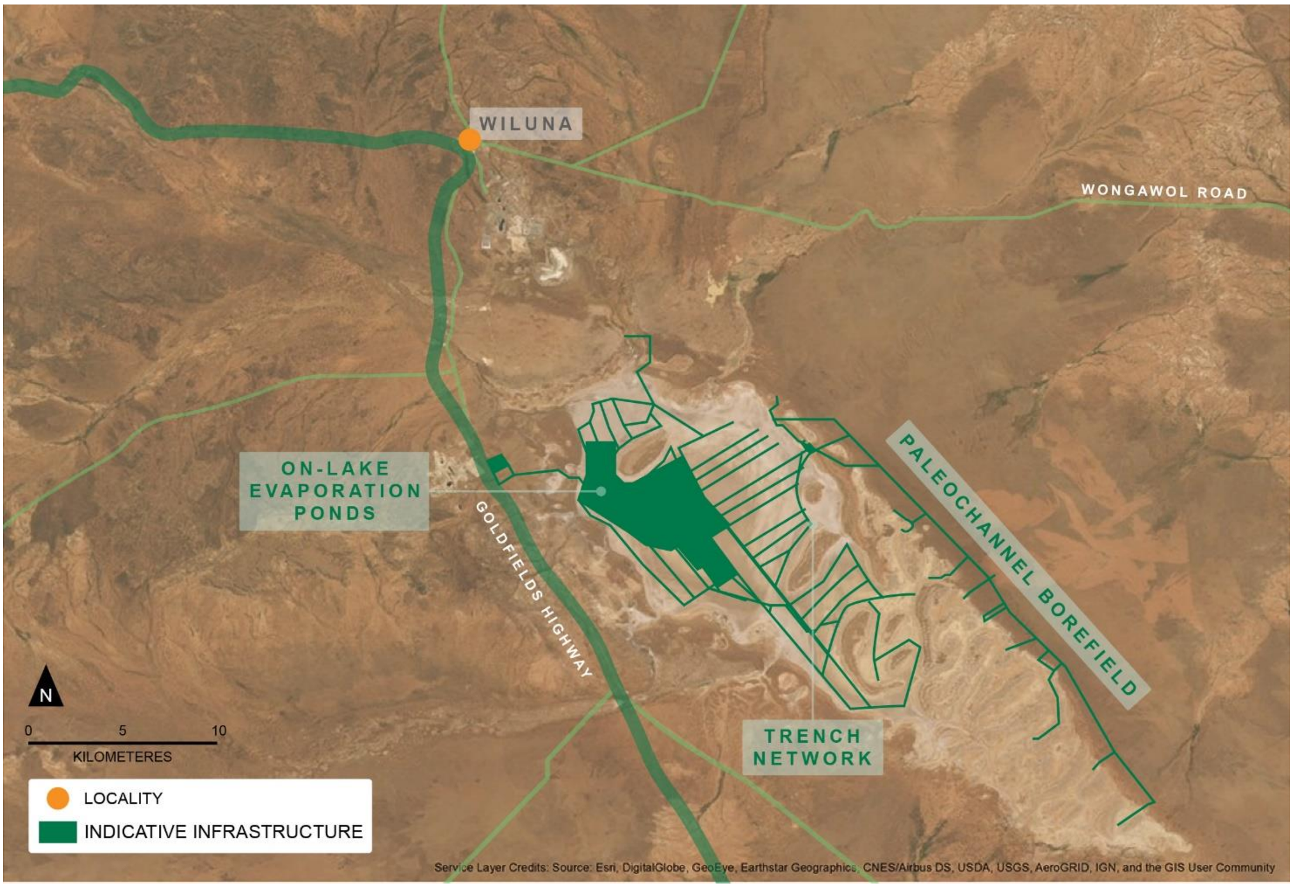

Figure 13: Brine extraction and transfer network

The production plan has been configured to ensure that harvest salt will be available to meet process plant ramp-up requirements. Construction of initial surface trenches on the north-west lake playa is anticipated to commence in Q4 2019. Initial bores and excavation of the remaining surface trenches across the middle and east lake playa will be staged throughout 2020. Future stages of trench and bore development are planned to sustain steady-state operations over the 20 year life of mine.

Brine Evaporation

Solar evaporations ponds covering 909ha will be constructed on the lake playa. These ponds will be used to concentrate the brine extracted from the Lake Way resource and precipitate potassium-containing harvest salts. The location of Lake Way is ideal for a solar evaporation process. Data from the Lake Way weather station has been correlated with historical data from nearby weather stations at Wiluna Township and Wiluna Airport to provide an average water evaporation rate for the project of 3896mm per annum (10.7mm/day) and average rainfall of 260mm per annum (net evaporation of 3,636mm per annum).

The operational area of the evaporation ponds is distributed between various pond types based on mass balance modelling that supports the 245,000t per annum SOP production rate. The sizing of each pond type is detailed in Table 7.

Table 7: On-lake Ponds

Pond	Area
Halite	686ha
Kainite	87ha
Carnallite	9ha
Bitterns	60ha
Recovery	67ha

The evaporation pond network includes allowance for buffer storage as part of the Halite ponds, which is required to manage the seasonal variations in evaporation pond brine demand. A recovery pond network is also included to recycle potassium containing salts from the process plant brine streams and maximise overall potassium recovery.

SO4 engaged Ad-Infinitum to complete evaporation modelling and pond design for the Project. Geotechnical consulting services were provided by Coffey Tetra Tech and the inter-pond BTS was designed by Tetra Tech Proteus.

Evaporation Pond Chemistry

The composition of brine entering the evaporation pond network is detailed in Table 8 and represents the initial composition of brine to be extracted from the lake playa and paleochannel. This composition is based on sample data from Lake Way which was collected during hydrogeological investigations, site evaporation trials and process test work. Buffer storage capacity will be used for pre-conditioning to ensure that consistent brine composition is delivered to the primary pond network over the life of mine.

Table 8: Brine inflow to primary pond network

Composition	Unit	Value
K	mg/L	6,578
Na	mg/L	77,431
Mg	mg/L	7,940
Ca	mg/L	494
SO_4	mg/L	27,336
Cl	mg/L	130,896

Evaporation Pond Configuration

The evaporation ponds are configured to provide capability and flexibility that will support a staged construction plan, ramp-up to meet initial plant demand and long-term production outcomes. The evaporation-concentration route for the project is represented by the pond flow schematic detailed in Figure 14.

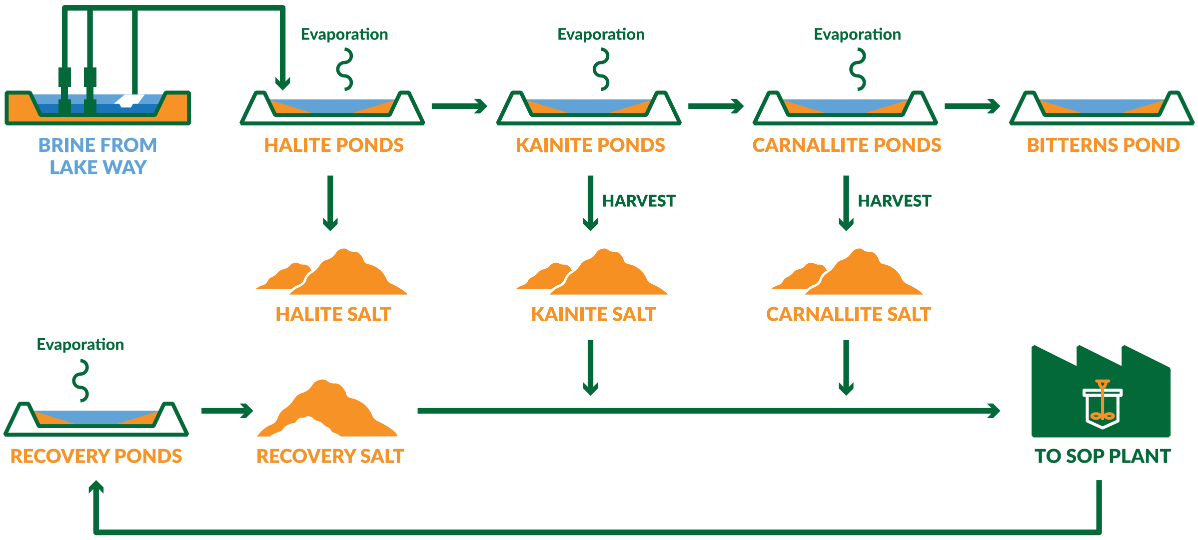

Figure 14: Pond Flow Block Diagram

The adopted pond configuration provides operational control across six zones (or trains) to simplify the operating strategy. Six trains of multi-cell Halite and Kainite ponds will feed two downstream Carnallite ponds. Flow of brine from the Carnallite ponds will then be captured by a single bitterns pond. The pond configuration is detailed in Figure 15.

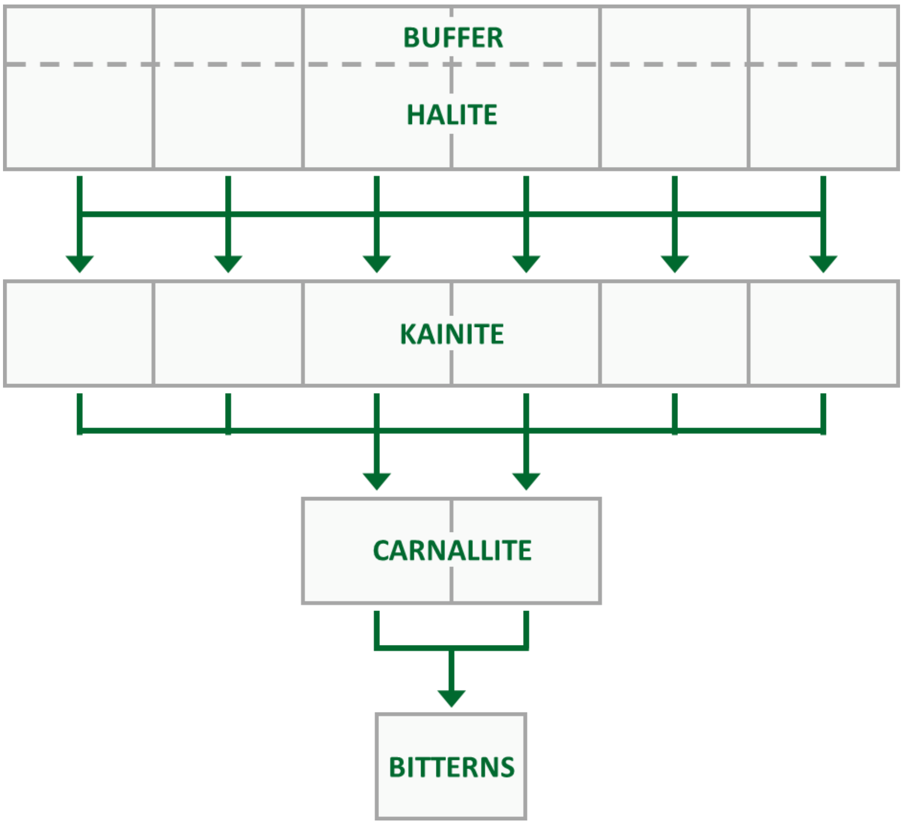

Figure 15: Evaporation Pond Configuration

Evaporation Pond Layout

All ponds are located on-lake providing significant benefits for both cost and operational efficiency. The specific site conditions were reviewed to determine the most suitable evaporation pond location and layout. The basis of the layout is to:

- Locate ponds in areas of low brine yield, to minimise the sterilisation of the available brine resource
- Target areas where the lake bed sediment layer is thin and basement is shallow, to minimise cut-off wall depths required, and reduce seepage of unlined ponds by keying into low permeability weathered basement materials
- Locate harvest ponds to the west of the lake, to minimise harvest salt haulage distances to the plant
- Align ponds with the prevailing wind direction to maximise evaporation
- Enable harvest pond access directly from the Williamson Pit causeway
- Where possible, locate pond networks adjacent to each other for efficient operation and a shared walled construction methodology to optimise capital requirements

The on-lake evaporation pond layout provides the required evaporation surface area and optimises transfer pumping and salt haulage distances. Co-location of the ponds has been used to minimise seepage and enable efficient control of brine flow and chemistry. The location and layout of the evaporation ponds is shown in Figure 16.

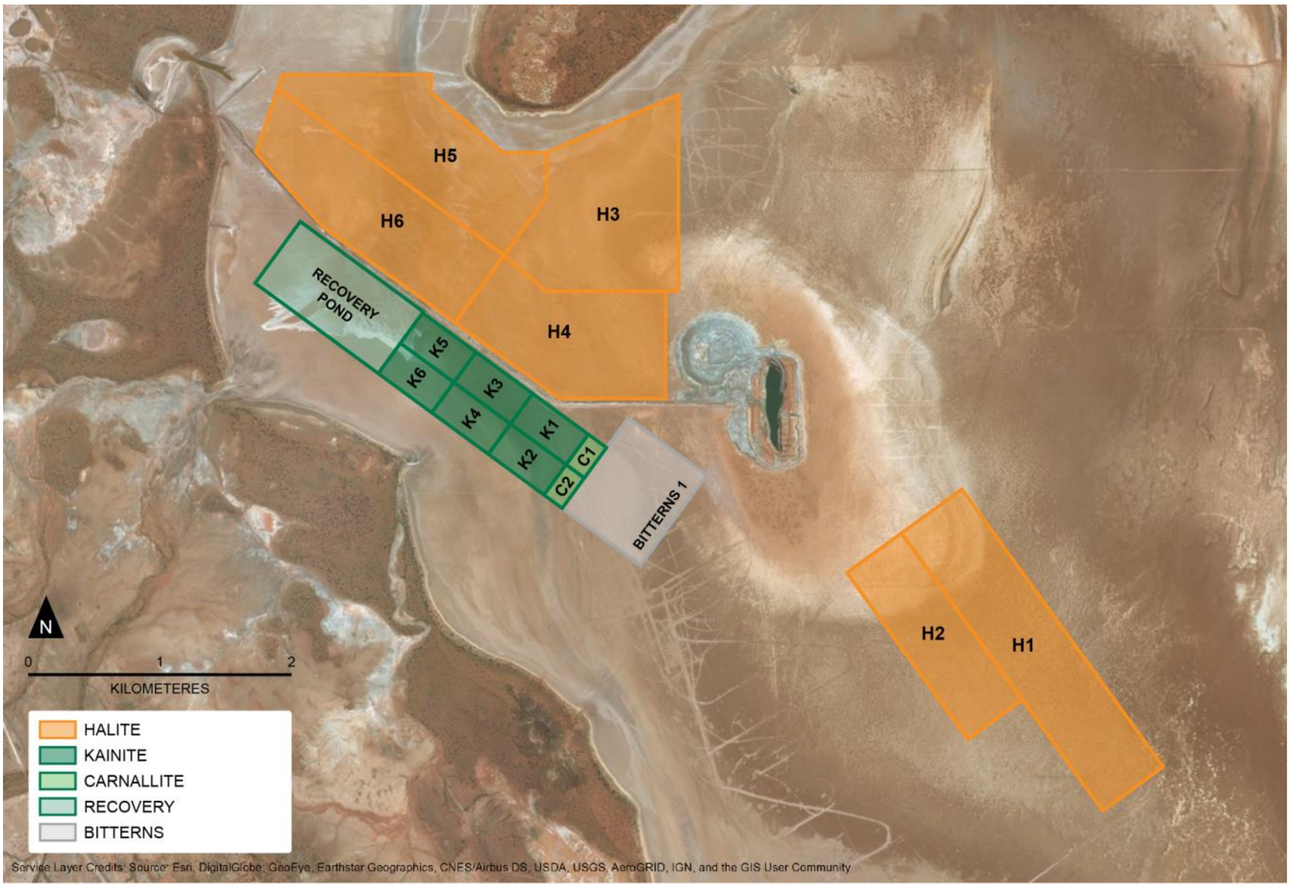

Figure 16: Evaporation Pond Location and Layout

Evaporation Pond Design and Construction

Pond requirements have been specified by Ad-Infinitum and embankment design provided by Coffey Geotechnics, with input from internal SO4 expertise.

Site trials have validated the use of sheet piles as an optimised alternative solution to traditional earthworks for perimeter embankments. This method of wall construction is available for on-lake ponds and will significantly reduce construction time, improve seepage control and lower costs. The sheet piles will be driven through the lake bed sediments into the underlying lower permeability residual or weathered basement layer to provide a seepage cut-off.

A review of geotechnical information, seepage estimates, pond layout, design criteria, lessons learned during the recent construction works, and operational requirements has been completed and the following evaporation pond design adopted:

- Evaporation pond walls will be constructed from either sheet piles or mine waste from the Williamson Pit.
- Halite H1 has been constructed from mine waste and will remain as currently constructed with a berm height of 1.5m.
- Halite H2 will be located adjacent to and adjoining the existing H1 pond, and similarly be constructed of mine waste with HDPE lining on the upstream embankment face. A cut-off key of recompacted clay materials will be utilised.
- The remaining Halite ponds and Kainite/Carnallite harvest ponds will be constructed from sheet piles with a perimeter cut-off wall to at least base of sediment layer to control seepage.
- Internal pond walls will consist of mine waste berms and be trafficable where required to provide access to pump stations.

Ponds will be constructed in a staged approach that provides adequate capacity to meet the production plan and is optimised to defer capital expenditure where possible. The four construction stages for the evaporation ponds are show in Figure 17.

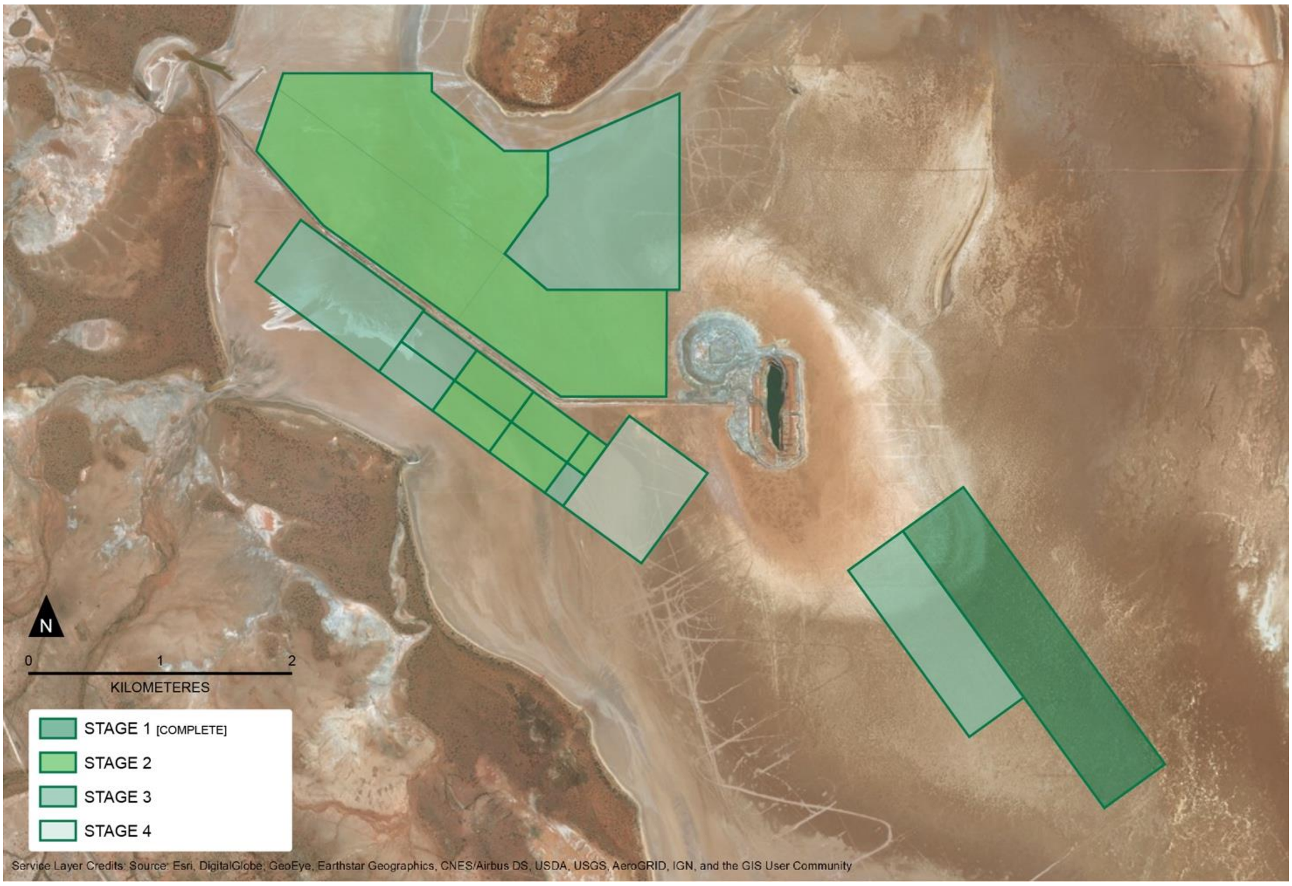

Figure 17: Evaporation Pond Construction Stages

Salt Harvest

The primary pond network is designed to support 12 months of steady-state salt growth before harvest. To enable a continuous harvest strategy, pond construction is staged to meet process plant ramp-up requirements and salt production is sequenced across the six trains of ponds where each train has sufficient capacity to deliver two months of primary feed to the plant.

The recovery pond network will be managed using the same operating approach to that adopted for the primary pond network. Production ponds will be continuously harvested over a 12-month period. The salt harvest methodology adopted by SO4 is consistent with that deployed in similar operations around the world. Temporary pumps are required to transfer excess brine from pond cells to be harvested and dewater the entrained brine from salt contained within those cells. A grader and excavator will be used to load harvest salts into double combination 'side tip' road trains for direct feed to the process plant.

Figure 18 shows the life of mine feed to the process plant from harvesting of primary Kainite and Carnallite ponds and the recovery ponds.

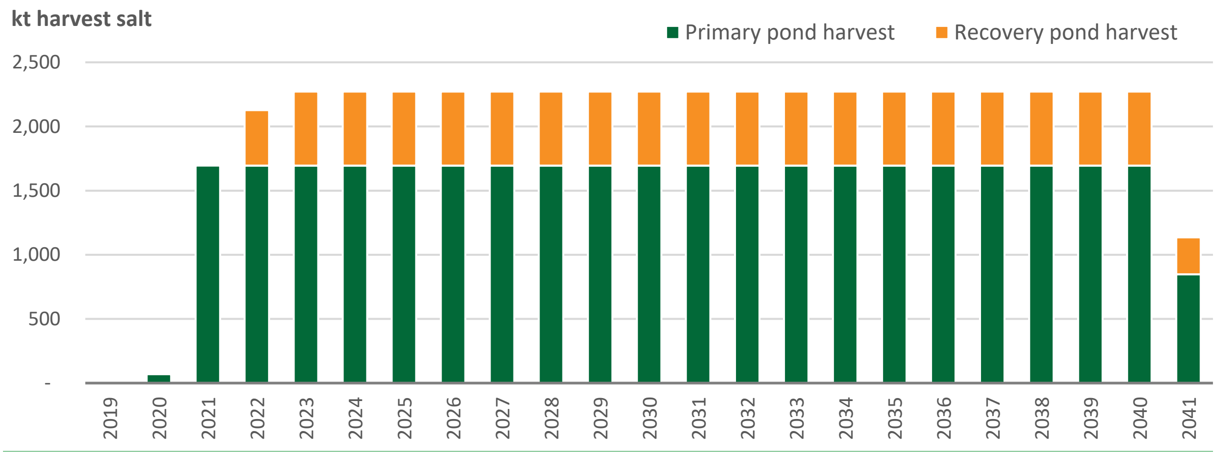

Figure 18: Process plant life of mine requirement

Some halite salt will be harvested annually and used to construct and maintain on-site infrastructure including pond walls and access roads. Similar to salt harvesting within the production ponds, temporary pumps will be used to 'de-brine' ponds. Graders, excavators and side-tipping trailer trucks will be used to reclaim, transport and stockpile an upper layer of halite salt.

PROCESS PLANT

The process plant design has been developed based on considerable test work and subject matter expertise from leaders in the potash production industry.

The key design parameters for the process plant are shown in Table 9.

Table 9: Process plant design basis

Parameter	Value
Flowsheet configuration	Feed preparation, reverse flotation, conversion and SOP crystallisation
Harvest salt feed	2.27Mtpa
KCl addition	42,360tpa
SOP production	245,000tpa
Process plant operating time	7,600h/yr
Process plant potassium recovery	84%
Product composition	
SOP grade	>98%
%K_2O equivalent	>53%
Target Cl content	<0.1%
Target Mg content	<0.2%

Potassium-containing harvest salts will be treated in a processing plant and converted to SOP product using the production process outlined in Figure 19. Steady-state plant feed of 2.27Mtpa of harvest salt with the addition of 42,360t per annum KCl will support annual production of 245,000t of SOP.

Process water requirements to the crystalliser area is 1.5GL per annum with a total requirement of 1.7GL per annum to the process plant and associated equipment.

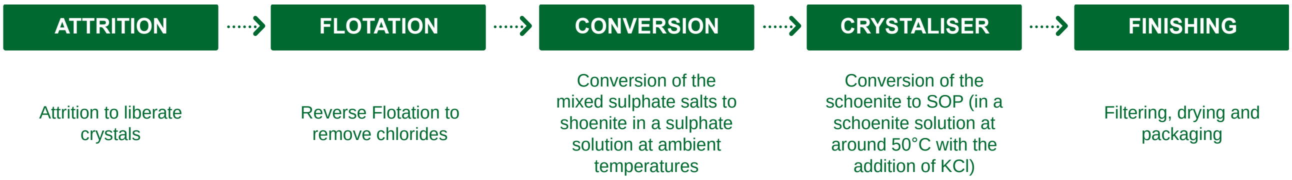

Figure 19: Plant production process

Process Flowsheet Testwork

Saskatchewan Research Council (SRC) was engaged to conduct an extensive metallurgical test program and further define the process flowsheet for the Project. More than five tonnes of harvest salts from trial evaporation ponds at Lake Way were sent to SRC to complete the test work. The testwork included harvest salt characterisation, feed preparation, flotation, kainite conversion and SOP crystallisation. Process flowsheet enhancements were considered during this bench scale testing phase, namely KCl addition. The testing phase culminated in a number of bench scale closed loop locked cycle tests, and finally a continuous pilot operation.

Process Flowsheet

The harvest salts from Lake Way include an excess of sulphate (SO_4) with respect to potassium. The BFS has considered the opportunity for addition of KCl as a reagent to the crystallisation circuit, to take advantage of excess sulphate that can be converted to SOP and increase overall production for the Project. To realise the flexibility of the project, the plant will be designed with two operating modes, either with or without KCl addition.

A simplified representation of the proposed flowsheet for the Project is shown in Figure 20.

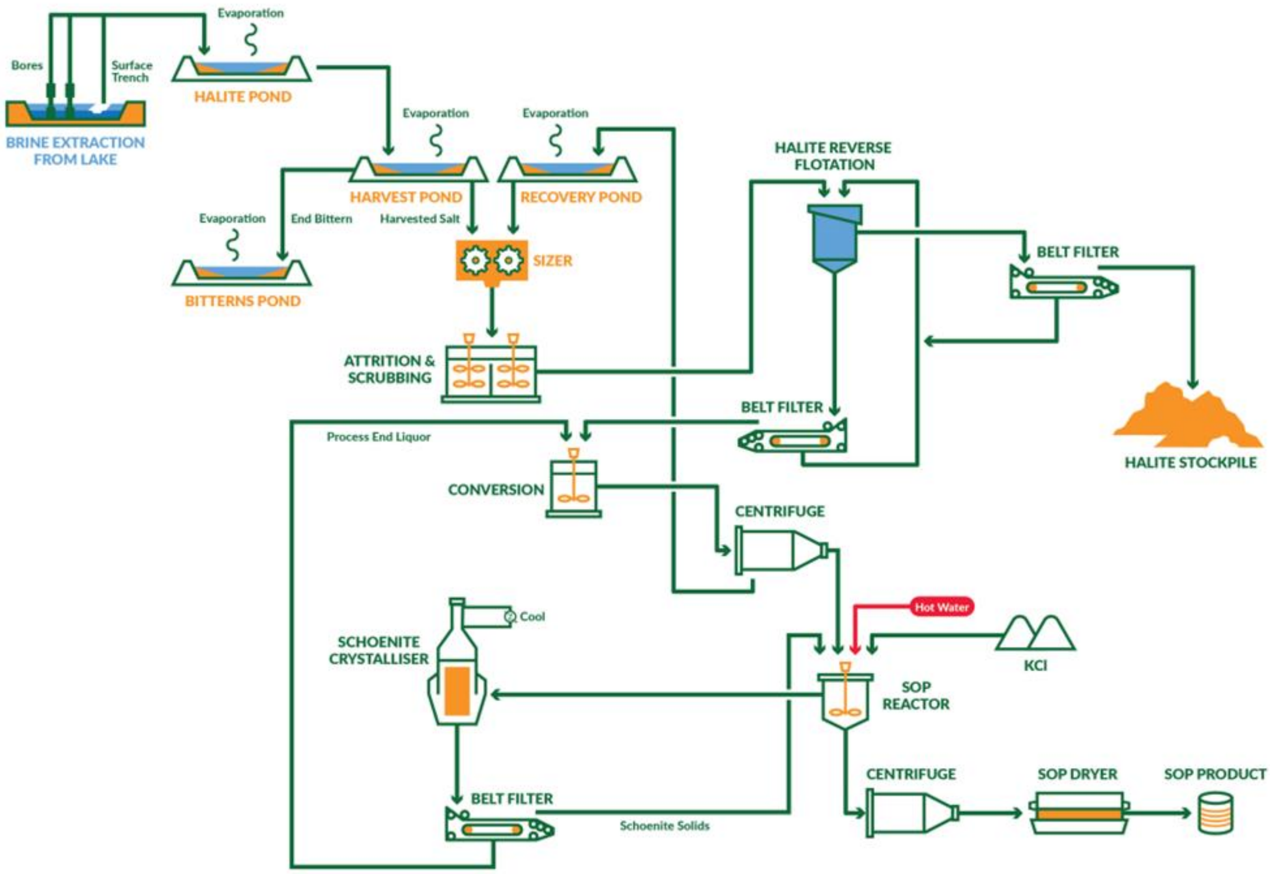

Figure 20: Project flowsheet

Harvest salts from the evaporation pond network will be delivered to the plant feed preparation area.

The harvest salts will be fed to attrition/scrubbing banks to liberate salts before reverse froth flotation at ambient temperature. Flotation tails consisting of mostly halite are de-brined, via a belt filter, and the resulting halite solids are deposited on the halite waste stockpile for subsequent disposal back onto the lake. The resulting brines from the flotation concentrate and tails are recycled back to the flotation brine tank.

Potassium bearing salts from the flotation step are fed to the conversion tanks where they are contacted with high sulphate conversion brine and turned into schoenite. The schoenite concentrate, from conversion, is sent to the sodium chloride (NaCl) leach tank to dissolve any residual halite, if necessary, with the addition of water. The schoenite slurry is then de-brined via a centrifuge with the schoenite cake being fed into the SOP crystalliser system. The spent conversion brine centrate is pumped to the on-playa solar recovery pond to recover the dissolved potassium, which will be recycled back to the plant as feed salt.

The SOP crystalliser system involves many recycle streams. This stage of the process plant essentially combines schoenite and water, at the appropriate process conditions, to convert the schoenite feed salt and KCl (if added) to high quality SOP.

The SOP crystalliser system has three major components consisting of a SOP crystalliser, SOP leach tank and a schoenite cooling crystalliser. Schoenite salt from the conversion process and recycled secondary schoenite from the schoenite cooling crystalliser are reacted with hot water and recycled SOP centrate from the SOP centrifuge. A slurry from the SOP crystalliser reports to the

SOP leach tank where additional hot water is added to complete the reaction and dissolve remaining impurities. The SOP leach tank also thickens the slurry before being sent to the SOP centrifuge.

The sulphate rich brine from the SOP crystalliser overflow is cooled in a schoenite cooling crystalliser to produce secondary schoenite which is recycled to feed the SOP crystalliser. The remaining cooled crystalliser mother liquor is recycled back to the process for conversion of kainite salts to schoenite.

A slurry from the SOP leach tank, consisting of high-grade SOP in sulphate rich brine, will be dewatered and dried in direct gas-fired rotary dryer. SOP from the rotary dryer is sent to be stockpiled in an enclosed shed, before being loaded into bulk trucks for transport to market.

The plant layout maximises gravity feed opportunities and minimises pumping and material transfer requirements throughout the process flow. Allowance for site topography, cultural and climatic conditions, and proximity to the on-lake evaporation ponds were high priority constraints considered during the design process.

MAJOR INFRASTRUCTURE

The Project location offers a strategic advantage when considering proximity to key infrastructure including a major state highway, existing site access roads, gas pipeline, airport and raw water borefields with access to granted groundwater licences.

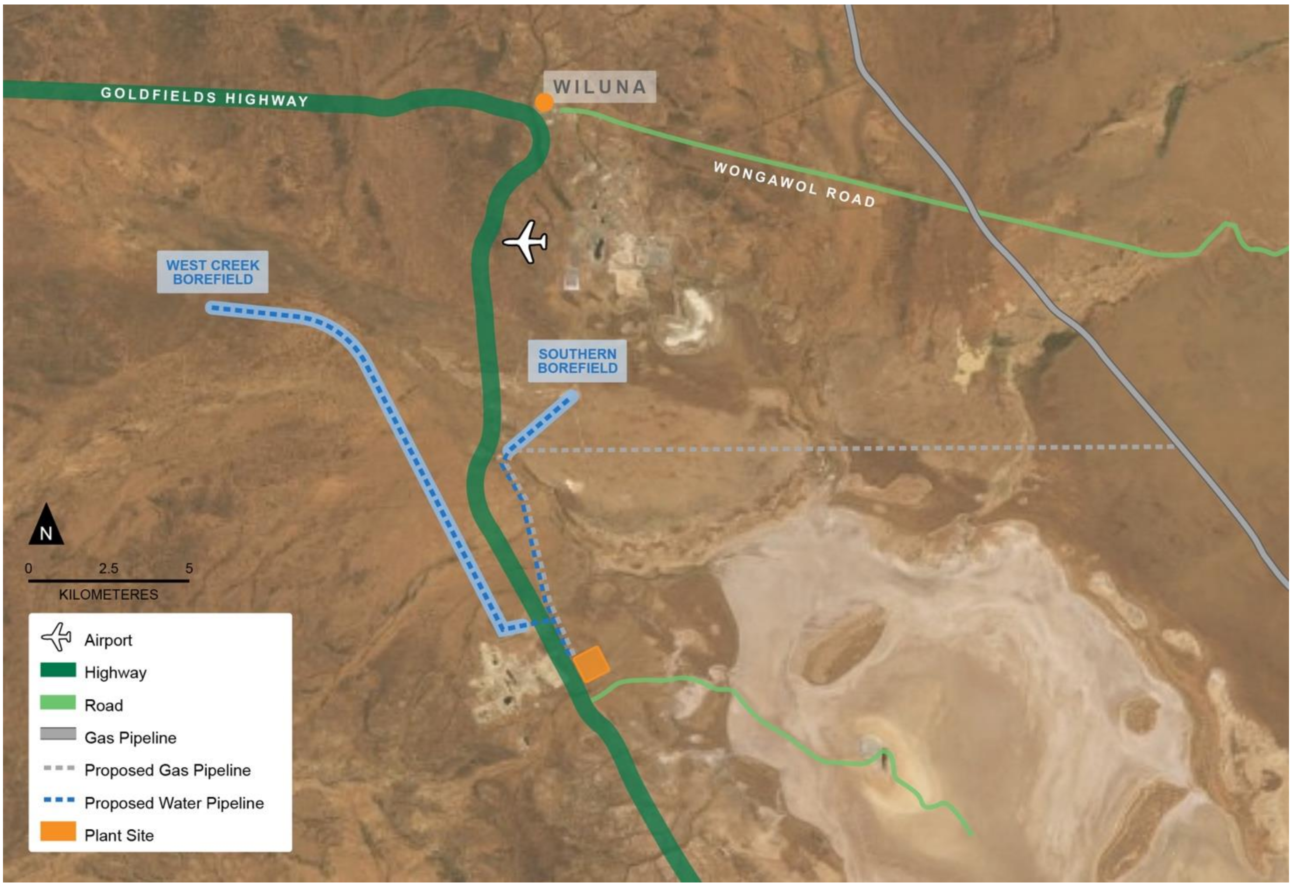

Figure 21: Project infrastructure map

The support infrastructure for the Project encompasses fit for purpose facilities that optimise capital expenditure, maximise operational efficiency and provide for future expansion.

Figure 22 shows the site layout which co-locates the mine operations, administration and associated facilities with the process plant, workshops and warehousing. This area is located out of flood zones, and facilities orientated based on the predominant wind patterns.

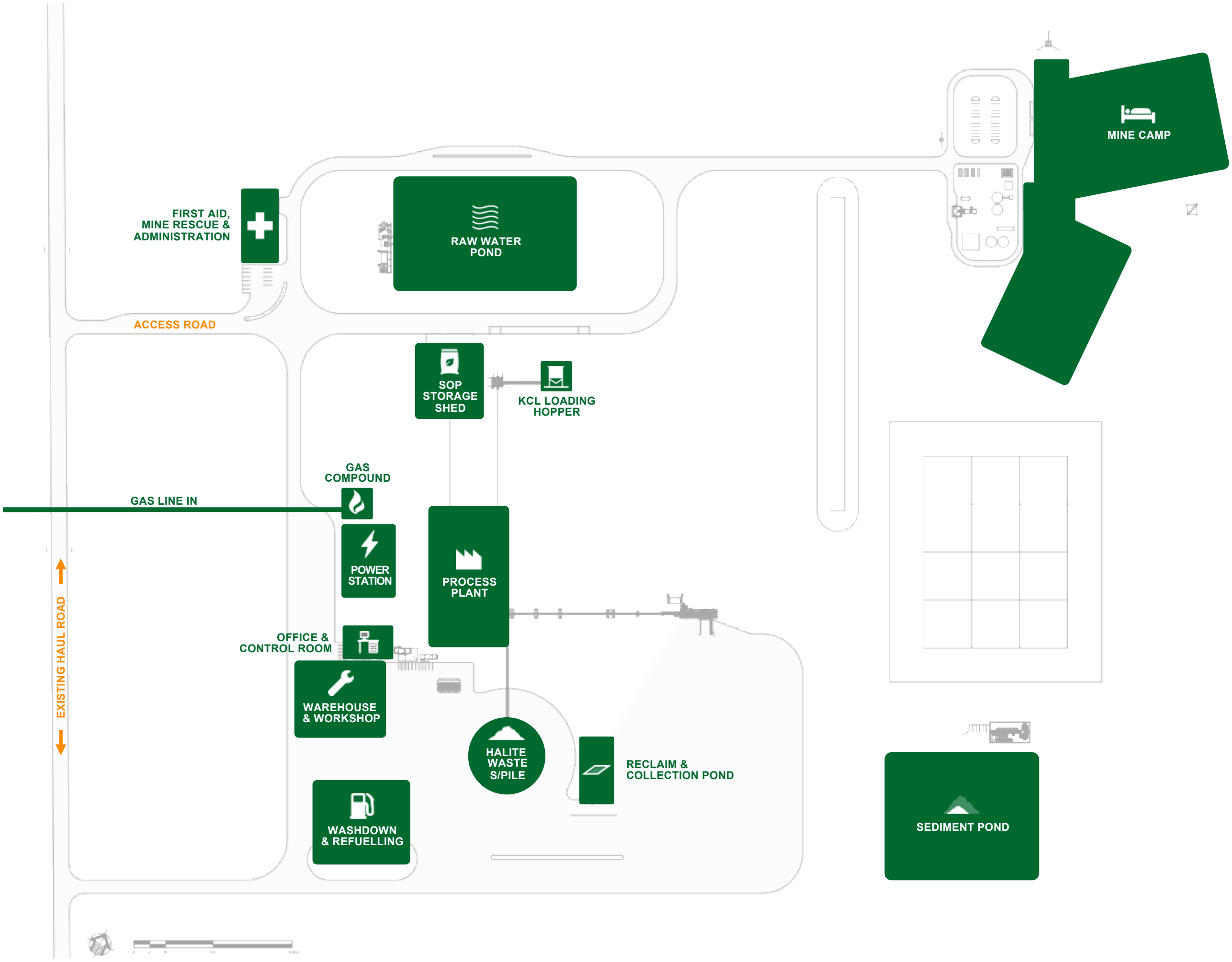

Figure 22: Process plant and village layout

Road access

The Project is located along the Goldfields Highway which extends approximately 800km from south of Kambalda in the Goldfields to Meekatharra in the Mid-West. The Lake Way site will be accessed by an existing junction on the Goldfields Highway which requires minor modification to accommodate the ‘super’ quad road trains that will be used for product logistics.

Unsealed access roads are required to connect the facilities for operational, maintenance and personnel movements around the Lake Way site. These roads will provide access to the gas lateral, Goldfields Gas Pipeline, raw water borefields, paleochannel bores and production ponds.

Power

The power requirements for the Project will be provided by a dedicated 12MW hybrid (solar-gas) power station under a supply agreement with a build, own, operate (BOO) contract. The BOO contract results in SO4 not incurring capital costs in relation to the Power Station, as these costs are translated into an on-going operating cost.

The power station will be located adjacent to the process plant and consist of modular natural gas fired reciprocating generator sets. Waste heat will be recovered from the generator exhaust and reused for the purpose of water heating, which will contribute to a reduction in overall gas demand.

Natural gas will be delivered to site via a connection to the Goldfields Gas Pipeline which runs along the eastern side of the Lake Way site. The natural gas lateral connection and access will be provided under BOO contract.

SO4 is committed to establishing renewable energy sources where possible and proposes to incorporate a hybrid power station that will include 2MW of solar generation capacity to supplement generation capacity and absorb future peak loading requirements.

Water

Raw water for the Project will be sourced from two borefields. A 5C abstraction licence has been granted by the Department of Water and Environmental Regulation (DWER) for the West Creek borefield and a 5C abstraction licence is in the process of being transferred from Blackham to SO4 for the Southern borefield. The total raw water supply for the project is 1.83GL per annum. 1.13GL per annum of the required water supply will be extracted from the existing Southern Borefield which consists of five existing operating bores, and the additional raw water requirement of 0.7GL per annum will be met by the West Creek Borefield.

Accommodation

The workforce will require a permanent accommodation village with a capacity for 100 personnel. The accommodation village will be temporarily expanded during the construction phase to include an additional 200 personnel.

PRODUCT LOGISTICS

SOP product will be transported from Lake Way, approximately 780km, to Geraldton for bulk export to international markets. The road direct logistics solution will utilise dedicated super quad road trains and deliver SOP to an offsite storage facility in the Narngulu industrial area, approximately 14km from Geraldton Port. The route from the Lake Way site to Narngulu is shown in Figure 23.

Figure 23: Route map from Lake Way to Narngulu industrial area

During shiploading, product will be loaded into double road trains, trucked to Geraldton Port and discharged at the drive-over truck unloading circuit that connects to the Berth 4 shiploader. The super quad road trains will be used to backload KCl, imported through Berth 6 at Geraldton Port, from the offsite storage facility to Lake Way.

PRODUCT MARKETING

Potassium is one of three primary nutrients required by all plants to varying degrees in order to grow. Among other benefits, potassium is critical to the transport of water in the plant, and as such becomes significantly more important in arid conditions. Potassium is of particular importance when growing crops under intensive conditions, to maximise yield.

KCl is the most widely used form of potassium in agriculture today. However, bringing significant levels of chloride to the soil can have drastic negative impact to the long-term capability to support plant growth, particularly where water is in short supply. SOP is the second most widely used potassium source. The benefits of SOP versus KCl include being chloride free or very low chloride containing and having sulphur incorporated in the molecule.

SO4 has reviewed existing market reports and commissioned leading market analysts CRU International Group and Argus Media, experts in the fertiliser industry, to provide specific analysis in order to build a reliable SOP industry outlook.

SOP demand and growth of consumption is driven by several factors. These include growth in crop area that requires SOP rather than KCl, increases in land area that suffers from water scarcity (as low water input means increased risk from salinity and therefore lowered yields) and increased export of cash crops (ie crops grown specifically for sale and not for own consumption) requiring higher quality produce and stronger resistance to transport stress.

Supported by the extensive test work and samples produced to date from Lake Way harvested salts, SO4's strategic intention is to provide a high quality, premium grade SOP to the market. Initially the Project will produce two products being (i) a high potassium content standard powder SOP and (ii) fertigation grade SOP. SO4 will explore the potential to increase the product offering to include a granular grade.

The specifications produced from the Lake Way pilot plant testwork are summarised in Table 10.

Table 10: Lake Way pilot plant specifications

Parameter	Unit	Specification
Potassium	% K_2O	>53%
Sulphate	% SO_4	>55%
Chloride	% Cl	<0.1%
Insolubles	%	<0.1%
Total solubility	g/100g H_2O	11.8
Dissolution rate	% in 1 minute	95%

Historical analysis of the SOP market price and demand shows that consumers are willing to pay more for reliably higher quality. The Project will produce high quality SOP. Therefore, it is logical that the SO4 marketing strategy focus on maximising this quality advantage. Figure 24 highlights the key elements of the approach to market.

Figure 24: Key elements of the SO4 Marketing Strategy

SO4 has engaged CRU International Group to provide a market report specifically on the Project. Based on the premium grade specifications that have been produced from results of the Lake Way pilot plant testwork, premium pricing upwards of 20%[4] should be achievable for the product. Supported by the CRU report, SO4 has utilised a life of mine SOP price of US$550/t (FOB) for the BFS.

MINING TENURE

Details of the mining tenements included in the Project to date are provided in Table 11. This includes tenements acquired as part of the Blackham Transaction announced 23 July 2019.

Table 11: Mining tenements for the Project

Tenement	Holder	Area (ha)	Granted date	Expiry date
M53/796	Kimba Resources Pty Ltd	955.45	21/11/2001	20/11/2022
M53/797	Kimba Resources Pty Ltd	950.85	21/11/2001	20/11/2022
M53/798	Kimba Resources Pty Ltd	569.45	21/11/2001	20/11/2022
M53/121	Kimba Resources Pty Ltd	658.50	03/03/1989	02/03/2031
M53/123	Kimba Resources Pty Ltd	931.55	03/03/1989	02/03/2031
M53/253	Kimba Resources Pty Ltd	970.40	14/10/1992	13/10/2034
M53/910	Kimba Resources Pty Ltd	211.55	23/05/2002	22/05/2023
M53/147	Kimba Resources Pty Ltd	650.10	05/10/1989	04/10/2031
M53/1102	Piper Preston	9,395.00	Pending	-

The layout of SO4 Mining Leases and Exploration Licences is shown in Figure 25.

[4] CRU SOP Market Study May 2019

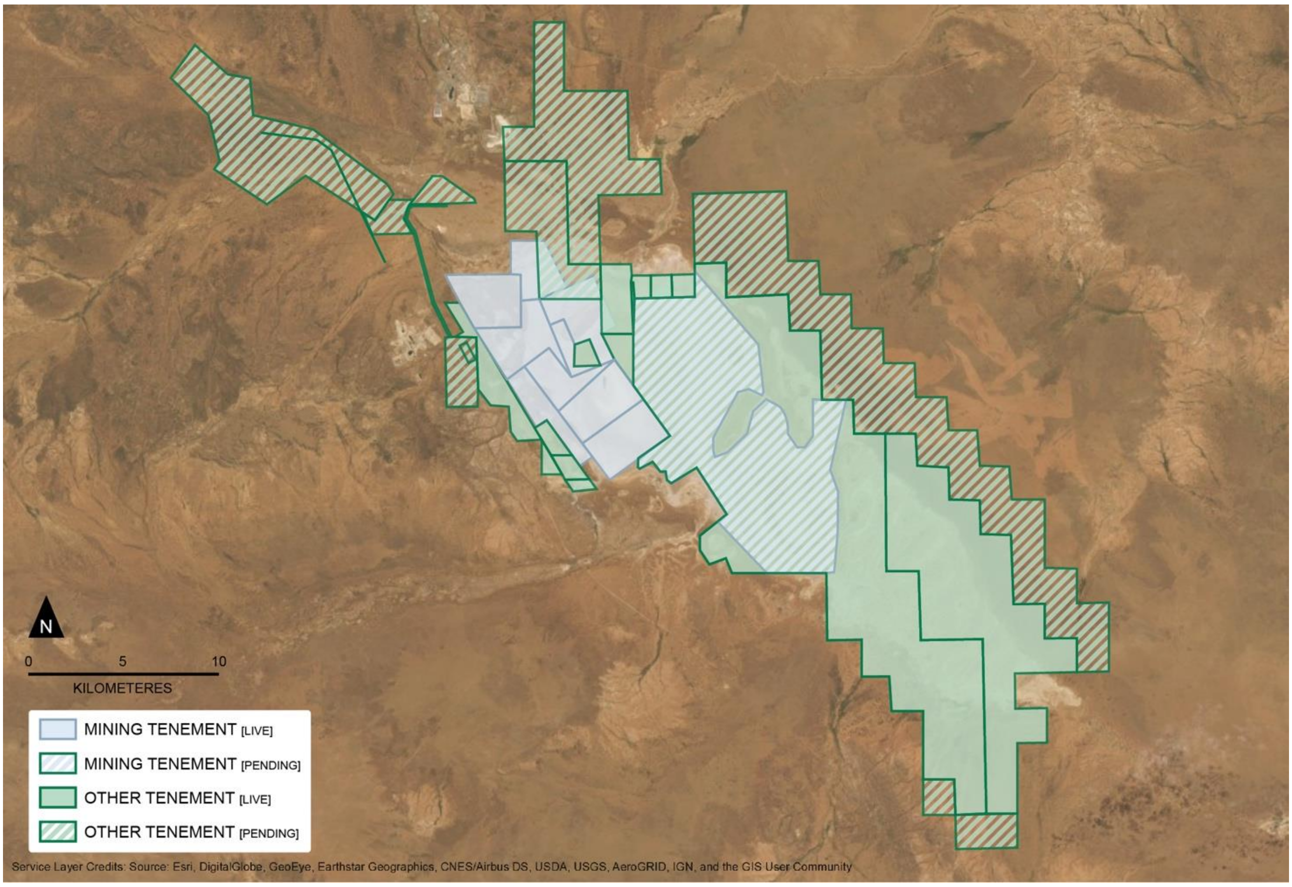

Figure 25: Project tenements

APPROVALS

Lake Way is located in an area with a long history of minerals exploration and associated environmental assessment. SO4 has taken advantage of existing environmental knowledge to support the permitting of its early works programme and focus additional investigations required for permitting of full-scale operations.

Environmental work to date has not identified any social or environmental factors that could constitute fatal flaws or insurmountable obstacles to gaining necessary statutory approvals. The approvals for the Project are currently being progressed.

The referral for Stage 2 Project development works submitted to the Environmental Protection Agency (EPA) in March 2019 was determined not to require formal assessment under Part IV of the Environmental Protection Act 1986[5].

The Company has since received approval from the Department of Mines, Industry Regulation and Safety (DMIRS) for the Mining Proposal for on lake ponds and trench construction at Lake Way associated with Stage 2. The approval from DMIRS includes a disturbance area to construct ponds and trenches totalling up to 757ha as shown in Figure 26.

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[5] EPA non-assessment decision was received June 2019 and relates to the Lake Way SOP Demonstration Plant submission

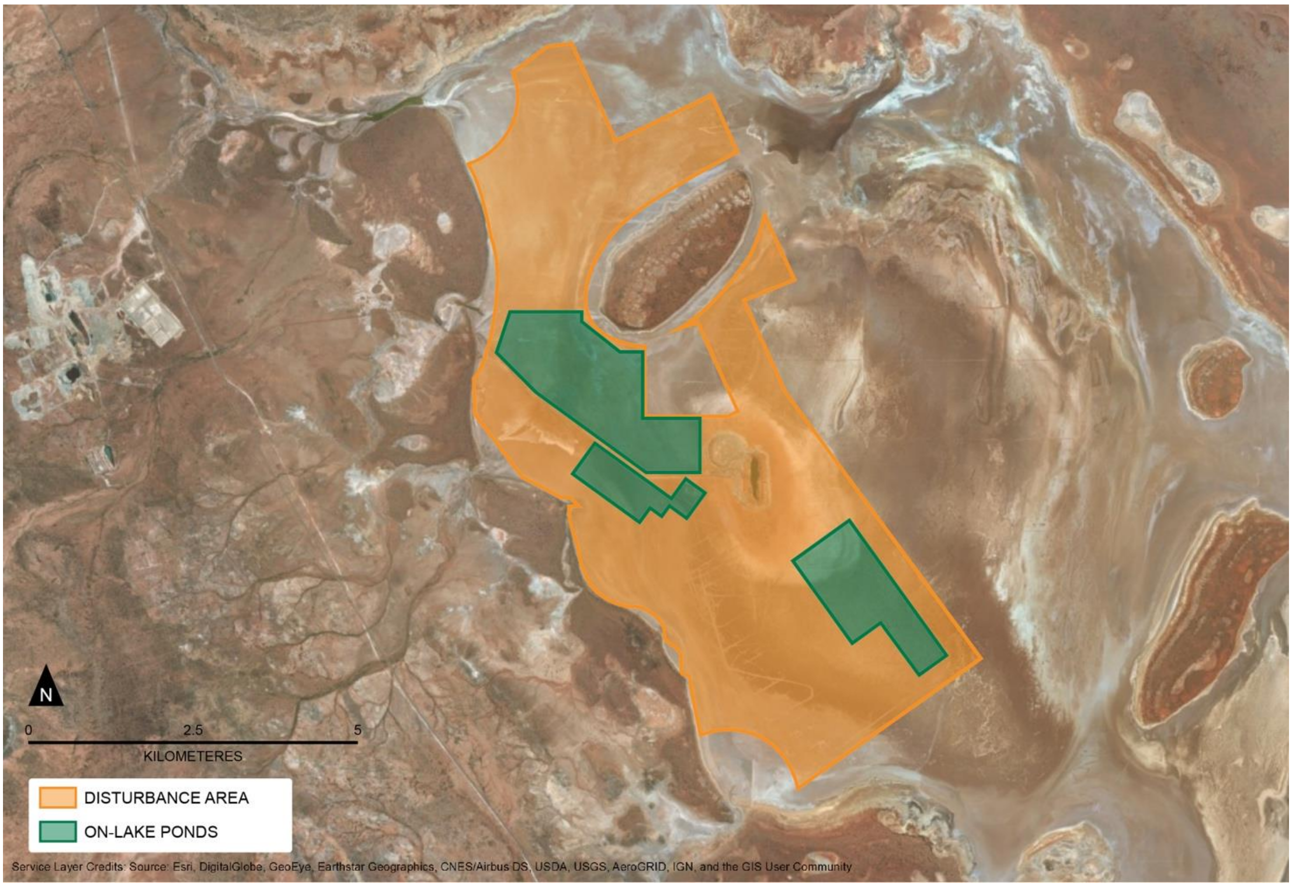

Figure 26: Approved disturbance area for Project development works

The Company has obtained Ministerial consent to use the land under section 18 of the Aboriginal Heritage Act 1972. Further heritage approvals will be required and obtained in accordance with legislative requirements.

The Company has submitted the Works Approval to DWER. Obtaining this approval will enable SO4 to commence construction of the next stage of the Project, including significant areas of evaporation ponds and trenches.

Further approvals will be required for the full commercial scope of the Project with allowance for these approvals included in the Project schedule. The referral for the full scope was submitted to the EPA for assessment in September 2019.

NATIVE TITLE AND HERITAGE

SO4 has been working collaboratively with Tarlka Matuwa Piarku Aboriginal Corporation (TMPAC), the registered native title body corporate determined to hold native title rights and interests on trust for the native title holders over the area within which the Project is located. The Project is located on, and in the vicinity of Lake Way, which is an Aboriginal site and area of particular significance and sensitivity to the native title holders.

SO4 and TMPAC have entered into a native title exploration agreement and are finalising a comprehensive land access agreement that provides certainty for the Project, cultural heritage management protocols and lasting social and economic benefits to the native title holders.

A collaboratively working arrangement has been established with the Shire of Wiluna. This has enabled SO4 to establish a community contribution and presence that aligns with Company values, supporting the Shire of Wiluna's Strategic Community Plan vision and other community organisations that are essential to long-term sustainability of the region.

ECONOMICS

Operating Costs

The operating costs for the Project have been calculated on a bottom up approach utilising specific contractor terms, industry averages and operating experience where appropriate and based on the optimised mine plan for the 245,000t per annum base case.

Table 12: Operating Costs for the Project

Operating cost item	Total	
	(A$/t)	(US$/t)
Labour	44.9	30.5
Power	37.7	25.7
Maintenance	23.2	15.8
Reagents	74.2	50.5
Consumables	29.3	19.9
Miscellaneous	8.2	5.6
General and administration	22.2	15.1
Mine gate cash operating cost	**239.8**	**163.0**
Transport and handling cost	62.5	42.5
C1 cash cost	**302.2**	**205.5**
Royalties	32.6	22.2
Marketing	20.2	13.8
Total cash operating cost	**355.1**	**241.4**

The C1 cash cost of US$205/t positions the Project as one of the lowest cost producers of SOP globally as shown in Figure 27.

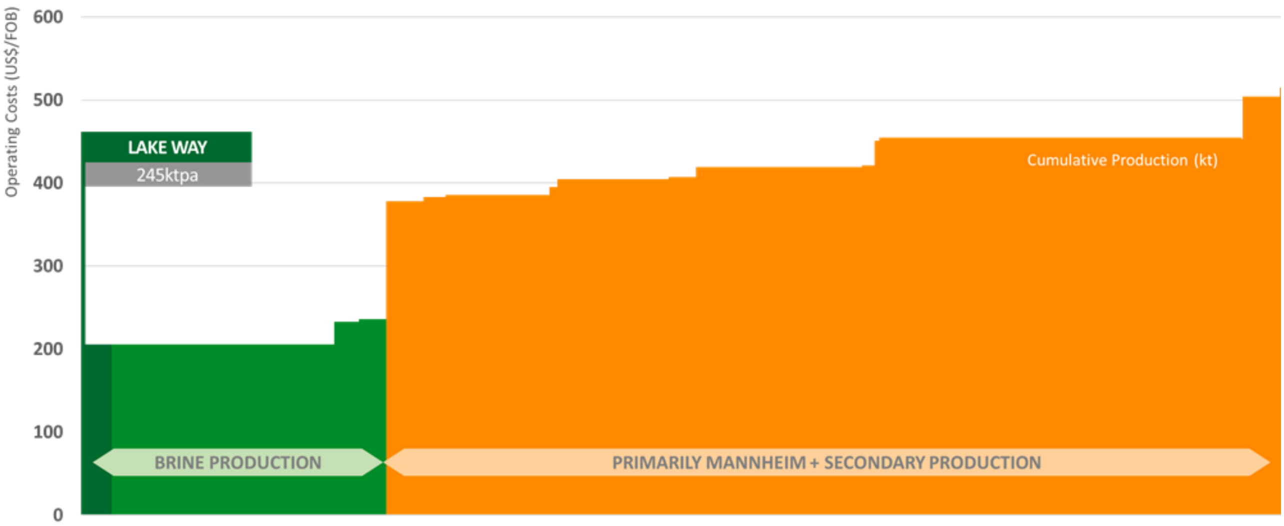

Figure 27: Global Cost Curve

Capital Costs

The total development capital cost for the Project is estimated at A$254m which includes a contingency of A$21m. The capital intensity based on the 245ktpa production rate is a low $1,038/t.

The capital spend profile has been developed in line with the project schedule to achieve plant commissioning by Q4 2020. The capital spent will be over a period of 15 months starting in October 2019 with a majority of the initial capital spend to be incurred in relation to the evaporation pond and brine extraction construction.

Table 13: Development Capital for the Project

Capital cost item	Total
	(A$/t)
Brine Extraction	30.6
Brine Evaporation	28.1
Process Plant	76.9
Plant Infrastructure	12.4
Area Infrastructure	8.6
Regional Infrastructure	0.2
Total direct cost	**156.8**
Miscellaneous	11.5
Indirect cost	64.5
Contingency	21.4
Total capital cost	**254.2**

The sustaining capital estimate is A$4m per annum (A$16/t) resulting in a life of mine sustaining capital expenditure of A$82m.

Financial Modelling

The Project has been evaluated based on a discounted cashflow analysis with key inputs from the BFS including the 20 year mine plan, capital and operating costs and key financial assumptions. Key financial assumptions that were used in the financial evaluation of the Project are shown in Table 14.

Table 14: Key Financial Assumptions

Financial assumption	Unit	Value
SOP price	US$/t	550
Foreign exchange rate	US$/A$	0.68
Discount Rate (post-tax real)	%	8%
Taxes	%	30%
Government royalty	%	2.5%
Private royalty	%	1.5%

The financial macro-economic assumptions outlined above are supported by key market intelligent agencies. The Pricing assumptions are reflective of the premium grade SOP product to be produced from the Project.

The financial evaluation of the base case BFS outcomes for the Project are shown in Table 15.

Table 15: Key Financial Metrics

Financial metric	Unit	Value
EBITDA[1]	A$m	$111m
Average annual post-tax free cash flow[1]	A$m	$78m
NPV_8 (post-tax)	A$m	$479m
IRR (post-tax)	%	28%
NPV_8 (pre-tax)	A$m	$696m
IRR (pre-tax)	%	38%

Note 1: Refers to average annual Project cashflows during steady-state production.

The project is forecast to produce A$4 billion in revenue over the life of the project with a cumulative post-tax cash flow of A$1.35 billion as shown in Figure 28.

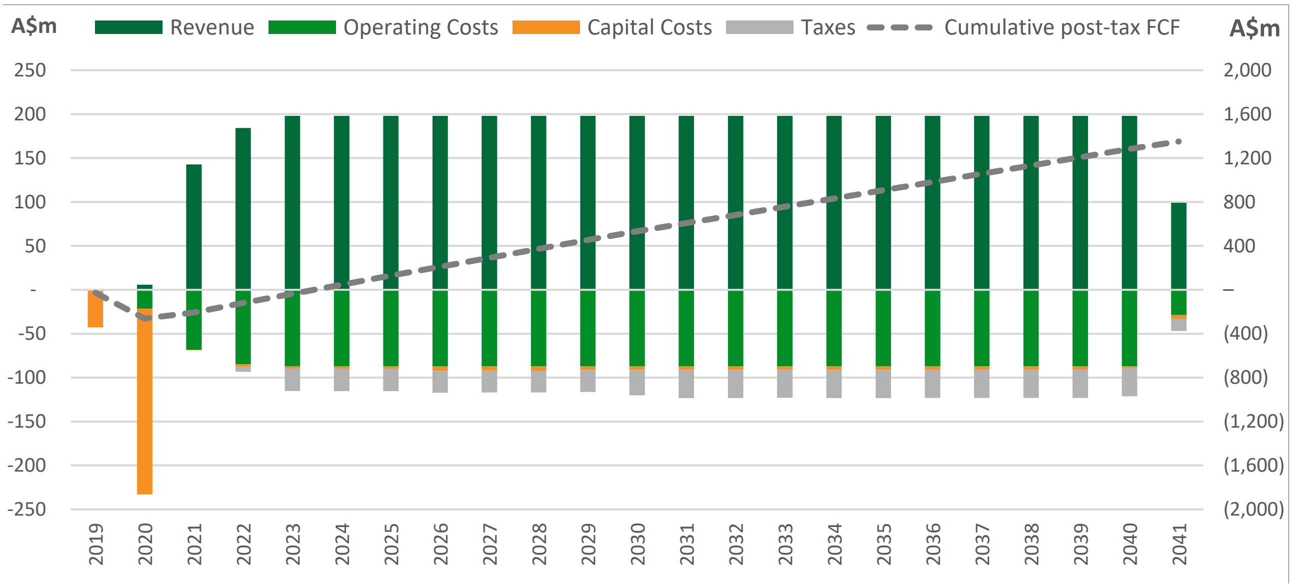

Figure 28: Project Cash Flow

Sensitivity Analysis

Sensitivity analysis has been performed on post-tax NPV. Model inputs were flexed between a range of -20% to +20% in 10% increments. The analysis in Table 16 indicates that the Project is most sensitive to exchange rates and SOP price.

Table 16: NPV_8 sensitivity analysis

Sensitivity	-20%	-10%	Base	+10%	+20%
Capital costs	531	505	**479**	452	425
Operating costs	557	518	**479**	440	401
SOP price	245	362	**479**	595	712
AUD/USD	748	598	**479**	381	299

Sensitivity analysis of post-tax NPV against the base case discount rate has also been considered, with the results shown in Table 17.

Table 17: NPV_8 sensitivity analysis on base discount rate

Sensitivity	6%	7%	Base	9%	10%
Discount rate	614	542	479	423	374

The tornado chart, provided as Figure 29, highlights the sensitivity of post-tax NPV_8 at -20% and +20% of financial model inputs against the $479m base case scenario.

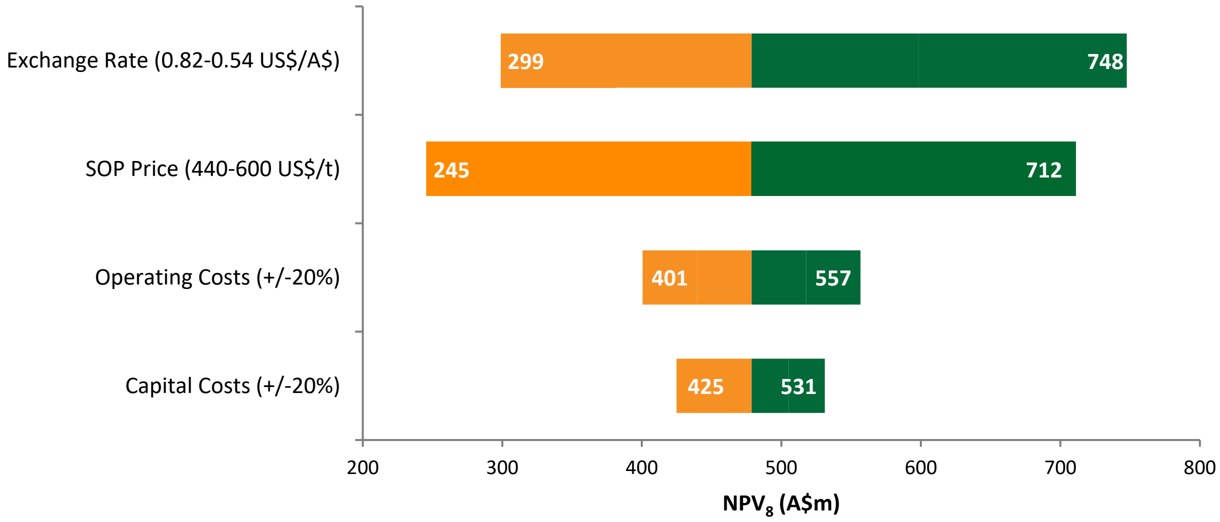

Figure 29: NPV_8 sensitivity analysis

A number of scenarios have been analysed as part of the financial evaluation for the Lake Way BFS. This has highlighted the robustness of the Project even under the most extreme downside scenarios.

ENQUIRIES

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APPENDIX A – COMPETENT PERSON STATEMENT AND DISCLAIMER

Competent Persons Statement

The information in this announcement that relates to Production Targets and Ore Reserves for Lake Way is based on, and fairly represents, information compiled by Mr Ben Jeuken, who is a member of the Australasian Institute of Mining and Metallurgy and a member of the International Association of Hydrogeologists, and Mr Robert Kinnell, who is a member of the Australasian Institute of Mining and Metallurgy and a Fellow of the Geological Society of London. Mr Jeuken is employed by Groundwater Science Pty Ltd, an independent consulting company. Mr Kinnell is a full time employee of Salt Lake Potash Limited. Mr Jeuken and Mr Kinnell have sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Jeuken and Mr Kinnell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to Exploration Results and Mineral Resources for Lake Way is based on, and fairly represents, information compiled by Mr Ben Jeuken, who is a member of the Australasian Institute of Mining and Metallurgy and a member of the International Association of Hydrogeologists. Mr Jeuken is employed by Groundwater Science Pty Ltd, an independent consulting company. Mr Jeuken 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Jeuken consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to Process Testwork Results is extracted from the announcement entitled 'Premium Grade Water Soluble Sulphate of Potash Produced from Lake Way Salts' dated 18 September 2019. This announcement is available to view on www.so4.com.au. The information in the original ASX Announcement that related to Process Testwork Results was based on, and fairly represents, information compiled by Mr Bryn Jones, BAppSc (Chem), MEng (Mining) who is a Fellow of the AusIMM. Mr Jones is a Director of Salt Lake Potash Limited. Mr Jones 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Salt Lake Potash Limited confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. Salt Lake Potash Limited confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

The information in this Announcement that relates to Processing and the Process Plant is based on, and fairly represents, information provided by Mr Kevin Martina, Professional Engineer, who is a Member of the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS), a 'Recognised Professional Organisation' (RPO) included in a list promulgated by the ASX from time to time. Mr Martina is employed by Wood Canada Limited, Saskatoon. Wood is engaged as a consultant by Salt Lake Potash Limited. Mr Martina 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Martina consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

This announcement may include forward-looking statements. These forward-looking statements are based on Salt Lake Potash's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Salt Lake Potash, which could cause actual results to differ materially from such statements. Salt Lake Potash makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of that announcement.

APPENDIX B – SUMMARY OF RESERVE ESTIMATE AND REPORTING CRITERIA

This ASX Announcement has been prepared in compliance with JORC Code 2012 Edition, AMEC Brine Guidelines and the ASX Listing Rules. The following is a summary of the pertinent information used in the Ore Reserve Estimate with full details provided in the body of the announcement and the JORC Code Table 1 included as Appendix D.

Material Assumptions and BFS Outcomes

Material assumptions used in the estimation of the production target and associated financial information are set out in Table B-1:

Table B-1 BFS Material Assumptions

Assumption	Value
Project Start Date	Q4 2020
Cost and Pricing Basis	2019 Dollars
Currency	Australian Dollars (unless otherwise stated)
Foreign Exchange Rate (US$)	US$0.68
Cost Escalation	0%
Revenue Escalation	0%
BFS Accuracy	±15%
Capex Contingency Allowance	9%
Mining & Processing	
Measured Mineral Resource (Drainable Porosity)	2Mt Measured
Inferred Mineral Resource (Drainable Porosity)	2Mt Indicated
Portion of Production Target – Measured	60%
Portion of Production Target – Indicated	40%
Probable Ore Reserve	2.4 Mt contained potassium
Trenches (production and transport)	132 km increasing to 165 km over LOM
Paleochannel bores	18 (initial number, increasing to 57 over LOM)
Bore production rate (average)	8.4 L/s/bore
Trench yield rate (flow) – minimum	4 L/s/km
Trench yield rate (flow) – maximum	8 L/s/km
Annual brine abstraction rate (initial)	18.2 Gl/a
Brine chemistry (average lake brine SOP grade)	15.2 Kg/m^3
Solar evaporation ponds	909 ha
Annual production (steady state)	245 ktpa SOP (>53% K_2O) with KCl addition
Life of mine	20 Years
Overall system efficiency	82%
Pricing	
Sulphate of Potash (FOB)	US$550/t
Operating Costs	
Brine Extraction	A$15.8/t
Brine Evaporation & Harvesting	A$26.2/t
Process Plant	A$173.1/t
Plant Infrastructure	A$0.8/t
Area Infrastructure	A$1.6/t

Assumption	Value
General & Administration	A$22.2/t
Transportation	A$62.5/t
Sustaining Capital	A$16.0/t
Capital	
Brine Extraction	A$30.6 million
Evaporation	A$28.1 million
Process Plant	A$76.9 million
Plant Infrastructure	A$12.4 million
Area Infrastructure	A$8.6 million
Regional Infrastructure	A$0.2 million
Miscellaneous	A$11.5 million
Indirect Costs	A$64.5 million
Contingency	A$21.4 million
Other	
Royalties	Govt – 2.5% Other – 1.5%
Corporate tax rate	30%
Discount rate	8%

Material outcomes from the Study are set out in Table 3 in the body of the Announcement.

Reserve Classification

The Ore Reserve is based on a production plan comprising a combination of surface trenches and bores. The brine pumping rate and brine concentration incorporated in the production plan is based on the results of detailed numerical modelling of the lake bed sediments and paleochannel. The model outlines the brine production profile from a combination of surface trenches and bores, capable of delivering 118,700t per annum of contained potassium to the evaporation ponds.

The numerical model used to simulate the production plan employs the aquifer properties used in the Mineral Resource Estimate and incorporates other modifying factors (such as recharge and evapotranspiration) to predict brine production and brine concentration over the life of mine. A steady state calibration and extensive sensitivity analysis was undertaken to enable the model to best represent the actual hydraulic system.

Two models were developed to simulate production of the resource:

- A regional groundwater flow model was developed to simulate the combined brine production from a trench network and a paleochannel borefield to meet the proposed production target of 118,700ktpa of contained potassium at Lake Way for 20 years.
- Cross-sectional flow and transport models were developed to estimate the decline of brine grade with time, and to test the dependence of the predictions on density and viscosity.

The models were used to define the base case production plan that will achieve annual brine abstraction of 118,700kt of contained potassium, delivered to the evaporation pond system.

To test the robustness of the model, an approach of testing assumptions to failure was employed and the predicted scenario stress-tested monthly for a total length of 20 years (representing the projected mine life). Annual production scenarios were simulated to understand the volume of brine required on a year by year basis.

Mineral Resource Depletion

Brines by their nature are not the same as conventional solid resources, as they are subject to groundwater movement, dilution and grade over time. Depletion is reported in the context of depletion of the Mineral Resource contained in the Total Porosity of the sediment. This assumes that both methods of production (trenches and bores) deplete the total resource, not only the fraction held in drainable porosity.

In the Lake Bed Sediments, the liquid brine is removed by pumping, but some mineral is left behind in the retained porosity. This mineral is mobilised by subsequent rainfall and lake flooding. Brine grade extracted from the trenches will decrease as potassium is produced over the life of mine. This is supported by brine leach testwork undertaken by the Company.

The paleochannel remains confined and under pressure for the duration of the planned production and is not dewatered by pumping. The hydrostatic pressure in the paleochannel is reduced by pumping, and groundwater is drawn toward the pumping bores. This water is replaced by water drawn into the paleochannel from the regional groundwater system, and vertically down by slow leakage from the overlying clay. The water drawn into the paleochannel replaces the water drawn out by pumping. Inflow both laterally from the regional system, and vertically from the overlying clay will transport additional dissolved potassium to the paleochannel. However, additional potassium has not been considered in the resource depletion calculation.

Ore Reserve Estimate

The Ore Reserve estimate for Lake Way is detailed in Table 6 in the body of the Announcement. The brine flow rate and concentration estimates are based on modelling and extrapolation of testwork which provides an Ore Reserve classed as Probable.

2.4Mt of contained potassium includes 60% converted from the Measured resource category (100% of the northern lake bed sediments and 10.6% of the paleochannel), and 40% converted from the Indicated resource category (the remaining 89.4% of the paleochannel). No brine from the Inferred resource category is included in the Ore Reserve and Production Target.

The results of the test pumping and the consistent nature of the brine grade within the paleochannel mean that the Measured and Indicated Mineral Resource Estimates have been converted to a Probable Ore Reserve.

The northern zone of the lake playa has been classified as a Measured Mineral Resource Estimate for the initial 8m at surface. This resource has been converted to a Probable Ore Reserve given the effects of variable recharge, dilution and liberation of the mineral salts contained within the retained porosity across the lake bed surface.

Modifying Factors

The Modifying Factors included in the JORC Code have been assessed as part of the BFS. The Company has received advice from appropriate experts when assessing each Modifying Factor.

A summary assessment of each relevant Modifying Factor is provided below.

Mining (Brine Extraction) – *refer to section entitled 'Production Plan' in the Announcement.*

The Company engaged an independent hydrogeological consultant with substantial salt lake brine expertise, Groundwater Science Pty Ltd, to complete the Mineral Resource Estimate for the Lake Way Project. The Principal Hydrogeologist of Groundwater Science, Mr Jeuken, has over 10 years of experience in groundwater resources assessment and management for mining. He has experience in salt lake brine potash evaluation, aquifer testing, wellfield planning and installation for mining, and the development of conceptual hydrogeological models.

The numerical hydrogeological model was produced by the Company and reviewed by an independent expert appointed by Mr Jeuken. Key details of the hydrogeological model and implementation of modifying factors to the Ore Reserve are summarized in the Table B-2 below.

Table B-2 Key modifying factors implemented in the numerical hydrogeological model used to simulate the brine production plan

Aquifer	Parameter	Value	Basis
Lake Bed Sediment	Brine Grade	6.8 kg/m^3	Mineral Resource Estimate
	Hydraulic Conductivity	4 m/day	Mean of: -5 Long term trench pumping trials with piezometer array -30 Test pit pump-out trials -14 Hydraulic (Slug) tests at piezometers
	Total Porosity	0.43	Mean of 68 Laboratory tests
	Drainable Porosity	0.11	Mean of 5 long term trench pumping trials and 68 laboratory tests of sediment.
	Recharge	Direct Rainfall based on wetting threshold and coefficient implemented on 20 year rainfall record. Catchment run-off based on catchment run-off model calibration to adjacent gauged catchment	Run-off and recharge study. Climate Data from Wiluna BOM Station
	Dispersity and Diffusivity	No Dispersion	Dispersion treated through dual porosity model.
	Mixing	Mixing of recharging water with the brine body was simulated by dual porosity cross sectional models	Dual porosity model simulates mixing and transfer of mineral from retained porosity and drainable porosity
Paleochannel Basal Sand	Brine Grade	6.1 kg/m^3	Mineral Resource Estimate
	Hydraulic Conductivity	1 – 5 m/day	3 Pumping tests and lithology of sediment
	Total Porosity	0.4	Lithology and benchmark to equivalent material
	Drainable Porosity	0.15	Lithology and benchmark to equivalent material
	Recharge	Recharge to a confined paleochannel is drawn in as slow vertical leakage from the overlying clay. Vertical Hydraulic conductivity of the clay was simulated as 5 x 10^{-4} m/day	Geological Model and Analysis of long duration pumping trials.
	Dispersity and Diffusivity	Not applicable / Not modeled	Brine drawn from overlying clay will exhibit comparable brine grade.
	Mixing	Not applicable / Not modeled	Brine drawn from overlying clay will exhibit comparable brine grade.

Brine extraction requirements and system design is based on hydrogeological modelling (SO4), hydraulic design and civil engineering studies (Cardno Engineering), geotechnical investigations and stability analysis (Coffey Tetra Tech) and BTS design and specification (Proteus Tetra Tech).

Brine will be extracted from Lake Way using the two methods of surface trenching within the lakebed sediments and vertical bores targeting the basal sand aquifer of the paleochannel.

The two methods of extraction outlined in the Announcement are common practice for brine extraction. These extraction methods are used by the three main current operations which include Great Salt Lake in the US, Lop Nur Salt Lake (Luobupo) and SQM in Chile.

Brines by their nature are not the same as conventional solid resources, as they are subject to groundwater movement, dilution and concentration over time. Depletion is reported in the context of depletion of the Mineral Resource contained in the total porosity of the sediment. This assumes that the brine resource contained within the total porosity of the lakebed sediments is depleted with time. The brine grade within the paleochannel is unaffected by the dilution effects of recharge and is not expected to deplete with time.

In the Lake bed sediments, the brine drains into trenches via gravity and upward movement due to changes in pressure within the formation. Once into the trench the brine is removed by pumping, however a significant proportion of the mineral remains within the retained porosity of the formation. This mineral is mobilised by effect of recharge from rainfall and surface water inflow. Column leaching tests have shown that continued recharge and flushing has the potential to liberate between 80 and 100% of the mineral content held within the retained porosity over time. However, the brine concentration extracted from the trenches will decrease as potassium is produced over the life of mine. This is again supported by brine leach testwork undertaken by the Company.

The paleochannel remains confined and under pressure for the duration of the planned production and is not dewatered by pumping. The hydrostatic pressure in the paleochannel is reduced by pumping, and mineral rich groundwater is drawn toward the pumping bores. This brine is replaced by brine drawn into the paleochannel from the regional groundwater system, and vertically down by slow leakage from the overlying clay. The brine drawn into the paleochannel replaces the brine drawn out by pumping. Inflow both laterally from the regional system, and vertically from the overlying clay will transport additional dissolved potassium to the paleochannel.

No cut-off grade has been applied given the large potential of the paleochannel, the addition of KCl to the production process and the manageable dilution rate.

Processing (including Metallurgical) – *refer to sections entitled 'Brine Evaporation' and 'Process Plant' in the Announcement.*

SO4 engaged Ad-Infinitum to complete evaporation modelling and pond design for the Lake Way Project. Geotechnical consulting services were provided by Coffey Tetra Tech and the inter-pond brine transfer system was designed by Tetra Tech Proteus.

A series of solar evaporation ponds will be used to produce potassium-rich harvest salts from Lake Way brine.

Design activities have included process modelling to define evaporation pond requirements and harvest salts that will be produced, several phases of geotechnical investigations, and geotechnical and civil engineering of ponds. Process, mechanical, piping, electrical and instrumentation design was carried out for the inter-pond brine transfer system.

SO4 has conducted extensive site evaporation tests at Lake Way in evaporation ponds utilising several construction methods including mine waste from the Williamson Pit and sheet piles. An early works program has also been completed, involving design and construction of a 125-hectare evaporation pond. Lessons learned and data gathered during this project have been incorporated into the study.

Lake Way's process development relied heavily on experience applied by Wood Group, SRC and specialist consultants (Carlos Perucca Processing Consulting Ltd and Ad Infinitum) who are well experienced from working on similar operations. Production of SOP from lake brines is well understood and a well-established process.

SO4 has conducted extensive testing of lake brines and harvest salts from Lake Way. The testing conducted to date supports that lake brine can be concentrated economically, via solar evaporation, to produce mixed potassium sulphate double salts. It has also been shown that these salts, when harvested, can be economically converted into a valuable, high purity SOP fertiliser product.

More than 5t of harvest salts from trial evaporation ponds at Lake Way have been sent to SRC to complete test work, including harvest salt characterisation, feed preparation, flotation, kainite conversion and SOP crystallisation. Process flowsheet enhancements were considered during the bench scale testing phase, namely KCl addition. The testing phase culminated in a number of bench scale closed loop locked cycle tests, and finally a continuous pilot operation.

The program demonstrated that Lake Way harvest salt can be successfully converted to SOP using the identified process flowsheet, including; attritioning, crushing, conversion, flotation and crystallisation to produce an SOP product of very good chemical quality (>53% K_2O equivalent).

Infrastructure – *refer to sections entitled 'Major Infrastructure' and 'Product Transport and Logistics' in the Announcement.*

Lake Way's proximity to the West Australian goldfields means relatively minor area infrastructure upgrades and modifications are required. Existing key infrastructure includes a major state highway, existing site access roads, gas pipeline, airport and raw water borefields with access to granted groundwater licences.

GR Engineering Services Limited were engaged to complete the non-process infrastructure (NPI) study work.

The Company has engaged with relevant authorities and asset owners to determine availability and capacity of existing infrastructure.

SO4 engaged experienced transport logistics companies with a local profile and relevant bulk haulage experience. SOP product will be transported 780 km from Lake Way to Geraldton using dedicated super quadruple (quad) road trains, for bulk export to international markets.

The road direct logistics solution will utilise an offsite storage facility in the Narngulu industrial area, approximately 14 km from Geraldton Port. During shiploading, product will be loaded into double road trains, trucked to Geraldton Port and discharged at the drive-over truck unloading circuit that connects to the berth four shiploader.

The super quad road trains will be used to backload muriate of potash (MOP or KCl), imported through berth six at Geraldton Port, from the offsite storage facility to Lake Way.

Marketing – *refer to section entitled 'Product Marketing' in the Announcement.*

Independent potassium sulphate and potash market forecasts and assessments were provided by experts CRU International and Argus Media Group.

These reports emphasised that the specifications proposed by SO4 of a potassium content (expressed as K_2O) of >53% and chloride content of <0.1% placed the product into the premium range. The reports confirmed that it would be feasible for SO4 to monetise the high level of potassium in its product relative to the more commonly traded specifications of 50-51% K_2O. There is also a premium pricing market for low chloride content where the level can consistently be maintained at below 0.5%.

The Company has previously entered into MOU's with Mitsubishi Australia Limited and Sinofert Holdings Limited setting out the basis for binding offtake agreements. The Company is progressing discussions with these parties and others with a view to signing binding offtake and marketing agreements for the future sale of its product.

Economic – *refer to sections entitled 'Economics' in the Announcement*.

Capital cost estimates have been prepared by SO4 and GR Engineering Services Limited, using a combination of cost estimates from suppliers, historical data, reference to recent comparable projects, and benchmarked construction costs for Western Australia. Costs are presented in real 2019 terms and are exclusive of escalation. The overall accuracy is deemed to be ± 15%.

The capital cost estimate includes the cost of all services, direct costs, contractor indirects, EPCM/Owner's costs, non-process infrastructure, general area infrastructure and other facilities used for the operation of the Mine and Process Plant.

Operating costs have been estimated by SO4, and are based on a combination of first principles build-up, direct supplier quotes, and experience on similar projects with unit rates benchmarked to costs attributable to Western Australia. The operating costs also provide an annual allowance for sustaining capital works.

Labour costs have been developed based on a first-principles build-up of staffing requirements with labour rates benchmarked for the Goldfields region.

The operating and capital cost estimates build-up has been reviewed by Turner and Townsend.

Government royalties have been assumed at a 2.5% FOB gross revenue basis for the life of the project. Private royalties are ~1.5% mine gate revenue.

Royalties account for an average life of mine cost of A$32/t per annum.

Rehabilitation and mine closure costs are included within the discounted cash flow modelling (OPEX) based on study outcomes.

On 5 August 2019, SO4 announced that it had reached an agreement with Taurus Funds Management for financing of up to US$150m for the Lake Way Project. The Company has commenced drawdown of the initial US$30m tranche of this facility. Having completed the BFS, access to the remaining portion of funding will become available upon satisfaction of conditions precedent to the Lender's satisfaction. Conditions precedent are customary for a project financing of this nature and include execution of financing agreements, satisfying the equity requirement based upon a Cost to Complete analysis and offtake agreements being agreed. Based on ongoing discussions, there is a reasonable basis that the Company will be able to raise any additional funding required for the Project with potential funding sources including, but not limited to, royalty financing, offtake agreements, convertible notes and traditional debt and equity.

Environmental – *refer to section entitled 'Approvals' in the Announcement.*

Environmental work to date has not identified any social or environmental factors that could constitute fatal flaws or insurmountable obstacles to gaining necessary statutory approvals. The Company has adopted a strategy of parallel lodgement of permit applications as a means of expediting project approvals and subsequent implementation.

The referral for Stage 2 Project development works submitted to the Environmental Protection Agency (EPA) in March 2019 was determined not to require formal assessment under Part IV of the Environmental Protection Act 1986.

The referral for the full commercial project scope was submitted to the Environmental Protection Authority (EPA) for assessment in September 2019.

Social, Legal and Governmental – *refer to sections entitled 'Mining Tenure' and 'Native Title and Heritage' in the Announcement.*

Details of the mining tenements included in the Project to date are provided in Table 11 in the body of the Announcement, including eight granted Mining Leases and one application for a Mining Lease. This includes tenements acquired as part of the Blackham Transaction completed on 8 October 2019.

Lake Way is located in an area with a long history of minerals exploration and associated environmental assessments. SO4 has taken advantage of existing environmental knowledge to support the permitting of its early works programme and focus additional investigations required for permitting of full-scale operations.

SO4 has been working collaboratively with the native title holders, Tarlka Matuwa Piarku Aboriginal Corporation (TMPAC), The Project is located on and adjacent to Lake Way which is a registered aboriginal heritage Site.

SO4 and TMPAC have entered into a native title exploration agreement and are finalising a comprehensive land access agreement that provides increased certainty for the Project, cultural heritage management protocols and lasting social and economic benefits to the native title holders.

A collaborative working arrangement has also been established with the Shire of Wiluna. This has enabled SO4 to establish a community presence that aligns with Company values, supporting the Shire of Wiluna's Strategic Community Plan vision and other community organisations that are essential to long-term sustainability of the region.

The Company takes legal advice in relation to social, legal and governmental requirements as necessary.

APPENDIX C – SUMMARY OF RESOURCE ESTIMATE AND REPORT

This ASX Announcement has been prepared in compliance with JORC Code 2012 Edition, AMEC Brine Guidelines and the ASX Listing Rules. The following is a summary of the pertinent information used in the Mineral Resource Estimate with full details provided in the JORC Code Table 1 included as Appendix D.

In March 2019, the Company reported an updated Mineral Resource Estimate for Lake Way, of 1.8Mt in the Measured category from the northern lakebed sediments calculated using drainable porosity and 1.4Mt in the Indicated category from the paleochannel basal sands calculated using drainable porosity. The remaining area of the lakebed and the paleochannel clays were classified in the Inferred category.

Additional passive seismic lines to better delineate the route and dimensions of the paleochannel were completed during June and July 2019. The higher resolution and greater density of survey lines interpretation increased the length and volume of the paleochannel, which has resulted in an increase to the Mineral Resource Estimates for the paleochannel basal sands and paleochannel sediment, whilst additional aquifer testing has also enabled a portion of the paleochannel basal sands resource to be upgraded to the Measured category. The lake bed sediments remain as reported in the March 2019 Mineral Resource Estimate with the north zone of the lake being classified in the Measured category and the southern zone classified in the Inferred category. Brine from the Williamson Pit has been pumped into the Stage 1 evaporation ponds and the resource is now considered to be largely depleted.

The key data and interpretation that underpins the Mineral Resource Estimates are summarised as follows:

- The Northern Lake Bed Sediment Measured Resource is based on extensive test pits, drillholes and trench pumping trials. This work has informed, geometry, brine grade, total and drainable porosity, and hydraulic conductivity of the aquifer. The work includes porosity determination by 5 long term trench pumping trials and 68 laboratory tests of sediment and hydraulic conductivity determination by; 5 Long term trench pumping trials with piezometer array; 30 Test pit pump-out trials, 14 Hydraulic (Slug) tests at piezometers.
- The Southern Lake Bed Sediment Inferred Resource is based on geometry defined by historic drilling data. Brine concentration and porosity is extrapolated from the northern portion of the Lake. The reason for inclusion as an inferred resource is the high degree of spatial consistency in the northern part of the playa. All data points located on the playa exhibit an elevated brine grade. Experience at other salt lakes also demonstrates a high degree of spatial continuity in brine grade within the playa margin. Under salt lake playas brine concentration (grade) is relatively homogenous. The brine resource is generated in-situ by evaporation of a fairly consistent groundwater source which is subject to sporadic mixing and dilution at the lake due to infiltration of rainwater, and subsequent re-concentration by evaporation. These mechanisms generate a relatively homogenous brine concentration.
- The Paleovalley Sediment Inferred Resource is based on geometry defined by historic drilling and recent seismic survey. Brine concentration is interpolated from the overlying lake bed sediment. Porosity is based on lithology and benchmarking to determinations in comparable lithology. The reason for inclusion as an Inferred Resource is the understanding of the hydrogeological setting. In Australian salt lake playas, extreme evaporation at the playa surface acts as a brine concentrator. Density cycling and diffusion of the brine results in a

relatively consistent brine profile with depth. The production plan does not pump directly from the paleovalley clay and the production plan is insensitive to the porosity value applied to this unit.

- The Paleochannel Basal Sands Resource is based on geometry well defined by historic drilling and recent geophysical survey. The historic drilling dataset includes a hydrogeological investigation into the paleochannel undertaken by WMC in 1992. This work included drilling four transects across the paleochannel within the study area and installation of test bores and piezometers. This work provides a valuable dataset that informs the hydrogeological structure of the paleochannel and the lithology of paleochannel sediment. Brine grade is interpolated the entire length of the channel from two tested boreholes. This extrapolation is warranted on the basis that the playa and paleochannel are a well-understood groundwater system. The playa acts as the brine generator and density cycling and diffusion distributed the brine with depth. The consistency in concentration with depth is demonstrated at the two bore sites and in the broader study of paleochannel hydrogeology in Western Australia. Porosity is based on lithology and benchmarking to determinations in comparable lithology. The 20-year production plan is insensitive to porosity since the channel is never dewatered. Brine produced from bores is replaced by inflow along the channel and by very slow vertical seepage from the overlying clays. The confidence of the Resource is upgraded to Measured in the 2.5km radius around a 10-day pumping trial that hydraulically tested the aquifer to that extent.
- Following QA/QC as described below, the data set is considered suitable for estimation of a potash resource for the Project. Brine concentration QA/QC comprised:
    - The primary laboratory was Bureau Veritas Minerals Laboratory in Perth. Approximately 1:10 Duplicate samples were sent to a secondary laboratory; Intertek, Perth. The average error was less than 2%.
    - Analysis of charge balance was undertaken. Charge balance checks the sum of all positively charged ions against the sum of all negatively charged ions. Charge balance error was less than 2%.
    - Multiple samples were taken and assayed over the course of the paleochannel bore pumping trials to check the consistently of the brine concentration and the assay.

Geology and Geological Interpretation

The geological, hydrological and hydrogeological interpretation for the lakebed resource remains as reported in the March 2019 Mineral Resource Estimate (refer ASX Announcement dated 18 March 2019).

<u>Geology and Hydrogeology of the Paleochannel</u>

The province is characterised by granite–greenstone rocks that exhibit a prominent northwest tectonic trend and low to medium-grade metamorphism. The Archaean rocks are intruded by East–West dolerite dykes of Proterozoic age, and in the eastern area there are small, flat-lying outliers of Proterozoic and Permian sedimentary rocks. The basement rocks are generally poorly exposed owing to low relief, extensive superficial cover, and widespread deep weathering. A key characteristic of the goldfields is the occurrence of paleochannel aquifers. These paleodrainages are incised into the Archean basement and in-filled with a mixed Tertiary and Quaternary sedimentary sequence.

The paleochannel sediments of Lake Way are characterised by a mixed sedimentary sequence including sand, silts and clays of lacustrine, aeolian, fluvial and colluvial depositional origins. These near-surface deposits also include chemically-derived sediments of calcrete, silcrete and ferricrete. Beneath eastern parts of the playa, there is a deep paleochannel that is infilled with Tertiary-aged paleochannel clay and basal sands in the deepest portion.

The paleochannel hosted resource is contained in the pore spaces of the sediment that infills the paleochannel structure. The sediment comprises silts and clays from surface to approximately 100m depth, and then coarse-grained sands and gravels at the base of the channel.

The silts and clays exhibits low permeability, the brine held in these sediments cannot be drained directly to bores because the permeability is too low to allow useful bore yields.

A proportion of the brine held in these sediments can be removed by underdrainage to the underlying Basal Sand unit.

Brine is removed from the Basal Sand unit by pumping from bores. This depressurises the Basal Sand unit and induces downward brine leakage from the overlying sediment. The rate of leakage will be very low.

Only a relatively small fraction of the total porosity can be removed from a fine-grained unit by this method, and as such no brine from the paleochannel sediments is incorporated into the Ore reserve calculation.

Drilling and Sampling Techniques

No additional drilling has been undertaken since March 2019.

Passive Seismic Survey Lines

A Horizontal to Vertical Spectral Ratio (HVSR) passive seismic survey was completed over 55 survey transects totalling 271 line kilometres over Lake Way. The HVSR passive seismic survey used the Tromino 3G ENGY seismometer and the HVSR survey method to detect the depth to hard bedrock below regolith cover, identify paleochannels in 2D and 3D, and gather subsurface layer information in paleochannels to assist with SOP brine exploration and resource estimation. The bedrock depth could then be used for direct drill planning and for paleochannel volume estimation.

HVSR passive seismic data were acquired by Atlas Geophysics and data were remotely assessed by Resource Potentials in Perth for quality control, editing, recording repeat stations and extensions, preliminary data processing, cross-section generation and providing client updates and preliminary results throughout the survey period.

The final HVSR passive seismic data were then processed, and velocity analysis completed with amplitude-depth cross-sections generated for each passive seismic survey transect. These data highlighted an interpreted fresh bedrock interface below Lake Way as an acoustic impedance contrast layer, as well as highlighting shallower layering within the unconsolidated sedimentary cover deposits.

Paleochannel Aquifer Tests

Aquifer tests comprising both stepped-rate test (SRT) and constant-rate test (CRT) pumping tests were previously reported in the March 2019 report.

In August 2019 bore TB 3/4 was retested and comprised a step-rate test (SRT), a 10-day constant-rate test (CRT) and recovery testing.

The static water level (SWL) before the testing commenced was 3.92mbgl. The pump used for aquifer testing was a 4” (100mm) Grundfos SP17-7 with a 7.5kW motor and the pump inlet was set at a depth of 81m. The size of the pump was limited due to the diameter of the bore being 6” (155mm).

The SRT was conducted with five (5) 100-minute steps at 2, 3, 4, 5 & 6l/sec. Maximum drawdown during the SRT was 43.24m.

The CRT commenced at a pumping rate of 5L/s. The test was conducted for 10days without incident. The maximum drawdown in the test bore was 44.57mbgl with 7.92m of drawdown in MB 3/4 Deep, the adjacent deep monitoring bore and 0.0m of drawdown in the adjacent shallow monitoring bore, MB 3/4 Shallow. Results from test pumping is shown graphically in Figure C-1.

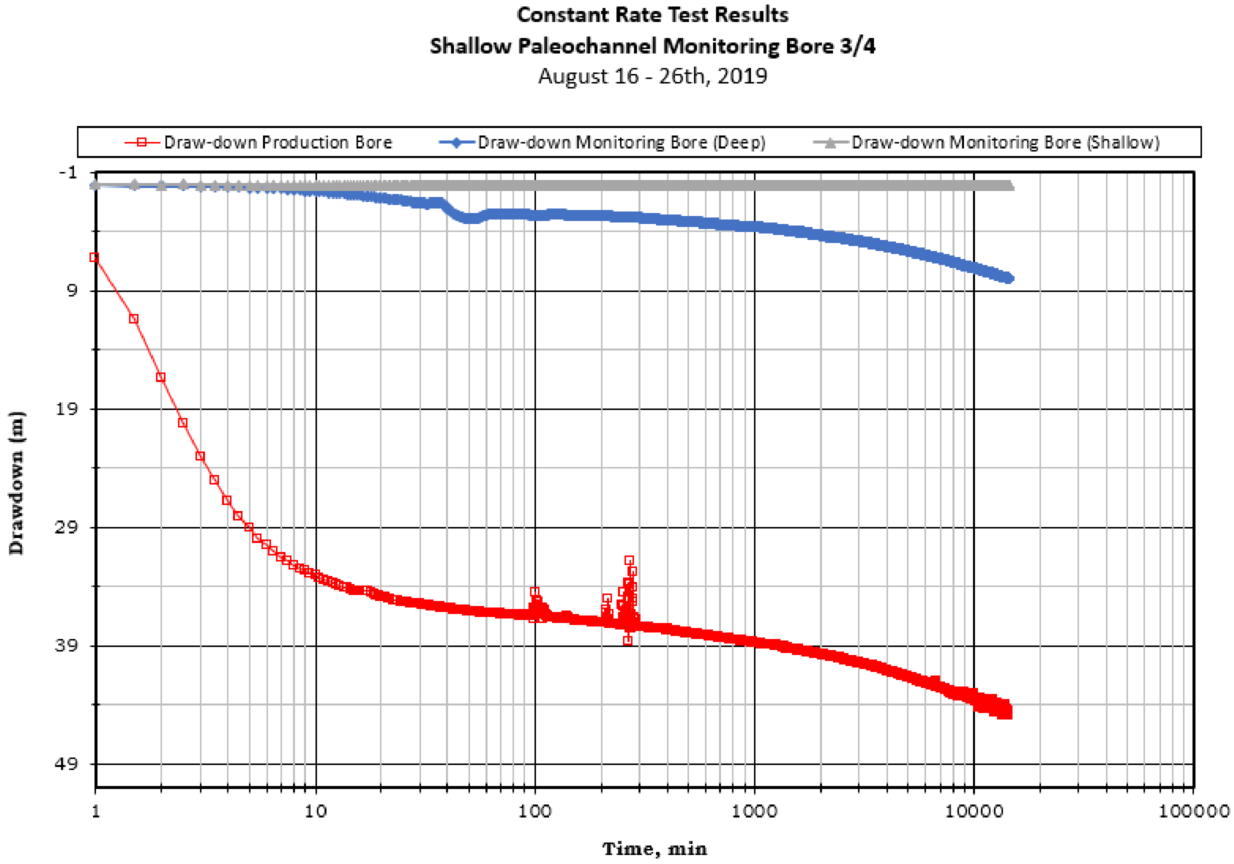

Figure C-1 - TB 3/4 10 Day Constant Rate Test Results

Following pump shutdown, the recovering water levels were monitored in the production and surrounding monitoring bores with water levels recovering to 84% in the production bore and 47% in the deep monitoring bore after 523 minutes.

Lakebed Sediment Brine Leaching Tests

Twelve 100mm diameter 300mm long (minimum) insitu cores were taken from Lake Way. The sediment cores were then prepared as leaching columns and 200 ml of <18Ω resistivity ("Milli-Q") water was added to the column via a funnel attached to a plastic watering rose. This delivered a gentle and even distribution of water onto the sediment column with minimum disturbance to the sediment surface.

Columns were allowed to percolate naturally overnight. The following day, a vacuum was applied until water began dripping from the base of the Buchner funnel. Once flow was established, the vacuum was either reduced or turned on/off manually to each column to ensure a slow rate of leaching. The vacuum was stopped when either the full volume of leachate was collected, or vacuum was lost to a column.

Once collected, the volume of leachate was recorded and analysed.

Sample Analysis Method

Passive Seismic Geophysics

The final outputs from the passive seismic study included:

- HVSR amplitude-depth cross-sections and map layouts as image plots for all survey transects, including 3D geo-referenced images of windowed HVSR cross-sections without map layouts.
- CSV file and 3D DXF files of the main acoustic impedance contrast layer in depth from surface and RL, with upper and lower uncertainties, using average shear wave velocities.
- Georeferenced images of the depth to the main acoustic impedance contrast layer, with 2D contour vectors.
- Geo-referenced images of the local Lake Way gravity survey data only, and a regional merged gravity data grid, including local Lake Way gravity anomaly profiles and contour files.
- Final HVSR passive seismic data in ASCII format for archive and DMIRS reporting, along with an excel spreadsheet of all passive seismic station locations.

All survey coordinates in this report are in the GDA94 datum and MGA 51 projection, and HVSR cross-sections are plotted in RL elevations relative to SRTM heights.

Aquifer Pumping Test

A summary of the test pumping programme is presented in Table C-1 and the results of the analysis on Table C-2.

Table C-1 Summary of the 10 Day Test Pumping Programme at Bore TB3-4

Pumping Test Type	Duration	Pumping Rate (L/s)	Bores Monitored	Maximum Drawdown (m) / Recovery Level (m) below SWL (SWL, mbgl)	Radial Distance from TB 3/4 (m)
SRT	500 min (100 min each)	2, 3, 4, 5 & 6	MB 3/4 Shallow MB 3/4 Deep	11.91, 19.48, 27.04, 34.61 & 43.24	13.1m 33.4m
CRT	240 hours	5	MB 3/4 Shallow MB 3/4 Deep	TB 3/4: 48.49m MB 3/4 Shallow: 0.0m (No Drawdown) MB 3/4 Deep: 7.92m	13.1m 33.4m
Recovery#	523 minutes	0	MB 3/4 Shallow MB 3/4 Deep	TB 3/4: 7.58m (84% Recovery) MB 3/4 Shallow: (No Drawdown) MB 3/4 Deep: 4.18m (47% Recovery)	13.1m 33.4m

Notes: SWL – SWL Water Level. Method of measurement – water level logger, # time since pump-shutdown.

Table C-2 Results of the Test Pumping Analysis

Method of Analysis	Transmissivity (m^2/day)	Storativity	Boundary Conditions
Hantush-Jacob	56	0.0002	- Leakance 1/B = 0.0003 m^{-1}

Brine grade was measured after the first hour and then after every 24 hours for the duration of the test. The results are shown in Table C-3.

Table C-3 Laboratory Analysis of Brine samples taken during the 10 day test

Time into Test	Potassium (mg/l)	Mg (mg/l)	SO_4 (mg/l)	TDS (mg/l)
1 Hour	6,340	8,130	25,600	256,174
24 Hours (1 day)	6,250	8,090	25,400	255,320
48 Hours (2 days)	6,320	8,140	25,300	257,337
72 Hours (3 days)	6,320	8,130	25,400	254,805
96 Hours (4 days)	6,280	8,090	25,800	253,556
120 Hours (5 days)	6,280	8,060	25,800	256,842
144 Hours (6 days)	6,310	8,180	25,900	255,674
168 Hours (7 days)	6,370	8,170	25,400	256,107
192 Hours (8 days)	6,380	8,130	25,900	253,751
216 Hours (9 days)	6,330	8,140	25,600	241,614
240 Hours (10 days)	6,320	8,130	25,700	255,942

The results of the aquifer test analyses show that:

- There does not appear to be any connection between the shallow lakebed sediments and the paleochannel aquifer. The shallow lakebed sediments and the paleochannel sand units within Lake Way make up two broadly separate aquifer units separated by the generally very low permeability lakebed sediments.
- Only the production bores and adjacent deep piezometers associated with the test pumping of the paleochannel production bores showed diagnostic responses typical of bores located proximal to boundaries.
- The bore is inefficient and partially penetrating (skin effects are 22m head loss at a flow rate of 5L/s) – only screens the top 10 m of a 22m thick aquifer and typically the coarse material is at the bottom and has been missed, the screenslot size is very small (0.5mm) and the gravel pack is very fine (0.8 to 1.6mm)
- Relatively small drawdown (7.92m) was achieved in TB 3/4's deep monitoring bore, located 33m away after 10 days of pumping at 5l/s in a partially penetrating production bore, indicating the transmissive nature of the paleochannel aquifer unit at this locality.
- Representative transmissivity (T) values adopted for the paleochannel aquifer unit ranged between 56 and 98m^2/day.

The water quality analysis results from test pumping show the following:

- Overall the analysis shows the groundwater quality from the Lake Way paleochannel aquifer to be hypersaline.
- The paleochannel production bores tested ranged in 6,080 – 6,340 mg/l of potassium, 7,900 – 8,520 mg/l of Magnesium (Mg), 23,400 – 26,600 mg/l of SO4 & 241,000 – 283,000 Total Dissolved Solids (TDS).

Radius of influence of the 10 days test was 2.5 km, with both boundaries well defined by the data. On this basis it can be stated with confidence that a 5 km length of the paleochannel has been hydraulically tested and is therefore a measured resource.

Lakebed Sediment Brine Leaching Tests

The volume of brine, and therefore mineral contained within the retained porosity portion of the total porosity represents a significant resource. It has been suggested once the naturally drainable porosity has been depleted that the natural process of recharge from rainfall and surface runoff "refills" the aquifer and leaches out a portion of this mineral resource contained within the retained porosity.

The results of SO4's investigation of brine chemistry across the lake bed gives an average potassium concentration of 6,800 mg/L.

By assuming a porosity value of 43% (0.43), as used in the Mineral Resource Estimate (MRE), the mass of potassium stored in each sediment core prior to leaching was calculated.

The total mass of potassium produced can be determined by calculating the mass produced in each flushing step (concentration times volumes) and totalling it. Of the 12 samples tested 9 provided a useable result.

Using the same pre flushing lakebed brine concentration as the MRE of 6,800 mg/L the percentage of flushing varied from 77% to 127%. The leaching results are shown on Table C-4.

Table C-4 Column Leach Testing Results

Sample	LYC S01	LYC S02	LYC S04	LYC S05	LYC S06	LYC S07	Pond 1	Trench 1	LYC S10	LYC S11	LYC S12	LYC S13
Volume (cm3)	1125.0	1125.0	2708.0	2625.0	1166.5	1083.0	2166.4	2249.7	2208.1	1041.5	2333.0	1166.5
Volume x poro (ml)	483.8	483.8	1164.4	1128.8	501.6	465.7	931.5	967.4	949.5	447.9	1003.2	501.6
Volume x poro (L)	0.48	0.48	1.16	1.13	0.50	0.47	0.93	0.97	0.95	0.45	1.00	0.50
Mass of K (mg)	3337.88	3337.88	8034.64	7788.38	3461.01	3213.26	6427.69	6674.91	6551.30	3090.24	6922.13	3461.07
Flushed mass of K (mg)	3234.43	3360.89	0.00	6725.86	2666.48	4074.77	8100.69	6558.24	3639.81	2893.92	3504.17	3569.99
% of brine flushed	0.97	1.01	No result	0.86	0.77	1.27	1.26	0.98	No result	0.94	No result	1.03
Volumetric Mass of K (kg/m3)	2.88	2.99	0.00	2.56	2.29	3.76	3.74	2.92	1.65	2.78	1.50	3.06

The results show that the lake bed is a highly variable sedimentological and hydrogeological environment, this variability of the lake bed will affect hydraulic properties such as total porosity, effective porosity and specific yield.

When results produce a total mass of potassium flushed greater than the stored estimate this reflect uncertainty in the original brine concentration and the hydraulic properties (primarily total porosity) of the sample.

The total potassium flushed from the samples equated to an average of 3.0 kg potassium per cubic meter of sediment (range 2.3 to 3.7). Mobilisation was achieved quickly, with most potassium leached within 2 to 3 pore volumes. These values are consistent with the Mineral Resource Estimate and the parameters applied in brine grade depletion modelling incorporated in the production plan.

The test work validates the mechanism for mobilisation of potassium held in retained porosity by rainfall and run-off to the playa surface.

Resource Estimation Methodology

The resource estimation methodology remains as previously reported.

Williamson Pit

Brine from the Williamson Pit has been pumped into the Stage 1 evaporation ponds and the resource is now considered to be largely depleted.

Lake Bed Sediment

The Lakebed sediments remain as previously reported (refer ASX Announcement 18 March 2019).

Paleovalley Sediment

Volume

The volume of the clays above the basal sands that infill the paleochannel has been exported from the geological model created in Leapfrog. The volume is 15,200Mm^3 which represents an increase of 54% over the March 2019 estimate.

Porosity

The total porosity and drainable porosity remain unchanged from the March 2019 estimate, where the total porosity applied is 40%. Drainable porosity is applied as a low value of 3%, based on the fine-grained lithology of the host sediment which will retain much of the contained brine.

Solute Concentration

Solute concentration is inferred to be continuous from the lake playa to the base of the paleochannel sediment. The average concentration is 15.2kg/m^3 SOP. The assumption is based on observed brine grade continuity at two sites where bores in the paleochannel basal sand report brine grades consistent with the grades in the overlying lake bed sediment.

Paleochannel Basal Sand

Volume

The extent and thickness of the paleochannel basal sand resource is defined by the geological model created in Leapfrog. The total volume of the unit is estimated to be 1,100Mm^3 which represents a 60% increase from the March 2019 estimate.

Porosity

The total porosity and drainable porosity remain unchanged from the March 2019 estimate, where the total porosity applied is 40% and drainable porosity applied is 15%.

Solute concentration

Solute concentration is derived as the average value of the samples taken during pumping tests completed in bore TB3-4 and TB5-7. The average SOP concentration for both the Measured and Indicated components is 13.6kg/m^3 SOP. No spatial interpolation was completed.

Classification Criteria

Lake Bed Sediments (North)

The estimated resource in the northern part of the lake has a high degree of confidence.

The resource estimate and associated hydrological data set are considered adequate to support a mine plan. In this case the mine plan comprises design of a production trench network and construction of a groundwater flow simulation model to estimate and plan brine production rates. The resource is reported as a **Measured Resource**.

There has been no update to the estimated resource for the Lake Bed Sediments (North) and further information can be found in the ASX Announcement dated 18 March 2019.

Lake Bed Sediments (South)

The estimated resource in the southern part of the lake has a low degree of confidence.

The resource estimate is based on assumed continuity of grade and porosity and is not adequate to support a mine plan. The resource is reported as an **Inferred Resource**.

There has been no update to the estimated resource for the Lake Bed Sediments (South) and further information can be found in the ASX Announcement dated 18 March 2019. No brine from Lake Bed Sediments (South) resource estimate is included in the Ore Reserve and Production Target.

Paleovalley Sediment

The estimated resource in Paleovalley sediment has a low degree of confidence. The Resource estimate is based on assumed continuity of grade and porosity and is not adequate to support a mine plan. The resource is reported as an **Inferred Resource**.

The volume of the geological unit is well defined by a geological model based on detailed geophysical survey validated to an extensive drilling data set.

Brine grade is assumed to be continuous and consistent from the Playa surface to the base of the geological unit. This assumption is supported by only a limited number of data points where brine chemistry at surface and at depth are available.

Total Porosity and Drainable Porosity values are based on lithology logged in historic drilling and on benchmarking of comparable projects in Tertiary paleochannels in Western Australia. The values are not yet confirmed by test work.

Hydraulic properties of the units inferred from the lithology of the unit, and the response to pumping of two test bores.

No brine from Paleovalley Sediment resource estimate is included in the Ore Reserve and Production Target.

Paleochannel Basal Sand

The estimated resource in paleochannel basal sand has a high and moderate degree of confidence. The data is adequate to allow confident interpretation of the geological framework which is based on a good density of geophysical data and some historic drilling. The Resource is reported in part as a **Measured Resource** (10.6%) and an **Indicated Resource** (89.4%).

The test pumping data from the 10-day test and the consistent brine grade over that period is adequate to define a measured resource for the zone of influence for the test. Analysis of the time drawdown response in the pumping and deep monitoring bore indicates a radius of influence from the 10-day test as being 2.5 km, therefore it can be concluded that a 5 km length of channel has been hydraulically tested. Given that the channel on the tenements is 47 km long, 5 km represents 10.6% of the paleochannel length.

The continuity of brine concentration between very widely spaced samples is assumed and seen in the similar chemistry between TB3-4 and TB5-7. The estimate is adequate to inform the design of a numerical model which forms the basis of the mine plan. The remainder of the resource is reported as an Indicated Resource.

The paleochannel remains confined and under pressure for the duration of the planned production and is not dewatered by pumping. The hydrostatic pressure in the paleochannel is reduced by pumping, and groundwater is drawn toward the pumping bores. This water is replaced by water drawn into the paleochannel from the regional groundwater system, and vertically down by slow leakage from the overlying clay. The water drawn into the paleochannel replaces the water drawn out by pumping. Inflow both laterally from the regional system, and vertically from the overlying clay will transport additional dissolved potassium to the paleochannel. However, additional potassium has not been considered in the resource depletion calculation.

Results

The results of the Mineral Resource Estimate are summarised in the body of the report.

Cut-off Grades

Within the salt-lake extent no low-grade cut-off or high-grade capping has been implemented due to the consistent nature of the brine assay data. No aggregate intercepts have been calculated.

Mining and Metallurgical Methods and Parameters

It is assumed that the Brine resource will be mined by gravity drainage to a network of trenches excavated into the Playa Surface and an array of production bores completed in the paleochannel basal sand.

Pilot Plant test work has been completed to confirm the process flowsheet to be used at the Lake Way Project to recovery SOP from the Lake Brine (refer ASX Announcement 18 September 2019).

Environmental impacts are expected to be; localized reduction in saline groundwater level, surface disturbance associated with trench, bore, and pond construction and accumulation of salt tails. The project is in a remote area and these impacts are not expected to prevent project development.

The project is located with the Goldfields Groundwater Proclamation Area. A license to take groundwater will be required under the Rights in Water and Irrigation Act 1914. This Act is administered by the Government of Western Australia Department of Water and Environmental Regulation.

APPENDIX D - JORC CODE, 2012 EDITION – TABLE 1

Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole 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 presentively 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	Sampling involved the excavation of test pits over the tenement area to a depth of 4mbgl or weathered basement whichever was encountered first. Four trenches were also dug to 4m depth. A brine sample and duplicate were taken from each test pit and trench for analysis. From the test pump brine samples were taken after 1 hour and every 24 hours thereafter until the end of the test. Samples were taken manually by initially rinsing out the bottle with brine from the pit or trench and then placing the bottle in the test pit or trench and allowing it to fill. Samples were analysed for K, Mg, Ca, Na, Cl, SO_4, HCO_3, NO_3, pH, TDS and specific gravity. Each test pit was geologically logged and a sample taken each 1m depth. Test pumping from the trenches and test pits used a diesel driven trash pump coupled to a level switch. Test pumping from the borehole was carried out using an electric submersible pump powered by a diesel generator at the surface. Water levels in the borehole, piezometers, test pits and trenches were logged manually and by pressure transducer with barometric pressure and brine density correction. Column tests were carried out on 12 samples in order to understand the leaching potential of potassium (K) from lake bed sediments at Lake Way, Wiluna. The results of the column leaching tests support modelling of K grade during production, primarily the mass of K produced as a function of K held in pore space and mass of K produced per unit volume (kg/m^3). The tests also assessed the effect on K concentration of increasing pore volumes of water flushing through the sediments, to approximate K grade dilution during rainfall recharge or during the initial stages of fresh lake filling events.
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.).	13 Shallow auger holes were drilled to a maximum depth of 7mbgl at a diameter of 100mm. A continuous insitu core was abstracted for laboratory testing. The core was not orientated. Trenches and test pits were dug with an excavator. Test pumping occurred in pre-existing boreholes drilled in 1992.
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.	A continuous insitu sample was taken during auger drilling. Recoveries were 90%+, below the water table all samples were 100% saturated, upon retrieval the ends were sealed with duct tape to preserve the saturation. The samples were sent to Core Laboratories Australia Perth branch for total and drainable porosity and hydraulic conductivity analysis. Given the homogeneous nature of the lake surface there is no bias and the samples are representative of the lakebed. Samples from the test pits were logged each bucket and a representative sample bagged.

Criteria	JORC Code explanation	Commentary
		100% of excavated sample was available for sampling. The ability to see the bulk sample facilitated the selection of a representative sample. There is no relationship between sample recovery and grade and no loss of material as a result of excavation.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource 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 geological logging is sufficient for the purposes of identifying variations in sand/ clay and silt fraction within the top 4 -7m. For a brine abstraction project, the key parameters are the hydraulic conductivity and storativity of the host rock, which will be determined during test pumping of the trenches. The logging is qualitative. The entire depth was logged in every case.
Sub-sampling 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 insitu 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.	Full insitu core was used for porosity determination. Not applicable, core drilling. At all test pits brine samples were taken from the pit after 24hours or once the pit had filled with brine. The brine samples taken from the pits are bulk samples which is an appropriate approach given the long-term abstraction technique of using many kilometres of trenches to abstract brine from the upper 4m. The brine samples from the test pump were taken after 1 hour and then at 24 hours and every subsequent 24 hours. The brine samples are bulk samples from the paleochannel aquifer which is an appropriate approach given the long-term abstraction technique of using a borefield located along the length of the paleochannel. All the samples taken were incorporated into a rigorous QA / QC program in which Standards and Duplicates were taken. The samples were taken in sterile plastic bottles of 250ml capacity. Excavated lake bed samples were sealed in plastic bags. For all brine samples (original or check samples) the samples were labelled with the alphanumeric code Y8001, Y80002. Lake bed samples were labelled with the test pit locator LYTT01, LYTT02 etc. and the depth from which they were taken.
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.	The brine samples were sent to Bureau Veritas Laboratories in Perth, WA with the duplicates being held by SO4. Every 10th duplicate was sent to Intertek, an alternate laboratory for comparison purposes. No laboratory analysis was undertaken with geophysical tools. Soil samples and laboratory derived hydraulic conductivity, total porosity and drainable porosity samples were analysed by Core Laboratories in Perth WA. All laboratories used are NATA certified. The leaching tests were carried out at EGS Services laboratories, the procedures used were appropriate and the results consistent.
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.	Not applicable due to consistent brine concentration. No twin holes drilled. All sampling and assaying is well documented and contained on SO4's internal database. No adjustments have been made to assay data.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and	All coordinates were collected by handheld GPS.

Criteria	JORC Code explanation	Commentary
	other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	The grid system is the Australian National Grid Zone MGA 51 (GDA 94) Topography is controlled by site specific lidar survey.
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.	The lake area contained within the tenements was calculated by digitising the lake surface and removing the area covered by the islands and the dewatered area of the Williamson pit, the approximate area is 181.1km^2. 49 test pits and 5 trenches were excavated over the tenements surface resulting in 1 excavation per 3.3km^2, which is a high density of investigation for a salt-lake and sufficient to establish variations in depth to basement, sedimentology and local hydraulic conductivity. The valley resource estimate (Paleochannel Sediment and Paleochannel Basal Sand) is controlled by 199 historic drillholes to define basement depth and overlying fill. This includes 51 drillholes completed by WMC Resources Limited (**WMC**) to define the groundwater resources of the paleochannel. Two of these historic bores were test pumped. Each test pump represents a single point source from within the paleochannel, and the use of standard test pumping analysis provides an estimation of the radius of influence of the pumping which means that a determined length of the paleochannel has been hydraulically tested. Sample compositing not applied.
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.	There are no structural or geological controls with respect to sampling the lake bed sediments. The variation in depth to basement does control the potential depth of future trench systems to the west of Williamson pit and the main island. Geological influence on the brine is limited to the aquifer parameters of the host rock, namely the hydraulic conductivity, porosity and storage parameters. The drill holes are vertical.
Sample security	• The measures taken to ensure sample security.	SO4 field geologists were responsible for bagging and tagging samples prior to shipping to the BV lab in Perth and the SO4 offices. The security measures for the material and type of sampling at hand was appropriate.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	Data review is summarised in the report and included an assessment of the quality of assay data and laboratory tests and verification of sampling and assaying. No audits of sampling techniques and data have been undertaken.

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.	The Lake Way Project comprises tenements held by Salt Lake Potash Limited (SO4 or the Company) and includes those recently acquired from Blackham Resources Limited (Blackham). SO4 holds tenements covering the south east of the lake, including granted Exploration licences E53/1878, E53/1897, Exploration Licence Applications E53/2057, E53/2059 and E53/2060, and Mining Lease application M53/1102. The Company has subsequently entered into a Sales Agreement with Blackham to acquire the following tenements; Exploration licences E53/1862, E53/1905, E53/1952, E53/1863, Mining Licences, M53/121, M53/122, M53/123, M53/147, M53/253, M53/796, M53/797, M53/798, M53/910, Prospecting Licences P53/1642, P53/1643, P53/1644 and P531645, P53/1646, P53/1666, P53/1667, P53/1668, Miscellaneous licence L53/51, L53/207, Exploration Licence applications E53/1966 and E53/2049.

Criteria	JORC Code explanation	Commentary
		The Sales Agreement completed on 7 October 2019.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	There is a database of approximately 6200 boreholes across Lake Way. The primary source for the information is the publicly available Western Australian Mineral Exploration (WAMEX) report data base. Recent sterilisation drilling has also been undertaken by Blackham to the south and east of the BRT area. The majority of previous work has been concerned with investigating the bedrock and calcrete for gold and uranium, it is of limited value in defining the stratigraphy of the lakebed sediments. The data has been shown to be useful in the determination of the depth to base of lakebed sediments and has been used to develop an overall estimate of the volume of lake bed sediments that has been applied to the mineral resource calculations. WMC undertook a process water supply investigation into the paleochannel down the eastern shore consisting of 7 lines. Five production bores were installed and 4 tested, of these 4, 1 was prospective for brine.
Geology	• Deposit type, geological setting and style of mineralisation.	The deposit is a salt-lake brine deposit. The lake setting is typical of a Western Australian palaeovalley environment. Ancient hydrological systems have incised palaeovalleys into Archaean basement rocks, which were then infilled by Tertiary-aged sediments typically comprising a coarse-grained fluvial basal sand overlaid by palaeovalley clay with some coarser grained interbeds. The clay is overlaid by recent Cainozoic material including lacustrine sediment, calcrete, evaporite and aeolian deposits.
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 • 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 • 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.	Thirteen auger holes were drilled to a maximum depth of 7m. These holes were insitu sampled for specific yield testing in the lab and brine samples were taken. Test pits and trenches were excavated on the lake surface and one existing bore test pumped. All auger, test pit, trench and borehole details and locations of all data points are presented in the report.
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.	Within the salt-lake extent no low-grade cut-off or high-grade capping has been implemented due to the consistent nature of the brine assay data. Test pit and trench data aggregation comprised calculation of a hydraulic conductivity, transmissivity and drainable porosity for the whole sequence. The brine analysis taken during the test pump was consistent throughout the test. Aquifer performance during the test was analysed to derive aquifer Transmissivity and storativity.

Criteria	JORC Code explanation	Commentary
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 downhole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The chemical analysis from each of the test pits has shown the that the brine resource is consistent and continuous through the full thickness of the Lake Playa sediments unit. The unit is flat lying all test pits were excavated into the lake sediments to a depth of 4m or basement, the intersected depth is equivalent to the vertical depth and the thickness of mineralisation.
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.	All location maps and sections are contained within the body of the report.
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 results have been included in the body of the report or Appendices.
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 material exploration data has been reported within the body of this report and previous MRE reports. This includes the results of the passive seismic surveying undertaken. In total 55 passive seismic lines have been run over the lake and have been used to identify the route and dimensions of the paleochannel aquifer.
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.	Drilling, hydraulic testing and brine analysis and grade modelling of up to 18 production bores and 22 monitoring bores within the eastern paleochannel to upgrade the confidence of the resource estimate.

Section 3 – Estimation and Reporting 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 database. Extensive QA/QC as described in Section 3 *Sampling Techniques and Data.*
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.	A site visit was undertaken by Mr Ben Jeuken from 29th to 30th April 2018. The Competent Person visit was documented in Letter Report SO4-18-1-L001 (Groundwater Science, 2018). Numerous site visits have been undertaken by Mr Robert Kinnell in his capacity as the Exploration Manager for SO4.
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 shallow geological profile beneath the lake is relatively homogenous. The porosity of the material is consistent with depth; hence the geological interpretation has little impact on the resource except to define its thickness. The island is excluded from the resource estimate as access is not permitted. Mining the Williamson Pit has resulted in an area of approximately $4km^2$ being dewatered. This area has also been

Criteria	JORC Code Explanation	Commentary
	• 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.	excluded from the resource estimate. The paleochannel geometry in the vicinity of the test pumped bore has been interpreted from geophysical cross sections, the thickness of the paleochannel is taken from the 1992 geological logs.
Dimensions	• 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 area of the northern lake area of the resource extends $139.5km^2$, the area of the southern lake area extends $41.6km^2$. The top of the lakebed resource is defined by the water table surface; on average 0.3m below ground surface. The average thickness of the resource is 5.3m as determined from the leapfrog model. The extent of the paleochannel resource has been defined as a result of modelling the historic drillhole data, the WMC bores and the recently completed passive seismic geophysical surveys. The length of the paleochannel on SO4 and Blackham tenements is approximately 47km, the channel remains open to the north, south and via the Yeleerie tributary to the west. The total volume of sediment infilling the paleovalley has been exported from the geological model. The volume is 16,300 Mm^3. The extent and thickness of the paleovalley clays extending from 8m depth (Base of LBS) to the top of basement or Paleochannel Basal Sand is 15,200 Mm^3. The extent and thickness of the Paleochannel; Basal sand resource is defined by the geological model. The total volume of the unit is estimated to be 1,100 Mm^3. The Williamson Pit volume has been estimated as 1.26M m^3.
Estimation and modelling techniques	• 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 grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Brine concentration was interpolated using both Ordinary kriging and Voronoi polygons. The thickness of the lakebed sediments was developed using the Leapfrog software package and an inverse distance weighted calculation applied to the WAMEX boreholes database covering Lake Way. Average test pit spacing was 500m. No check estimates were available. No recovery of by-products was considered. Deleterious elements were not considered. Selective mining units were not modelled. Correlation between variables was not assumed. The geological interpretation from the WAMEX database and the geophysical cross sections were used to inform a 3D geological model which was used to define the thickness of the lakebed sediments as well as the location, width and depth of the paleochannel. Grade cutting or capping was not employed due to the homogenous nature of the orebody. Drainable porosity for the lakebed sediments was calculated by analysing the test trench pumping data and also from laboratory analysis of samples. Total Porosity was determined by laboratory analysis of samples. 55 seismic lines were run across the lake. The lines were generally orientated east west in order to cross perpendicular to the paleochannel, some lines were also orientated north south in order to provide control for the east west sets. The lines were located approximately 2.5km apart. The seismic response was calibrated using the drill hole logs from the WMC programme.

Criteria	JORC Code Explanation	Commentary
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Not applicable to brine resources. See discussion of moisture content under *Bulk Density.*
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	No cut-off parameters were 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.	Mining will be undertaken by gravity drainage of brine from trenches and by pumping from the deep paleochannel. Test pumping of 5 trenches was undertaken to obtain preliminary aquifer characteristics for the lakebed sediments. The initial resource was based on the testing of two WMC bores located within the paleochannel. During this phase of work one of the paleochannel bores was retested and a constant rate test run for 10 days, this provided greater certainty around the aquifer characteristics over the limited length of the radius of influence as result of testing at this bore.
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.	The brine is characterised by elevated concentration of potassium, magnesium and sulphate elements and distinctly deficient in calcium ions. Such a chemical makeup is considered highly favourable for efficient recovery of Schoenite from the lake brines (the main feedstock for SOP production), using conventional evaporation methods.
Environmental factors or assumptions	• 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.	Environmental impacts are expected to be; localized reduction in saline groundwater level, surface disturbance associated with trench and pond construction and accumulation of salt tails. The Project is in a remote area and these impacts are not expected to prevent Project development.
Bulk density	• 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.	Bulk density is not relevant to brine resource estimation. Volumetric moisture content or volumetric porosity averaged 43% v/v.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories.	The data is considered sufficient to assign a Measured resource classification to brine within the northern lakebed sediments and a portion of the paleochannel within the radius of influence of the test

Criteria	JORC Code Explanation	Commentary
	• 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.	pumping. An indicated resource was assigned to the remainder of the paleochannel. An inferred resource was assigned for the lakebed sediments to the south and the paleochannel clays. The result reflects the views of the Competent Person.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	No audit or reviews were undertaken.
Discussion of relative accuracy/ confidence	• 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 should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	For both the lakebed sediments and the paleochannel the estimated tonnage represents the in-situ brine with no recovery factor applied. It will not be possible to extract all of the contained brine by pumping from trenches. The amount which can be extracted depends on many factors including the permeability of the sediments, the drainable porosity, and the recharge dynamics of the aquifers. No production data are available for comparison.

Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code Explanation	Commentary
Mineral resource estimate for conversion to Ore Reserves	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. • Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves	The Ore Reserve is made up of 100% of the measured resource for the northern lakebed sediments and 10.6% of the paleochannel and the indicated resource for the remaining 89.4% of the paleochannel. No inferred resources are included in the Ore Reserve. Mineral resources are inclusive of the Ore Reserve.
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.	A site visit was undertaken by Mr Ben Jeuken from 29th to 30th April 2018. The CP visit was documented in Letter Report SO4-18-1-L001 (Groundwater Science, 2018). Numerous site visits have been undertaken by Mr Robert Kinnell in his capacity as the Exploration Manager for SO4.
Study Status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore reserves. • The Code requires that a study to a least pre-feasibility study level has been undertaken to convert Mineral Resource to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically	A Bankable Feasibility Study (BFS or the Study) has been undertaken to convert Mineral Resources to Ore Reserves. The conversion of Mineral Resources to Ore Reserves has been limited to the Probable Reserves category. The volume of available reserves has been determined by a complex numerical model. Modelling has been completed giving consideration to the Australian Groundwater Modelling guidelines (Barnett et al. 2012) using the Modflow USG Transport, Modflow Surfact, and Groundwater Vistas 7 and taking into consideration modifying factors such as recharge and evapotranspiration. The Ore Reserve has been completed as a result of the Study with

Criteria	JORC Code Explanation	Commentary
	viable and that material modifying factors have been considered.	an implied +/- 15% accuracy. A mine plan has been developed utilising all reserves for an initial abstraction rate of 18.2GL/year and production rate of 118,700 tonnes per annum delivered into the evaporation ponds.
Cut off parameters	• The Basis of the cut-off grade or quality parameters employed.	No cut off grade has been applied. Grade depletion will be managed through incorporating additional trenches and bores as well as within the plant through the addition of KCl.
Mining factors or assumptions	• The method and assumptions used as reported in the Study convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). • The choice, nature and appropriateness of the selected mining methods and other mining parameters including associated design issues such as pre strip, access etc. • The assumptions made regarding geotechnical parameters, grade control and pre production drilling. • The major assumptions made and Mineral Resource model used for pit and slope optimisation (if appropriate) • The mining dilution factors used • The mining recovery factors used • Any minimum mining widths used • The manner in which inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion • The infrastructure requirements of the associated mining methods	The volume of convertible Mineral Resource has been determined through the numerical modelling process. Modelling has been completed giving consideration to the Australian Groundwater Modelling guidelines (Barnett et al. 2012) using the Modflow USG Transport, Modflow Surfact, and Groundwater Vistas 7. The numerical model was constructed based on the parameters determined during the field testing and analysis, such as test pit geology, test pumping results, geophysical surveys, boundary conditions. The numerical model was calibrated to steady state using an iterative process to reduce the residual error between the predicted and observed data. Sensitivity analysis was performed to test assumptions made during development of the models. Model predictions for resource recovery over the life of mine incorporate trenches and bores to the required flow and manage grade depletion. Incorporation of rainfall and surface water recharge based on a nominal 20-year period. Column tests to assess the liberation of salts from the retained porosity as a result of fresh water recharge events. Incorporation of rainfall and surface water recharge based on a nominal 20-year period. 2D Cross-sectional groundwater flow and transport modelling to assess grade depletion with time. Brine will be extracted via gravity inflow into a network of trenches dug within the lakebed sediment and a borefield installed along the length of the paleochannel. Test trenches were dug and their stability observed over time as well as their performance during test pumping. Similarly, a bore was test pumped within the paleochannel both methods of abstraction were deemed to be feasible and appropriate. The field investigations informed the length of trenches required and the cost to install. The geometry of the paleochannel and the anticipated flows informed the cost required to abstract a sustainable yield from the bores. The construction methodology and costings have been developed for the BFS. A brine transfer system has been developed, costed and hydraulically modelled to ensure that the required flow of brine can be delivered to the evaporation ponds to deliver 118,700 tonnes of potassium per annum.
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation • Whether the metallurgical process is well tested technology or novel in nature • The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied • Any assumptions or allowances made for the deleterious elements	The metallurgical process is appropriate for the mineralisation and similar techniques and plants are in operation elsewhere. The test work incorporated several stages of development including: • wind tunnel evaporation tests • bench scale metallurgical testing such as; crushing, flotation, conversion and crystallisation tests • larger scale field evaporation trials • locked cycle flowsheet testing • pilot processing of 5t of site field trial evaporated harvest salts Harvested salt was sent to world renowned potash laboratory,

Criteria	JORC Code Explanation	Commentary
	• The existence of any bulk sample or pilot scale test work and the degree to which such samples area considered representative of the orebody as a whole • For minerals that are defined by a specification has the ore reserve estimation been based on the approximate mineralogy to meet the specification.	Saskatchewan Research Council (SRC) for flowsheet development and testing. The flowsheet development program has tested the complete flowsheet from brine evaporation to produce harvest salts and converting these harvest salts to SOP, which has included the following steps: • Solar evaporation of Lake Way brine, on site, in sequential evaporation ponds, to produce harvest salt and to confirm site evaporation conditions • Harvesting of potassium bearing salts for flowsheet testing • Crushing potassium bearing harvest salts from Lake Way and determining mineralogy • Preparing potassium bearing harvest salts for flotation • Flotation of halite waste salt from potassium bearing harvest salts. • Conversion of potassium bearing harvest salts to schoenite using recycled crystalliser mother liquor • Secondary schoenite crystallisation from cooled mother liquor Conversion of schoenite to SOP product.
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Environmental impact assessments of mining and processing operations are well advanced, with some follow up hydrological, flora/fauna and heritage studies still required in support of approvals for full scale operation. These will be completed in Q3/Q4 2019. Effectively no waste rock is generated by the mining activity. Spoil produced by establishment of on-playa infrastructure has been tested and determined to be non-acid generating (Pendragon, 2019). Chemistry of process residues (halite, epsomite, bischofite) is well understood. Geotechnical assessment of proposed disposal sites has been completed to allow preliminary design of process residue stockpiles to be completed. The physical characterisation of process residues has been completed. Final design option will be confirmed in Q1/Q2 2020. Environmental applications for storage of process residues from Train 1 and Demonstration phases of the Project implementation have been lodged and are currently under assessment. Environmental applications for residue storages required for full scale operation will be submitted to government in Q3/Q4 2019.
Infrastructure	• The existence of appropriate infrastructure, availability of land for plant development, power, water, transportation (bulk commodities), labour, accommodation or the ease with which the infrastructure can be provided or accessed.	The Infrastructure at the mine, includes a Processing plant, workshops, warehousing, associated buildings including administration, first aid, mine rescue and training, crib and ablutions reagents shed, and lab facilities. All facilities are in close proximity and walking distance from each other. The site has two access points one for haul trucks delivering salts from the on lake and the other for normal traffic, including LVs and product/service deliveries. The Accommodation village is close to the operations, but far enough not to have any noise disturbance. The village will combine a construction camp and an operational camp to a maximum of 300 rooms to start, then as construction finishes, it will be demobilized leaving all common facilities and 100 operation rooms. The camp includes recreational facilities, waste water treatment plant and RO plant for potable water supply. The temporary Gen sets will be replaced with permanent power from the power station. A new Gas fired power station will accommodate the requirements of all the sites power needs. and located in close proximity to the process plant to enable waste heat recovery to be used in the Process plant. Diesel fuel will be delivered to the mine in road trains and a central fuel farm including 2x110kL tanks to support the operation. Raw water will be supplied from 2 bore fields. The capacity giving a total supply of 1.8GL. The demand of the process water plus potable water is approximately 1.75GL. West creek bore-field will be run by diesel gen sets, and the Southern bore field will utilise

Criteria	JORC Code Explanation	Commentary
		the existing mains infrastructure to be run by Blackham Resources Limited power station supply. Two independent HDPE pipe runs to supply raw water to the site in a raw water pond. Raw water will be treated to potable water standards at the village and distributed to other associated buildings. The water will meet the requirements of Australian Drinking Water Guidelines. Communications system to be installed, including microwave backbone into the site, plant wide WiFi system, camp WiFi , and free to air TV, Site wide private UHF radio system, Interface to all raw water bores, paleochannel bores and transfer pumping stations. Full plant communications for the process including CCTV for critical plant items. Access to the Goldfields Gas Pipe line approximately 26km to supply gas for the Power station and some process drying and water heating equipment. Main road access will be via and existing entrance on to the Goldfields Highway with some minor modifications to accommodate 60m super quad road trains.
Costs	• The derivation of or assumptions made regarding project capital costs in the study • The methodology used to estimate operating costs • Allowances made for the content of deleterious elements • The derivation of assumptions made of metal or commodity prices for the principal minerals and co products • Derivation of transportation charges • The basis for forecasting or source of treatment and refining charges penalties for failure to meet specs etc. • The allowances made for royalties both government and private	The capital cost estimate was based on the following criteria; • Work breakdown structure (WBS) • Estimate base date of Q3 2019 • Engineering design concepts and quantities for construction and fabrication • Direct labour hours and rates with allowances for distributable costs • Freight allowances • A Labour 'norms' contracting strategy • Self perform and contract • Use of estimates from key study contributors • Budget pricing from vendors and contractors The capital cost estimate was completed to an accuracy meeting the criteria of the *Association for the Advancement of Cost Engineering* (AACE) Class 3 +/- 15% accuracy. The operating cost has been developed around cost elements with the primary activities and items included. The following assumptions have been made associated with operating costs and the base case operating philosophy: • Overall management will be undertaken by SO4. • Owner operated operations for on-lake and process plant production. • A haulage contractor will be engaged to transport all pond harvest salt to the process plant. • A Haulage contractor will be engaged to provide all transport of SOP product form the site to the selected Port and back haulage of KCl to Wiluna. • Contractor proposals have been received and form the basis of transportation charges, port and shipping charges. • Accommodation villages will be Contractor operated, with a BOO contract for the capital cost of the village. • FIFO flights for all personnel will be arranged and managed by SO4 between Perth and Wiluna. • Diesel fuel will be purchased in bulk and distributed by SO4. • Gas will be supplied as Liquid Natural Gas (LNG) by a new lateral tie-in to the Goldfields Gas Pipeline (GGP). • Power will be provided via a Build Own Operate (BOO) contractor. • Carbon tax has been excluded. • Allowances for maintenance down time have been considered by operating unit. • All costs are in Australian dollars (AUD). • An exchange rate of AU$1.00 = US$0.68 has been used during operations where necessary. • GST has been excluded. Pricing assumptions have been based on an Independent market report prepared for the Lake Way Project.

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		Transportation costs have been based on a detailed proposal received from a leading logistics/haulage company. Penalties and premiums applied to the pricing assumptions are based on market information and supported by the independent market report. Government Royalties are based on the prescribed rates for a "finished product" being 2.5%. The SOP product that will be produced and sold from Lake Way will be in the form of a finished product. Private Royalties are based on negotiated rates with the determined Native Title group that covers the Lake Way Project.
Revenue Factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price, exchange rates, transportation and treatment charges, penalties, net smelter returns etc. • The derivation of assumptions made of metal and commodity prices for the principal metals, mineral and co products	Grade is based on detailed pilot plant testing work undertaken on salts that have been processed from Lake Way. Pricing assumptions have been based on an Independent market report prepared for the Lake Way Project. Exchange rates are based on the current spot rate. Transportation costs have been based on a detailed proposal received from a leading logistics/haulage company. Penalties and premiums applied to the pricing assumptions are based on market information and supported by the independent market report. Pricing assumptions of US$550 per tonne have been based on an Independent market report prepared for the Lake Way Project.
Market Assessment	• The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply into the future • A customer and competitor analysis along with the identification of likely market windows for the product • Price and volume forecasts and the basis for these forecasts • For industrial minerals the customer specification, testing and acceptance requirements to a supply contract	The SOP market has been assessed recently by experienced market analysis organisations such as CRU International (CRU) and Argus Media Group (Argus). Additionally, SO4 engaged Argus to complete a specific market analysis on SOP and on the supply/demand forecast taking into account the volume that will enter the market from SO4's Lake Way Project and other likely new entrants and existing capacity changes. CRU and Argus studies considered all the major SOP producers individually and the smaller producers on a geographic region basis. Customers were considered on a geographical region level to analyse regional demand. Argus and CRU employed best practice techniques to evaluate supply/demand balance and therefore likely price impacts to develop several scenarios for price and volume forecasts. Non-binding MoUs have been signed with potential customers. The proposed SOP grades exceed the market accepted specifications in several key parameters.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	The material assumptions used in the estimation of the production target and associated financial information are detailed in Appendix B of this Announcement. NPV sensitivity analysis to a range of the material assumptions is included in the section titled 'Economics – Sensitivity Analysis'
Social	• *The status of agreements with key stakeholders and matters leading to social license to operate.*	SO4 has been working collaboratively the representative group, Tarlka Matuwa Piarku Aboriginal Corporation (TMPAC), for the native title holders over the area within which the Lake Way Project is located. The Project is located on, and in the vicinity of Lake Way, which is an area of significance and sensitivity to the native title holders. SO4 and TMPAC have entered into a native title exploration agreement and are finalising a comprehensive land access agreement that provides certainty for the Project, cultural heritage management protocols and lasting social and economic benefits to the native title holders.
Other	• *To the extent relevant, the impact of the following on the project and/or on the*	Whilst production has been modelled on the basis of average recharge no account has been taken of the impact of a cyclonic event on operations and the resource. The project lies outside the primary cyclone path for NW Western Australia, however

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	estimation and classification of the Ore Reserves: • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of government agreements and approvals critical to the viability of the project, such as mineral tenement status and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	significant rainfall events associated with cyclones have impacted the area, the most recent being in 1994 – 1995. The Company has previously entered MOUs with Mitsubishi Australia Limited and Sinofert Holdings Limited setting out the basis for binding offtake agreements. The Company is progressing discussions with these parties and others with a view to signing binding offtake and marketing agreements for the future sale of its product. Environmental work to date has not identified any social or environmental factors that could constitute fatal flaws or insurmountable obstacles to gaining necessary statutory approvals. The approvals for the Project are currently being progressed and the Project schedule allows for these approvals.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	The Ore Reserve estimate for Lake Way is detailed in Table 6 in the body of the Announcement. The brine flow rate and concentration estimates are based on modelling and extrapolation of testwork which provides an Ore Reserve classed as Probable 2.4Mt of contained potassium includes 60% converted from the Measured resource category (100% of the northern lake bed sediments and 10.6% of the paleochannel), and 40% converted from the Indicated resource category (the remaining 89.4% of the paleochannel). No brine from the Inferred resource category is included in the Ore Reserve and Production Target. The results of the test pumping and the consistent nature of the brine grade within the paleochannel mean that the Measured and Indicated Mineral Resource Estimates have been converted to a Probable Ore Reserve. The northern zone of the lake playa has been classified as a Measured Mineral Resource Estimate for the initial 8m at surface. This resource has been converted to a Probable Ore Reserve given the effects of variable recharge, dilution and liberation of the mineral salts contained within the retained porosity across the lake bed surface. The results reflect the view of the Competent Person.
Audit or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	The numerical groundwater model used to define the ore reserve has been reviewed by Mr Hugh Middlemis of Hydrogeologic Pty Ltd. Mr Middlemis is an independent consultant with over 18 years' experience in brine hydrogeology and modelling. The review concluded: • The overall 3D and 2D modelling methodology, including the predictive scenarios and selected sensitivity/uncertainty assessments, are consistent with best practice. The study is fit for the purpose of guiding mining project feasibility assessments. • Ongoing monitoring and other investigations will provide additional data for future model refinements and improvements in performance and for comprehensive uncertainty analysis. Such progressive updates should, in turn, be used to guide future monitoring and management programs.