# ASX Release



Wednesday 11 January 2017

## **Resource Statement and Technical Report**

# Highlights

- The Beyondie Sulphate of Potash (SOP) Project has a Drainable Brine:
  - Indicated Mineral Resource of **0.94Mt SOP** @ 7,145 mg/l K (**15.9 kg/m<sup>3</sup> SOP**)
  - Inferred Mineral Resource of **18.84Mt SOP** @ 6,051 mg/l K (**13.5kg/m<sup>3</sup> SOP**)
- For comparison with other Australian Projects, which quote Resources based on **Total Brine Volume (porosity)**, the project comprises of **148Mt SOP**.
- The Project has **high Potassium grades**, with the key "high grade" lakes to be targeted as initial production areas.
- **Low impurity levels** with a Sodium to Potassium ratio of 8.9 : 1 minimising the need for Sodium Chloride (NaCl) waste salt disposal requirements.
- Drilling planned to commence in Q1 2017 to upgrade resource confidence.

For the purposes of ongoing Compliance Statements and future ASX Releases that relate to Mineral Resources Estimates, Kalium Lakes Limited (KLL) ("Kalium Lakes" or "the Company") is pleased to provide the attached "*Technical Report for the Beyondie Potash Project, Australia, JORC (2012) and NI 43-101 Technical Report*" dated 23 May 2016, authored by K-UTEC AG Salt Technologies (K-UTEC) [see Appendix A].

This report can also be viewed on the company website at: <u>www.kaliumlakes.com.au</u>. The Technical Report formed part of the 28 November 2016: Disclosure Document, "*Kalium Lakes Limited Independent Expert's Report Project Number AU9636 October 2016*" prepared by Snowden Mining Industry Consultants Pty Ltd.

## **K-UTEC Technical Report**

Kalium Lakes entered into an agreement with K-UTEC to prepare a Technical Report according to the guidelines of the JORC Code with reference to the CIM Best Practice Guidelines for Resource and Reserve Estimation for Brines.

K-UTEC is a private company and the successor of the former central German potash industry's "Kaliforschungsinstitut" (potash research institute). KUTEC has more than 60 years potash experience and has sufficiently experienced employees to qualify as a Competent Person. Due to the company's history K-UTEC's home is still in Sondershausen, the centre of the central German potash industry.



Kalium Lakes has adopted both a JORC Code and a Canadian Institute of Mining, Metallurgy and Petroleum (CIM) NI 43-101 standard of disclosure for the reporting of Mineral Resources. The CIM has developed best practice guidelines for Mineral Resource and Reserve estimation of Brines which requires the following to be determined:

- the extent of the Brine body and aquifer geometry;
- Brine elemental chemistry and variability;
- total porosity (Pt) and effective (drainable) porosity (Pe);
- specific yield  $(S_y)$  = yield of drainable fluid obtained under gravity flow conditions  $P_e = S_y + S_r$  (where specific retention  $(S_r)$  = retained fluid in aquifer material);
- permeability, hydraulic conductivity and transmissivity of sediment lithology;
- only specific yield should be used as the measure of total brine endowment not total porosity. This requires pump tests of sufficient duration to determine parameters;
- Ore Reserves need to consider bore field engineering, evaporation parameters and suitable process flowsheets for cost effective recovery of the target metal ions; and
- Brine Resources and Brine Reserves are to be reported as available cubic metres of Brine with a grade for the valuable elements (e.g, Potassium (K) and Magnesium (Mg)).

Based on data from the fieldwork and laboratory analyses an assessment of the Mineral Resource has been undertaken. The Mineral Resource and the Exploration Target for SOP at the Beyondie Potash Project are summarised in the following Table 1 and Table 3.

Level	Drainable Brine Volume (10 <sup>6</sup> m <sup>3</sup> )	K Grade (mg/l)	K (10 <sup>6</sup> tonnes)	SO₄ (10 <sup>6</sup> tonnes)	SOP (10 <sup>6</sup> tonnes)
Indicated Mineral Resource	58.7	7,145	0.42	1.38	0.94
Inferred Mineral Resource	1,396.3	6,051	8.45	24.06	18.84
Exploration Target	1,440 – 3,518	1,100 – 4,515	1.58 – 15.89	2.72 - 46.06	3.53 - 35.43

#### Table 1: Mineral Resource and Exploration Target – Drainable Brine

Measured Mineral Resources and Ore Reserves cannot be estimated until further work is completed. Note that the above Exploration Target is conceptual in nature, as there is insufficient exploration to define a Mineral Resource. It is uncertain if further exploration will convert an Exploration Target to a Mineral Resource.

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**For comparative purposes** the following Table is provided to compare the above Indicated and Inferred Resources, as well as the Exploration Target which are all based on **Drainable Brine**, with other Australian Listed Companies Resources which quote Resources based on **Total Brine Volume (porosity)**.

As can be seen the Total Brine Volume is significantly higher than reporting against the CIM Guidelines of Drainable Brine. For production, the drainable brine component is the most important factor as not all of the total brine can be extracted.

#### Table 2: Total Brine Volume (porosity) Estimates

Level	Total Brine Volume (10 <sup>6</sup> m³)	K Grade (mg/l)	K (10 <sup>6</sup> tonnes)	SO₄ (10 <sup>6</sup> tonnes)	SOP (10 <sup>6</sup> tonnes)
Indicated Mineral Resource	428.4	7,145	3.06	10.08	6.83
Inferred Mineral Resource	10,491.2	6,051	63.48	180.77	141.57
Exploration Target	22,504 – 27,616	1,100 – 4,515	24.75 – 124.69	42.53 – 361.56	55.20 – 278.06

\* Tonnage for K, SO4 and SOP was calculated from the average grades of K, SO4 and SOP and the Total Brine Volume for each resource.

Measured Mineral Resources and Ore Reserves cannot be estimated until further work is completed. Note that the above Exploration Target is conceptual in nature, as there is insufficient exploration to define a Mineral Resource. It is uncertain if further exploration will convert an Exploration Target to a Mineral Resource.

Kalium Lakes Managing Director, Brett Hazelden, considers, "The Beyondie Potash Project's high potassium grade, in combination with the low impurity levels of sodium chloride together with the close proximity to a port, gas pipeline and main road gives the project a key strategic advantage which will translate to capital and operational cost benefits."

KLL also confirmed that drilling, to obtain results that will increase confidence of mineral resources as outlined in its 28 November 2016 Disclosure Document, is planned to commence in Q1 2017.



#### Indicated Resource

Geological layer	Maximum thickness (m)	Area (km²)	Sediment volume (10 <sup>6</sup> m <sup>3</sup> )	Porosity (P)	Total stored brine (10 <sup>6</sup> m <sup>3</sup> )	Specific yield (Sy)	Drainable brine (10 <sup>6</sup> m <sup>3</sup> )	K grade (mg/L)	K mass (Mt)	SO₄ grade (mg/L)	SO₄ mass (Mt)	K₅SO₄ (Mt)
Alluvium	8	14	112	0.47	53	0.17	19	7,100	0.1	23,500	0.45	0.3
Clays	50	14	698	0.5	349	0.03	21	7,100	0.2	23,500	0.49	0.3
Basal sands	7	10	67	0.4	27	0.28	19	7,100	0.1	23,500	0.44	0.3
Total					428		59		0.4		1.38	0.9
Inferred Resource	ce											
Geological layer	Maximum thickness (m)	Coverage (km²)	Sediment volume (10 <sup>6</sup> m <sup>3</sup> )	Porosity (P)	Total stored brine (10 <sup>6</sup> m <sup>3</sup> )	Specific yield (Sy)	Drainable brine (10 <sup>6</sup> m <sup>3</sup> )	K grade (mg/L)	K mass (Mt)	SO₄ grade (mg/L)	SO₄ mass (Mt)	K₅SO₄ (Mt)
Alluvium	8	515	4,120	0.47	1,935	0.17	700	6,000	4.2	17,200	12.06	9.5
Clays	50	331	16,540	0.5	8,270	0.03	496	6,000	3.0	17,200	8.55	6.7
Basal sands	7	102	715	0.4	286	0.28	200	6,000	1.2	17,200	3.45	2.7
Total					10,491		1,396		8.4		24.06	18.9
Exploration Targ	get											
Geological layer	Maximum thickness (m)	Coverage (km²)	Sediment volume (106 m <sup>3</sup> )	Porosity (P)	Total stored brine (10 <sup>6</sup> m³)	Specific yield (Sy)	Drainable brine (106 m <sup>3</sup> )	K grade (mg/L)	K mass (Mt)	SO₄ grade (mg/L)	SO₄ mass (Mt)	KsSC (Mt)
Alluvium	8	683	5,470	0.4	2,187	0.1	547	1,100	0.6	1,900	1.0	1.3
Clays	50	867	43,360	0.45	19,512	0.01	434	1,100	0.5	1,900	0.8	1.1
Basal sands	7	329	2,300	0.35	806	0.2	461	1,100	0.5	1,900	0.9	1.1
Lower Total					22,504		1,441		1.6		2.72	3.53
Alluvium	8	683	5,470	0.5	2,733	0.2	1,093	4,500	4.9	13,100	14.3	11.0
Clays	50	867	43,360	0.55	23,847	0.04	1,734	4,500	7.8	13,100	22.7	17.5
Basal sands	7	329	2,300	0.45	1,036	0.3	691	4,500	3.1	13,100	9.0	7.0
Upper Total					27,617		3,519		15.9		46.1	35

Refer to Compliance Statement. The Beyondie Project Exploration Target is based on a number of assumptions and limitations and is conceptual in nature. It is not an indication of a Mineral Resource Estimate in accordance with the JORC Code and it is uncertain if future exploration will result in the determination of a Mineral Resource



#### **Compliance Statement**

The information in this report that relates to Exploration Targets, Exploration Results and Mineral Resources is based on information compiled by Thomas Schicht, a Competent Person who is a Member of a 'Recognised Professional Organisation' (RPO), the European Federation of Geologists, and a registered "European Geologist" (Registration Number 1077) and Anke Penndorf, a Competent Person who is a Member of a RPO, the European Federation of Geologists, and a registered "European Federation of Geologists, a

Thomas Schicht and Anke Penndorf are full-term employees of K-UTEC AG Salt Technologies (K-UTEC). K-UTEC, Thomas Schicht and Anke Penndorf are not associates or affiliates of Kalium Lakes or any of its affiliates. K-UTEC will receive a fee for the preparation of the Report in accordance with normal professional consulting practices. This fee is not contingent on the conclusions of the Report and K-UTEC, Thomas Schicht and Anke Penndorf will receive no other benefit for the preparation of the Report. Thomas Schicht and Anke Penndorf do not have any pecuniary or other interests that could reasonably be regarded as capable of affecting their ability to provide an unbiased opinion in relation to the Beyondie Potash Project.

K-UTEC does not have, at the date of the Report, and has not had within the previous years, any shareholding in or other relationship with Kalium Lakes or the Beyondie Potash Project and consequently considers itself to be independent of Kalium Lakes.

Thomas Schicht and Anke Penndorf have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Thomas Schicht and Anke Penndorf consent to the inclusion in the Report of the matters based on their information in the form and context in which it appears.

#### Forward looking statement

All statements, trend analysis and other information contained in this document relative to markets for Kalium Lakes Limited trends in resources, recoveries, production and anticipated expense levels, as well as other statements about anticipated future events or results constitute forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "believe", "plan", "estimate", "expect" and "intend" and statements that an event or result "may", "will", "should", "could" or "might" occur or be achieved and other similar expressions.

Forward-looking statements are subject to business and economic risks and uncertainties and other factors that could cause actual results of operations to differ materially from those contained in the forward-looking statements. Forward-looking statements are based on estimates and opinions of management at the date the statements are made. Kalium Lakes does not undertake any obligation to update forward-looking statements even if circumstances or management's estimates or opinions should change. Investors should not place undue reliance on forward-looking statements.

\*\*\* ENDS\*\*\*



#### Corporate Profile (as at 11 January 2017)

Kalium Lakes Limited is an exploration and development company, focused on developing the Beyondie Potash Project in Western Australia with the aim of producing Sulphate of Potash (SOP) for the domestic and international markets.

The Beyondie Potash Project comprises 15 granted exploration licences and a miscellaneous licence covering an area of approximately 2,400 square kilometres. This sub-surface brine deposit will supply an evaporation and processing operation located 160km south east of Newman.

#### Kalium Lakes Limited

ABN: 98 613 656 643 ASX: KLL Ordinary Shares on Issue: 121,794,740

#### **Board of Directors:**

Mal Randall	Non-Executive Chairman
Brett Hazelden	Managing Director
Rudolph van Niekerk	Non-Executive Director
Brendan O'Hara	Non-Executive Director
Rudolph van Niekerk	Non-Executive Director

Company Secretary: Gareth Widger

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# Appendix A

Technical Report for the Beyondie Potash Project, Australia, JORC (2012) and NI 43-101 Technical Report





# TECHNICAL REPORT FOR THE BEYONDIE POTASH PROJECT, AUSTRALIA JORC (2012) and NI 43-101 Technical Report - Short Report

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Person in Charge:	EurGeol Thomas Schicht
	EurGeol Anke Penndorf

Sondershausen, 23. Mai 2016

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#### K-UTEC Project Team (Geology, Resources, Geophysics)

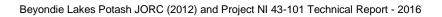
EurGeol Thomas Schicht, Qualified Geophysicist EurGeol Anke Penndorf, Qualified Geologist

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#### **Abbreviations**

Abbreviation	Full description	Abbreviation	Full description				
%	Percent	m	Metre				
°C	Degree Celsius	m²	Square metre				
Ag	Silver	m <sup>3</sup>	Cubic metre				
AI	Aluminium	Mg	Magnesium				
As	Arsenic	MGA94	Map Grid of Australia (1994)				
asl	Above Sea Level	MgCl <sub>2</sub>	Magnesium Chloride Milligrams per litre				
Au	Gold	mg/l					
AUD	Australian Dollar, Unit of Australian currency	Mn	Manganese Molybdenum				
В	Boron	Мо					
Ва	Barium	Na	Sodium				
Ве	Beryllium	NaCl	Sodium Chloride				
Bi	Bismuth	Nb	Niobium				
BOM	Bureau of Meteorology	Ni	Nickel				
Br	Bromine	NI	National Instrument				
Са	Calcium	Р	Phosphorus				
CaSO <sub>4</sub>	Gypsum, Calcium Sulfate	Pb	Lead				
Cd	Cadmium	Pd	Palladium				
Се	Cerium	Pr	Praseodymium				
Со	Cobalt	Pt	Platinum				
Cr	Chromium	Rd	Rubidium				
Cs	Caesium	Re	Rhenium				
Cu	Copper	S	Sulphur				
CIM	Canadian Institute of Mining, Metallurgy and Petroleum	Sb	Antimony				
CI	Chloride	Sn	Tin				
Er	Erbium	Si	Silicon				
Eu	Europium	Sm	Samarium				
EurGeol	European Geologist	SO <sub>4</sub>	Sulphate				
Fe	Iron	SOP	Sulphate of Potash				
Ga	Gallium	Sr	Strontium				
Gd	Gadolinium	Sy	Specific Yield				
Ge	Germanium	t	tonnes				
Hf	Hafnium	Та	Tantalum				
Hg	Mercury	Tb	Terbium				
Но	Holmium	Те	Tellurium				
In	Indium	Th	Thorium				
JORC	Joint Ore Reserves Committee	Ti	Titanium				
К	Potassium	TI	Tallium				
K <sub>2</sub> SO <sub>4</sub>	Potassium Sulphate (or SOP)	Tm U	Thulium				
KCI	Potassium Chloride		Uranium				
km	Kilometre	V	Vanadium				
km <sup>2</sup>	Square kilometre	W	Tungsten				
ktpa	Kilotonnes per annum	Y	Yttrium				
La	Lanthanum	Yb	Ytterbium				
Li	Lithium	Zn Zinc					
Lu	Lutetium	Zr Zirconium					



## **Short Glossary**

Short description	Full description							
Assessment work	The amount of work specified under mining law that must be performed each year in order to retain legal control of mining and exploration claims.							
Deposit	Body of rock or Brine containing a concentration of minerals.							
Conceptual Study	A Conceptual or Concept Study stands at the very early stage of a greenfield project to identify all possibilities and conditions to develop this project.							
Disclosure Requirements	The public disclosure of a Mineral Reserve must be demonstrated by a Pre- Feasibility Study or Feasibility Study.							
Pre-Feasibility Study	Preliminary study undertaken to determine if it would be worthwhile to proceed to the Feasibility Study stage.							
Feasibility Study	Economic study assessing whether a mineral deposit can be mined profitably.							
High grade	Rich concentration of the mineral in the deposit.							
Exploration Target (JORC)	An "Exploration Target" is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or Quality), relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource.							
Indicated Resource (CIM)	That part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit.							
Indicated Resource (JORC)	An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Ore Reserve.							
Inferred Resource (CIM)	An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.							
Inferred Resource (JORC)	An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.							
JORC Code (2012)	Widely accepted standard for reporting mineral resources and ore reserves established by the Australasian Joint Ore Reserves Committee.							

Short description	Full description							
Measured Resource (CIM)	Resource whose size and grade have been estimated from sampling at intervals that are spaced closely enough together so that the deposit's continuity is essentially confirmed.							
Measured Resource (JORC)	A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve or under certain circumstances, to a Probable Ore Reserve.							
National Instrument 43-101	Canadian rule that governs how issuers disclose scientific and technical information about mineral projects to the public.							
Potash	Potassium bearing mineral salt deposits; here as a brine.							
ppm	parts per million							
ppb	parts per billion							
Probable Reserve	Valuable mineralization that is not yet sampled sufficiently to be proven.							
Proven Reserve (CIM)	The economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.							
Proved Ore Reserve (JORC)	Depending upon the level of confidence in the various Modifying Factors a Measured Resource may be converted to a Proved Ore Reserve (high confidence in Modifying Factors).							
Reserve	Part of a mineral resource that can be mined profitably.							



#### **Compliance Statement**

The information in this document is extracted from the report titled "TECHNICAL REPORT FOR THE BEYONDIE LAKES POTASH PROJECT, AUSTRALIA, NI 43-101 Technical Report" and dated April 2016 (**Report**), that relates to Exploration Targets, Exploration Results and Mineral Resources and is based on information compiled by Thomas Schicht, a Competent Person who is a Member of a 'Recognised Professional Organisation' (**RPO**), the European Federation of Geologists and a registered "European Geologist" (Registration Number 1077) and Anke Penndorf, a Competent Person who is a Member of a RPO, the European Federation of Geologists, and a registered "European Geologist" (Registration Number 1152). The Report is available to view on the website of Kalium Lakes Potash Pty Ltd (Kalium or KLP): www.kaliumlakes.com.au. Kalium confirms that it is not aware of any new information or data that materially affects the information included in the original announcement regarding the Report and, in the case of estimates of Mineral Resources, which all material assumptions and technical parameters underpinning the estimates in the relevant announcement continue to apply and have not materially changed. Kalium confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original announcement regarding the Report.

Thomas Schicht and Anke Penndorf are full-term employees of K-UTEC AG Salt Technologies (K-UTEC).

K-UTEC, Thomas Schicht and Anke Penndorf are not associates or affiliates of Kalium or any of its affiliates. K-UTEC will receive a fee for the preparation of the Report in accordance with normal professional consulting practices. This fee is not contingent on the conclusions of the Report and K-UTEC, Thomas Schicht and Anke Penndorf will receive no other benefit for the preparation of the Report. Thomas Schicht and Anke Penndorf do not have any pecuniary or other interests that could reasonably be regarded as capable of affecting their ability to provide an unbiased opinion in relation to the Beyondie Lakes Potash Project.

K-UTEC does not have, at the date of the Report, and has not had within the previous years, any shareholding in or other relationship with Kalium or the Beyondie Lakes Potash Project and consequently considers itself to be independent of Kalium.

Thomas Schicht and Anke Penndorf have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Thomas Schicht and



Anke Penndorf consent to the inclusion in the Report of the matters based on their information in the form and context in which it appears.

Sondershausen, 23.05.2016

T. Slilr

Thomas Schicht European Geologist (EurGeol)

p.R\_ dos

Anke Penndorf European Geologist (EurGeol)



#### 0 Executive Summary

Kalium Lakes Potash Pty Ltd (KLP) is a privately owned company with ~ 2,400 km<sup>2</sup> of granted tenements at the eastern margin of the East Pilbara region of Western Australia. KLP is looking to develop a sub-surface brine deposit to produce 75-300 ktpa of Sulphate of Potash ( $K_2SO_4$  or SOP) product via evaporation and processing within the Beyondie/10 Mile tenement holding – the Beyondie Potash Project (BPP).

KLP entered into an agreement with K-UTEC AG Salt Technologies to prepare a Technical Report according to the guidelines of the JORC Code 2012 [1] with reference to the CIM Best Practice Guidelines for Resource and Reserve Estimation for Lithium Brines [2].

The description of the regional geology, local geology and hydrogeology was determined in KLP's Concept Study [3] and specified by a study report of AQ2 [16].

The Beyondie potash deposit is a brine, containing the target potassium and sulphate ions that could form a potassium sulphate salt. The brine is contained within saturated sediments in at least two separate horizons below the lake surface and in sediments adjacent to the lake. The lakes are located within the broader Ilgarari palaeochannel system that extends over hundreds of kilometres.

The alluvial sediments in the upper aquifer host the first brine horizon. The second brine horizon is connected to the lower aquifer within the sediments at the basis of the palaeochannel, the basal sands. There is a possibility that small clay layers are included, which can separate this aquifer into several sections, but generally it can be treated as more or less a uniform aquifer.

A drilling program and augering program with sampling of brine and soil material, geophysical fieldwork, laboratory analysis and pumping tests have occurred at the project area. Exploration activities are ongoing with further results expected to upgrade the mineral resource to a mineral reserve.

Based on data from the fieldwork and laboratory analyses an assessment of the Mineral Resource has been undertaken. The following Mineral Resources for SOP are estimated (see Table 1):



#### Table 1: Mineral Resources Summary

Level	Drainable Brine Volume (10 <sup>6</sup> m <sup>3</sup> )	K Grade (mg/l)	K (10 <sup>6</sup> tonnes)	SO₄ (10 <sup>6</sup> tonnes)	SOP (10 <sup>6</sup> tonnes)	
Indicated Resource	58.7	7,145	0.42	1.38	0.94	
Inferred Resource	erred Resource 1,396.3		8.45	24.06	18.84	
Exploration Target	1,440 - 3,518	1,100 - 4,515	1.58 - 15.89	2.72 - 46.06	3.53 - 35.43	

Measured Resources and Mineral Reserves cannot be estimated until further work is complete.

At the publication date of this Technical Report, a number of exploration works have been carried out. The results of the deposit exploration show the differences of the chemical composition of the brine from different well depths as well as laterally, e.g. from auger holes. The results of the chemical analysis of the brine, the long lasting constant rate pumping tests, grain size analysis, borehole tests, and geophysical investigations, have lead to values for Indicated and Inferred Resource classification. Furthermore, values for an additional exploration target have been extrapolated from the existing data and knowledge of the lake system within the underlying palaeochannel. As exploration work continues, the database as well as the classification of the resources and size of the resource may be increased.

The two possible mining methods, bores and trenching, will allow abstraction of the sub-surface brine. K-UTEC has developed a recovery method unique to the Beyondie brine, which allows a production route for SOP. According to the composition of the deposit brine the present concept considers the recovery of SOP as the principle product with the potential for producing the following by-products; Epsomite, Magnesium Hydroxide, Bischofite and Calcium Chloride Brine.

#### Introduction

1

Kalium Lakes Potash Pty Ltd (KLP) is a privately owned company with ~ 2,400 km<sup>2</sup> of granted tenements at the eastern margin of the East Pilbara region of Western Australia. KLP is looking to develop a sub-surface brine deposit to produce 75-300 ktpa of Sulphate of Potash (SOP) product via evaporation and processing within the Beyondie/10 Mile tenement holding – the Beyondie Potash Project (BPP).

KLP entered into an agreement with K-UTEC AG Salt Technologies to prepare a Technical Report according to the accepted JORC Code 2012 [1] with reference to the CIM Best Practice Guidelines for Resource and Reserve Estimation for Lithium Brines [2].



The purpose of the report is to provide KLP with an NI 43-101 and JORC (2012) compliant Mineral Resource estimate and lay the groundwork for a future Mineral Reserve and upgraded Mineral Resource estimate. The scope of the report covers the activities undertaken at the BPP area, the results and review of the results by the Qualified Persons/Competent Persons.

The sources of information and data in this report are varied, please refer to Section 25: References, for authors of works referenced in this report.

The K-UTEC Competent Persons visited the exploration area in August 2015 and were able to inspect: The deposit (overview from helicopter and several stops at some of the lakes), current drilling sites, geophysical fieldwork, core storage, trial solar evaporation ponds, borehole WB11\_TB1, helicopter drill rig, auger drilling team. Further the K-UTEC competent persons were able to meet and engage with KLP's Perth based consulting hydrogeologists AQ2.

#### 2 Reliance on other Experts

In preparing this report, the authors had to rely on reports not prepared under their supervision. These reports will be hereinafter identified as being third-party reports. This report includes the contents of the Concept Study (April 2015 [3]), a study compiled by KLP and its consultants [17] as well as a report by AQ2 [16]. AQ2 has extensive experience with water supply projects in hypersaline palaeochannels in Western Australia and as such it meets the Competent Person requirements for the assessment of а brine resource. K-UTEC have been independently engaged to provide specialist knowledge on the development of potash brine deposits around the world, specifically the Competent Person role related to the process of the brine.

K-UTEC provided guidance on the fieldwork and data acquistion related to the geology, hydrogeology, geophysics, chemical analyses and processing. The K-UTEC experts have sufficient experience in the exploration of potash and resource estimation for potash deposits as required by the CIM Standards and the JORC Code 2012 [1].

#### 3 Location and Property Description

The BPP region is located in Western Australia, east of the Great Northern Highway and extending into the Little Sandy Desert, and covers 2,400 km<sup>2</sup> of granted tenements. Proposed brine extraction and processing areas are located within the Little Sandy Desert catchment, which flows in an easterly direction towards inland lakes. There is no flow path to the ocean and as such it is a contained system.



#### 3.1 Coordinate System

The grid system used is the MGA94, Zone 51 coordinate system. All coordinates for tenement areas, boreholes, auger holes and geophysical traverses were given in this system. All overview maps and thematic maps, which have been generated by KLP, KLP consultants or K-UTEC, used this coordinate system. For reference, the Eastern Beyondie Lake is located at 227,000 E, 7,260,000 N.

#### 3.2 Property Description

Kalium Lakes Potash Pty Ltd has been granted the following Exploration Licences: E69/3306, E69/3309, E69/3339, E69/3340, E69/3341, E69/3342, E69/3343, E69/3344, E69/3345, E69/3346, E69/3347, E69/3348, E69/3349, E69/3351 and E69/3352. Additionally, KLP has been granted the Exploration Licence E38/2995 for the Carnegie East tenement. KLP has also been granted Miscellaneous Licence L52/162 for various activities including Beyondie site Access Road from the Great Northern Highway, Gas Pipeline, Communication and Water Supply.

Figure 1 shows the general location of the KLP exploration tenements and the tenement boundaries of the Beyondie Potash Project.

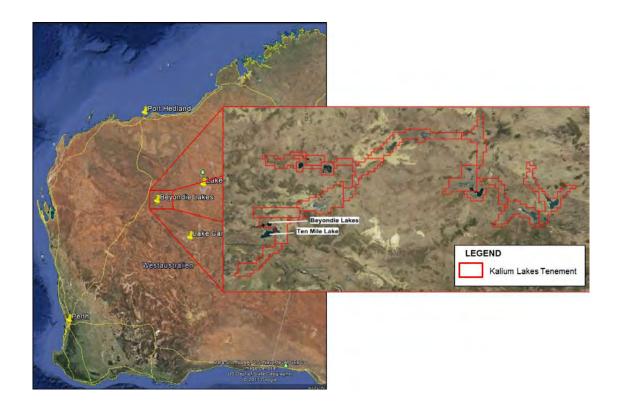


Figure 1: Beyondie Potash Project Outlines (partly taken from [3])



#### 3.3 Permits to Conduct Work

KLP has several granted Programmes of Work (POW) from the Department of Mines and Petroleum permitting KLP to undertake exploration activities on the granted tenements. KLP has 26D well construction licences from the Department of Water (DoW). KLP also has a Department of Environmental Regulation (DER) works approvals in place to commence pilot scale pump testing and pond installation associated with solar salt manufacturing.

# Accessibility, Climate, Physiography, Vegetation, Local Resources and Infrastructure

#### 4.1 Accessibility

4

The BPP site is located 160 km south, southeast of the iron ore producing town of Newman and 200 km north of the base metals and gold mining areas of Wiluna. Existing nearby infrastructure for site access, transit of personnel and product delivery, includes the Great Northern Highway (GNH), Goldfields Gas Pipeline and the Newman Airport, as shown in Figure 2 [3].

The BPP area is about 78 km to the east of the GNH and requires an upgrade of the existing access road that will connect the site with the GNH near the existing Kumarina road house. The upgrade will fall under the granted miscellaneous licence L52/162.

The BPP site access road follows a western alignment from the mine site over mostly flat country which contains good road base material, until it intersects with the GNH. Only minor non-perennial water courses need to be crossed by the access road.





Figure 2: Main Infrastructure [3]

#### 4.2 Climate

The BPP area is inside of the arid desert climate zone. The regional climate is characterised by hot summers and warm to cold winters with low annual rainfall. Most of the strongly seasonal rainfall occurs in the period between December and June. A large percentage of the annual total precipitation occurs over short periods, associated with thunderstorm activity and cyclonic lows. The closest weather station to the project area is at Three Rivers, approximately 127 km to the East, Southeast of the site. Table 2 outlines the meteorological conditions for Three Rivers as reported by the Bureau of Meteorology (BOM, [4]).

The maximum daily temperature (average) at the mine site rises to 39°C in January, the minimum average temperature is measured at 5°C with extremes to -5°C during June. Mean annual rainfall is 238 mm.



Table 2:Summary Meteorological Conditions for Three Rivers Station<br/>(Latitude: 25.13°S • Longitude: 119.15°E • Elevation 520 m) reported by BOM [4]

Statistic	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean max	39.3	36.8	35.4	30.3	25.3	21.1	21.0	23.4	27.8	31.9	35.2	38.0	30.5
Mean min	24.1	22.9	20.6	15.7	10.1	6.6	4.8	6.6	9.7	14.0	18.1	22.0	14.6
Mean rainfall	34.9	43.5	36.1	21.2	22.8	23.5	11.4	7.3	2.1	5.7	10.0	18.7	238.4
Mean monthly	547	473	430	304	186	144	157	203	271	397	451	537	4,100.0

Detailed regional meteorological data is currently being collected with a weather station, set up in February 2015.

Figure 3 and Figure 4 show the Australian Continental Evaporation and Humidity maps with the location of the BPP site. These figures indicate the BPP is located in an area expected to have some of the lowest humidity and highest evaporation rates in the country.

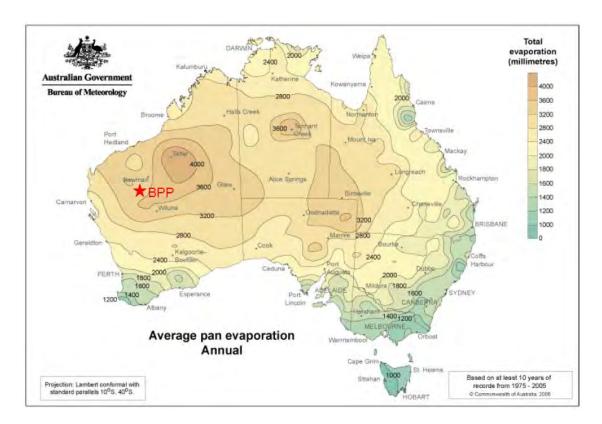


Figure 3: Australian Continental Evaporation [3]



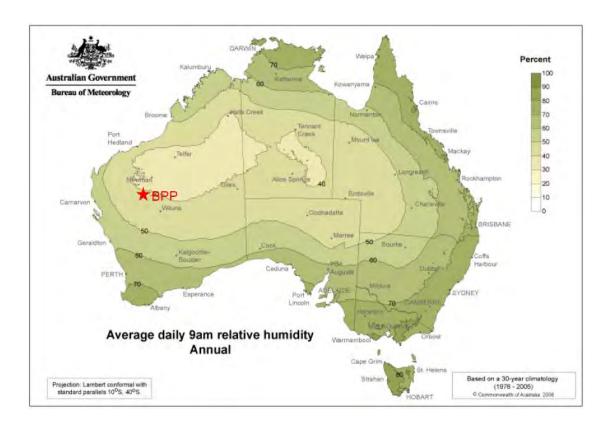


Figure 4: Australian Continental Humidity [3]

The wind data from Three Rivers Station shows a predominately eastern direction (see Figure 5 [3]).





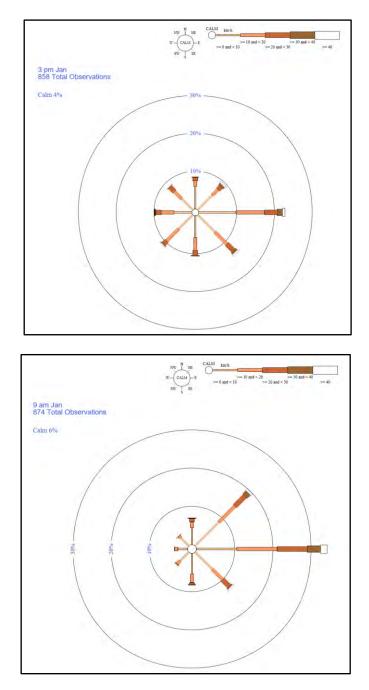


Figure 5: Wind Roses from Three River Station (BOM) at 3:00 pm and 9:00 am [3]

The annual solar exposure for the period of one year from 1 September 2014 to 31 August 2015 was between 20 and 22  $MJ/m^2$  as shown in Figure 6. Due to the climate the operations will be continuous with solar evaporation occurring all year and the process plant operating full time outside of maintenance.



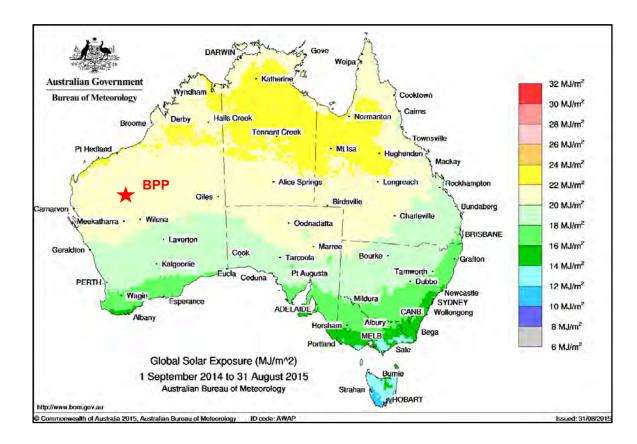


Figure 6: Solar Exposure [4]

#### 4.3 Physiography and Vegetation

The landscape around the BPP site is dominated by extensive sand dunes and flat plains. Several salt lakes lie within a palaeochannel system which is bordered by hills (bedrock). The altitude above sea level ranges between approximately 475 m (Lake Aerodrome) and 560 m (bedrock area north of Beyondie Lake 2). The vegetation in the working area is characterised by scant plant cover and small bushes. The lakes are mostly free of vegetation, except at borders or on islands.

#### 4.4 Local Resources and Infrastructure

The investigation area is not inhabited. It is located 78 km to the east of the Great Northern Highway and is currently accessible via an existing access track (see Figure 7 [3]).



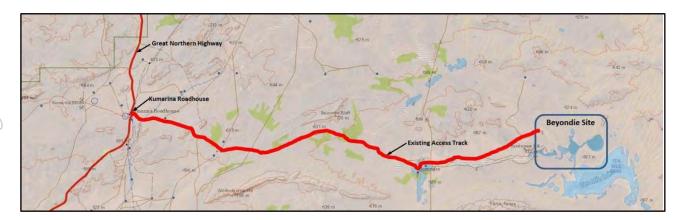


Figure 7: Access Track to the Beyondie Site [3] (L52/162)

The Beyondie Potash Project will concentrate supporting infrastructure mainly at the evaporation and processing area (**project area**) and will include offices, ancillary buildings, maintenance facilities, accommodation, diesel fuel, water, power, communications and Information Technology (**IT**) systems. Infrastructure will be progressively built and expanded throughout the phased development of the BPP.

Fuel for power generation can be sourced from diesel supplied by road train, gas supplied from within 78 km via a gas spur from the Goldfields Gas Pipeline (GGP) located next to the GNH or Compressed Natural Gas (CNG) supplied by road train.

Accommodation facilities will be required to house people inclusive of shutdown rooms at the project area, with the towns of Geraldton and Perth to source personnel with their own accommodation. When in operation the site will be operated by a Fly-In Fly-Out (FIFO) workforce, as is common with mining projects in Western Australia.

It is planned to construct administration buildings, maintenance workshops and warehouses, in addition a certified contractor or certified staff will operate an onsite laboratory.

Communications will be supplied for pilot scale works via satellite and then through a fibre optic and or microwave connection originating near the Kumarina Road House and extending 78 km to the project area along the alignment of the access road (L52/162). Mobile phone and communications towers will be installed as required for the initial development and expanded as necessary.



#### 5 History

6

There has been no previous exploration in the area of the Beyondie Potash Project. Prior ownership of the property and ownership changes are unknown.

#### Geological Setting and Mineralisation

#### 6.1 Regional Geology

The playa lakes identified under the Beyondie Postash Project are located directly at the southwestern edge of the Northwest Officer Basin (previously named Savory Basin). Among others, the Northwest Officer Basin contains the amended Sunbeam Group. The Beyondie Lake area is underlain by rocks of the Sunbeam Group, consisting mostly of sedimentary sandstones, siltstones, conglomerates and shales. The formations making up the Sunbeam Group (Grey et al, 2015 [14]) are:

- Watch Point Formation: brown to grey, fine- to medium-grained sandstone interbedded with grey to olive-green siltstone and silty sandstone and brown to blue-grey shale. Some fine-grained sandstone is glauconitic.
- Coondra Formation: coarse grained sandstone interbedded with pebble to boulder conglomerate in part matrix supported.
- Spearhole Formation: Coarse- to medium-grained sandstone, pebbly sandstone and conglomerate lenses.
- Mundadjini Formation: Fine to coarse-grained sandstone, conglomerate, siltstone, minor shale, mudstone, dolomite (some stromatolitic) and evaporites.
- Skates Hill Formation: contains dolomite, commonly stromatolitic, medium to fine-grained sandstone, siltstone and thick, discontinuous basal conglomerates.
- Boondawari Formation: diamictite, fine to coarse grained sandstone, conglomerate, siltstone, mudstone, dolomitic siltstone and dolomite, in part stromatolitic.

Intruded into the bedrock are dolerite intrusions (dykes and sills), while palaeochannels have been incised into the bedrock. The playa lakes are all part of the Ilgarari Palaeochannel System which joins the larger Disappointment Palaeochannel System about 200 km to the north-east.

Within the lakes, Quaternary lacustrine deposits are mainly clay, mud and silt which are usually saline and commonly gypsiferous. This region also contains a mixed sequence of Quaternary lacustrine and eolian deposits, characterised by saline clay, mud, silt and sand with gypsiferous (kopi) dunes. Surrounding the lakes are expanses of Quaternary eolian sand and sand sheets. Longitudinal (seif), chain and net dunes are abundant and there are some areas of ironstone



pebble veneer. Areas of valley calcrete, sheet carbonate and opaline silica are also present, especially to the southeast and west of Ten Mile.

#### 6.2 Palaeochannel Geology

The geology of the material infilling the palaeochannels in the Beyondie area was initially aluded to from the desktop studies, but has now been confirmed by recent drilling. To the north (250 km), the Paterson Demonstration site has identified palaeochannels filled with older Permian sediment of the Paterson Formation, while palaeochannels around Wiluna (250 km to the south) are filled with younger Tertiary sediments. The Paterson Formation sediments consist of poorly sorted sandstone, claystone, conglomerate, tillite and siltstones, all deposited in glacial, lacustrine, to fluvioglacial environments. At the Paterson Demonstration site (English et al, 2012 [7]) the palaeochannel infill consisted of Cenozoic alluvium, overlying tillic clay and basal sands/conglomerates of the Paterson Formation. The clays of the Beyondie area are believed to be Tertiary lucastrine deposits, not glacial Permean deposits.

The composition of Tertiary palaeovalley infill is remarkably uniform across Australia (Magee, 2009 [8]). It generally consists of fluvial sand overlain by lucastrine, fine-grained sediments (clays), underlain by a basal horizon of fluvial sands/conglomerates/gravels. The basal gravels/sands are usually carbonaceous with lignites and finer-grained interbeds representing swamp and valley lacustrine deposits. Basal sands can be up to 40 m thick in the thalweg of the palaeochannels (Johnson et al 1999 [9]). Reward Minerals (2014b) [12] have recorded the occurrence of a basal Tertiary sand, underlain by Patterson Formation in the palaeochannel in the Lake Dora West Palaeochannel System (400 km north-east of Beyondie Lake).

The recent drilling has shown that the palaeochannel of the Beyondie Lakes area is filled with an upper alluvium, an intermediate clay layer and a basal sand horizon (in the main thalweg of the palaeochannel).

Figure 8 shows an overview of the complete palaeochannel in the Beyondie Lakes area. It is divided in two sections in the western part:

- Lake Yanneri and Terminal Lake in the north, and
- Ten Mile Lake, Beyondie Lakes and Lake Sunshine in the south.



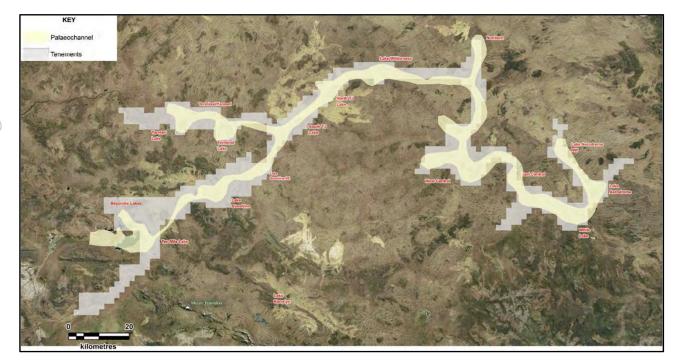


Figure 8: Full Palaeochannel Extention (map source: google earth)

#### 6.3 Local Tectonics

The geological map below (Figure 9, [5]) shows a fault line from southwest to northeast, crossing Beyondie Lake. A second fault line is running in parallel, about 10 km southeast of Lake Sunshine.

Dolerite dyke intrusions can be found north-west of Beyondie Lakes and south-east of Lake Sunshine.

Local exploration in the tenement area could support this information about tectonics and barren structures.



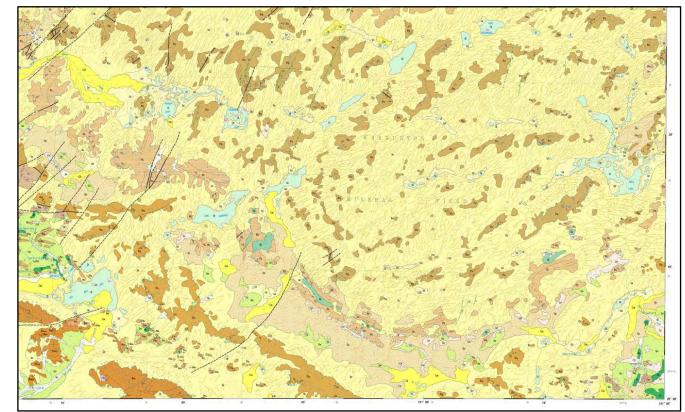


Figure 9: Regional Geology (BULLEN, 1995 [5])

#### 6.3.1 Groundwater

The groundwater flow is generally based on rainfall recharge to the aquifer system. The flow direction follows the morphological gradient from west to east. After major rainfall events, some surface water flow from the areas adjacent to the palaeochannel occurs, resulting in partial, temporary inundation of the playa lakes within the palaeochannel system. Further groundwater inflow from the valley sides into the channel can be assumed and will be tested in the future.

Adjacent to the salt lakes, especially to the south of Ten Mile Lake and to the west of Beyondie Lake are calcretes horizons, which can also form aquifer systems. Current creek courses and the associated alluvial sediment can also form shallow, low yielding aquifers. The calcretes and the creek courses contain mostly fresh water recharged by rainfall or flood events.

Site inspections have shown that groundwater levels are at or just below the lake surfaces. Drilling has shown connection between all of the aquifers, with the basal sand aquifer exhibiting confined conditions.

Based on the water levels at the surface in the lakes the gradient from the western edge of Ten Mile Lake to the eastern most lake of the Lake Sunshine system (33 km distance) is 0.0007 (a fall of 24 m) [3]. Across the Ten Mile Lake system, a lower gradient of 0.00009 occurs [3].

Height differences were calculated from Google Earth 10 m contour data, showing a surface elevation fall from the western edge (Ten Mile Lake) to the eastern edge (Lake Aerodrome) of 85 m.

The local gradients of the other parts of the palaeochannel were not considered at this time.

#### 6.3.2 Surface Water

Beyondie Lake and Ten Mile Lake are the upstream beginning of a row of salt lakes extending north and east to Lake Aerodrome as seen in the Figure 10. Together these lakes mark up the Ilgarari Palaeochannel System. All lakes are ephemeral, with localised surface water flow to the lakes and limited chance of flow from one lake to the next (due to the high dunes which block the flow paths, other than subsurfacely via the palaeochannel).

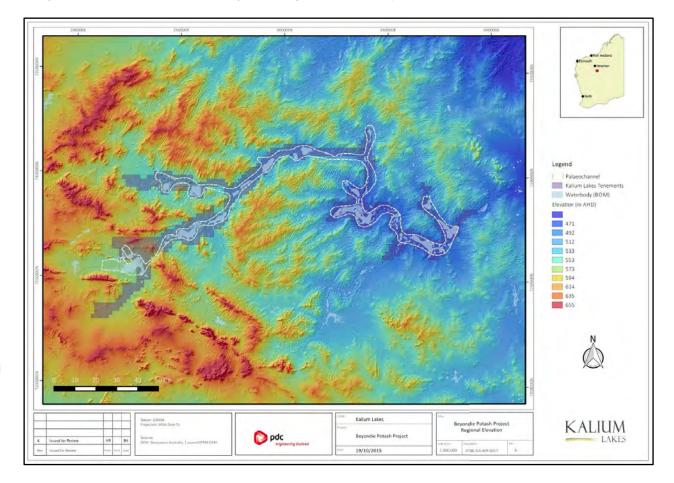


Figure 10: Surface Topography, Flow Direction, Palaeochannel and Tenements



#### 6.4 Aquifer Conditions

As a result from the fieldwork, two potential aquifer units have been identified within the palaeochannel system [16]. The main aquifer comprises a basal sand, deposited in the thalweg only. Four twelve inch bores (WB09, WB10, WB11, WB12) have been drilled into the basal sand aquifer, with two of the bores having been equipped as test boreholes (WB12\_TB and WB10\_TB). WB12\_TB was equipped with the screens installed above the sand layer, with only the base of the borehole open to the underlying sands.

Both boreholes have been pumped at rates of 20 l/s – 22 l/s, with the likelihood that the aquifer in both areas could deliver more with larger diameter, properly constructed production boreholes. The shallow surficial aquifer (gypsiferous sand and silts) only occurs on the bed of the current salt lakes. This aquifer is generally less than 10 m thick and is unlikely to support pumping from bores, so surface trenches will need to be utilised. At the current stage of exploration, no testing of shallow production boreholes or trenches has been undertaken, but Department of Mines approval has recently been granted to undertake trench testing.

To provide an indication of inflow rates to a trench, a simple one layer MODFLOW numerical model was utilised [16]. The model was set up to represent a single aquifer with uniform properties. The aquifer was assumed to extend over an area of 3 km by 3 km, with an aquifer thickness of 60 m. It utilised a permeability of 0.5 m/day and a specific yield of 10 %. The inflow to a 1 km long x 3 m wide x 3 m deep trench, located in the centre of the modelled aquifer and operated over a period of two years was predicted at 7 l/s.

## 7

#### Deposit Type and Mineralisation

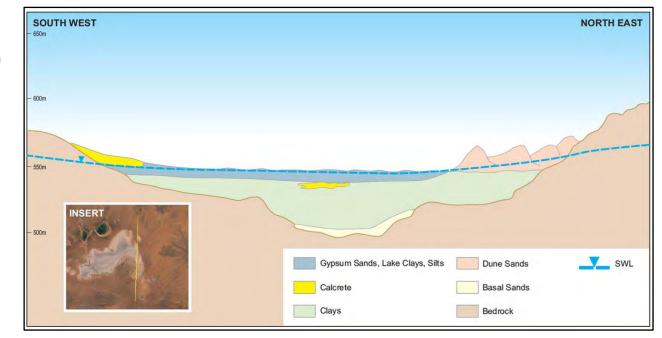
The Beyondie Potash Deposit is a brine, containing the target potassium and sulphate ions that could form a potassium sulphate salt. The brine is contained within saturated sediments in at least three separate horizons below the lake surface and in sediments adjacent to the lake. The lakes are located within a broader palaeochannel system that extends over hundreds of kilometres.

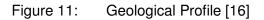
The lake bed alluvial sediments form the upper aquifer and host the first brine horizon. The third brine horizon is connected to the lower aquifer within the sediments at the base of the palaeochannel, the basal sands. Some small clay layers are included in the basal sands, which can separate this aquifer into several sections, but generally this can be treated as a uniform aquifer.

Between the basal sands and the alluvium an intermediate thick clay layer exists and was proven by the drilling programme. This clay hosts parts of the brine and can be treated as the second



brine horizon. It has to be tested if the brine is extractable from the clay. From literature values it is to expect that an extraction rate will be low.





#### 8 Recent Exploration

In August 2015 the Competent Persons of K-UTEC visited the Beyondie Lake area. During this visit, K-UTEC staff were able to observe mud rotary drilling at bore WB 11\_TB and could inspect the geophysical traversing being undertaken.

The site visit report by K-UTEC staff for the recent exploration is included at reference [13].

Recent Exploration has involved a complex data collection programme being undertaken, covering augering, geophysics, drilling, water and soil sampling and aquifer testing. It contained the following [16]:

- 9 boreholes drilled (diamond core) to collect representative geological samples;
- Augering at 336 locations across all of the lakes up to a depth of 1.5 m, to collect information on the geology and collection of groundwater samples;
- Six gravity geophysical traverse around Ten Mile Lake and a further twenty-two were run between Ten Mile Lake and the north and west of T Junction Lake;
- Installation of 20 monitoring boreholes;
- Installation of 4 test boreholes;



- Grain size analysis of 8 sand samples from 6 boreholes, 2 clay samples from 2 boreholes and 12 lake bed alluvium samples from 3 different lakes;
- 13 mini aquifer tests (1 hr pumping / 1 hr recovery);
- 3 constant rate / recovery tests
- Laboratory analysis of water samples collected from augering (400), drilling (87) and during the aquifer testing (26).

#### 8.1 Drilling

During 2015 nine diamond core holes were drilled, to take core samples for laboratory analysis. These holes were drilled with a HQ (60 mm) diameter.

Brine samples have been collected during the diamond drilling, by pumping from within the casing. A brine sample was collected after pumping had removed all possible drilling mud from the hole. With casing installed to the base of the hole, the sample collected was expected to be representative of the aquifer at the base of the hole, although flow down the outside of the casing from shallow aquifers cannot be discounted. It is possible, that mixed waters from multiple aquifer zones were collected and analysed.

The 2015 drilling included a number of different methods, such as air percussion (to install surface casing), mud rotary drilling (with tricone and/or blade bit), as well as blade/tricone bit drilling with brine as drilling fluid; all with 165 mm diameter. In September 2015 it was decided to use the diamond core drilling method and a casing advancer for further exploration drilling. Where casing was installed, brine samples were collected during the pump testing programme. Where basal sands were encountered, the diamond holes were reamed out to 300 mm and 200 mm gravel packed casing was installed. This has been completed on bores WB09, WB10, WB11, and WB12.

The ongoing drilling programme will ensure a borehole spacing of 1 km to 3 km over the main palaeochannel area.

All geological samples collected during all forms of drilling have been qualitatively logged at 1 m intervals to gain an understanding of the variability in the aquifer materials hosting the brine. During mud rotary and brine fluid drilling, samples were collected, washed and stored in chip trays for future reference. A geological core description with detailed documentation (drillog, soil profile) has been prepared for each borehole and can be taken from [16].

There is no drilling, sampling or recovery factors noted to date that could materially impact the accuracy and reliability of the results. Drilling details are shown as Appendix 1.



#### 8.2 Augering

An auger hole drilling programme was run (up to 1.5 m depth) with a 1 km sample grid on all lake surfaces. The auger holes were installed using a motorized, hand held auger (see Figure 12). After the hole was allowed to fill with brine (generally within 5 minutes), samples were collected. When the sediment had settled in the bottle, a clean sample was decanted to a 250 ml bottle, which was then kept cool until delivery to the laboratory for analysis.



#### Figure 12: Augering

The potassium concentration for all auger-hole samples obtained to date are shown in Appendix 2, and presented in Figure 13.



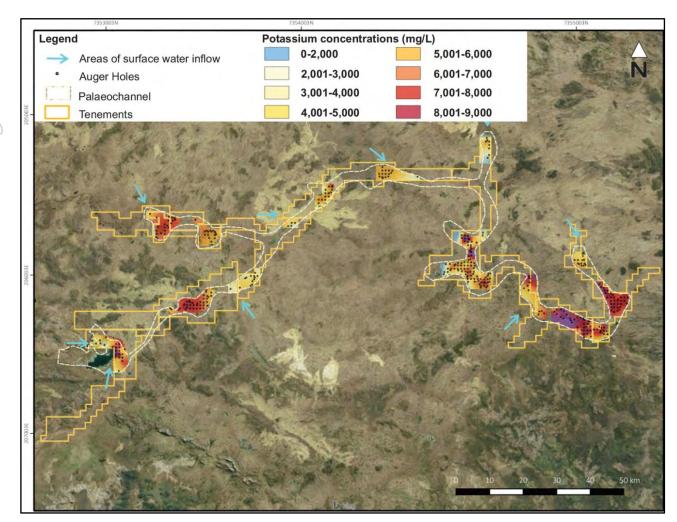


Figure 13: Overview Map of the Potassium Concentrations of Auger-Hole Samples [6]

### 8.3 Aquifer Tests

In December 2015 several pumping tests were conducted [16] to obtain information on aquifer parameters such as permeability and specific yield. Longer duration constant rate tests were carried out at WB 12\_TB as well as WB11\_TB, while a shorter test was undertaken at WB10\_TB. WB9\_TB is yet to be tested.

Mini constant rate tests (1 hr pumping / 1 hr recovery) were performed at holes WB10\_MBI, WB10\_MBD, WB11\_MBS, WB11\_MBI, WB\_MB12I, WB12\_MBD, WB07, WB06, SDHTM 09, WB19, WB23 and WB25.

Water samples were collected, when possible, at intervals of 1, 2, 4, 16, 32 and 72 h from the start of the constant rate tests in WB10\_TB, WB11\_TB and WB12\_TB to assess changes in brine chemistry during pumping.

The brine quality observed in the shallow sample locations appears to extend to the full palaeochannel depth, as the samples collected from the aquifer tests on the basal aquifer confirm the same brine quality at depth as seen in adjacent shallow bores / auger holes. It is therefore believed likely, that the brine concentration extends through the full sediment profile.

#### 8.4 Sampling

Apart from the above mentioned samples, a number of additional water samples have been collected from shallow holes dug into the lake bed and surrounding areas.

Auger samples are considered representative of the upper aquifer at each of the lake surfaces, all samples were taken up to a maximum depth of 1.5 m below surface level. A sufficient quantity of auger samples was obtained. Wherever possible, auger samples were taken at approximately 1 km spacing intervals.

Diamond core holes are considered representative of the lower aquifer at Lake 10 Mile. All diamond holes were drilled to the sand layer, with samples taken at regular intervals per the constant rate tests. Spacing between the four test boreholes is 1.8 km to 2.5 km.

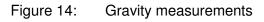
#### 8.5 Geophysical Surface Exploration

Geophyisical gravity measurements were undertaken during 2015 (see Figure 14), to traverse from solid bedrock on one side of the palaeochannel to solid bedrock on the other side. The location of the gravity traverses are shown in Figure 15. These measurements provide information about the location and extension of the palaeochannels.

With gravity measurements it is not possible to measure an absolute depth of the palaeochannel, though this was not the intended task. This method can give an indication to the deepest part of the palaeochannel (minimum) as well as the highest point of the surrounding bedrock (maximum). The results can be used to identify the potential deepest parts of the channel which is used to position future boreholes, targeting the deepest sand layers which will yield the most brine.







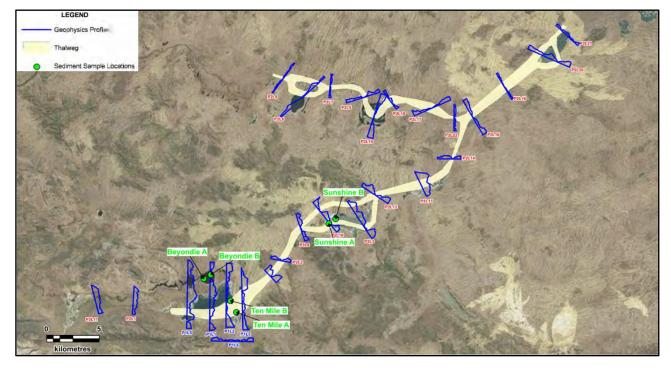


Figure 15: Gravity Traverses across Ten Mile and Beyondie Lake [3]

Further geophysical surface surveys will be necessary to provide a better estimation of the palaeochannel extension. Possible methods could be helicopter electromagnetic surveys (HEM) or seismic explorations on traverses across the palaeochannel.



9

## Sample Preparation, Analyses and Security

Brine samples, collected from drilling or from augering were hand delivered by KLP personnel back to Perth, then handed over to Bureau-Veritas Minerals (BV) for analysis of various parameters. All brine samples collected were kept cool (<20 °C), until delivery to the laboratory in Perth. Sample pH was measured in the field. Soil samples (sands) were sent to Soil Water Group Laboratories for grain size analysis.

Elemental analyses of brine samples has been performed by a reputable laboratory, BV at Canning Vale. The relationship between KLP and BV is strictly concerned with chemical analysis of samples and cost estimates for an on-site laboratory. Bureau-Veritas is certified to the Quality Management Systems standard ISO 9001. Additionally it has internal standards and procedures for the regular calibration of equipment and quality control methods. The laboratory equipment is calibrated with standard solutions.

Duplicate samples (~10 %) were assayed at ALS Laboratory in Malaga. ALS are certified to ISO 17025, the standard for testing and calibration in laboratories. The relationship between KLP and ALS is strictly for the analysis of duplicate samples for the BPP.

Analysis methods for the brine samples used are Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES), Ion Selective Electrode (ISE), Inductive Coupled Plasma Mass Spectroscopy (ICP-MS). All samples have been analysed for Ca, K, Mg, Na, SO<sub>4</sub>, Cl. And selected samples have been analysed for a full 62 suite of elements: Au, Ag ,As ,Ba, Be, Bi, Br, Cd, Ce, Co, Cs, Cu, Dy, Er, Eu, Ga, Gd, Ge, Hf, Hg, Ho, In, La, Li, Lu, Mo, Nb, Ni, Pb, Pd, Pr, Pt, Rd, Re, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, TI, Tm, U, W, Y, Yb, Zn, Zr, Al, B, Ca, Cr, Fe, K, Mg, Mn, Na, P, S, Si, Ti, V.

The sample preparation and security (no mixed samples, origin of each sample is transparent) as well as analytical procedures are in line with international standards and should provide reliable results.

### 10 Data Verification

Duplicate samples (~10 %) from the augering were assayed at ALS Laboratory in Malaga in order to verify the assay results performed by BV. ALS is certified to ISO 17025, the standard for testing and calibration in laboratories.

The results showed a good correlation amongst major ions (less than 10 %) at both laboratories except for Sulphur (BV's values on average about 21 % lower; see [16]). Upon review of this discrepancy, BV conducted an internal check and found no reason to suggest the Sulphur assay



was incorrect. BV analysed Sulphur by ICP-OES. Converted to  $SO_4$  by molecular weight calculation (Assumes all S exists as SO4, which is probably wrong). ALS used the method APHA 4500 to analyse the  $SO_4$ .

For resource assessment, the lower sulphate results were taken into account as the worst case scenario. The data is judged to be adequate for all calculations made for resource estimates in the following Chapter 12. With further exploration and sample analysis the chemical results will be refined. For a Feasibility Study variabilities of less than 10 % have to be achieved or a third independent laboratory has to be consulted. Without this the results can only be used for stating an Inferred Resource classification.

## 11 Metallurgical Testing

To date, three discrete phases of metallurgical test work have been undertaken.

- 1. During the Concept Study, KLP engaged Australian consultants CQG to assist with conducting bench-scale evaporation testing.
- 2. A small pilot scale evaporation trial was conducted during 2015 with 26,000 litres of brine to determine seasonal effects on evaporation rates, provide a concentrated brine sample for raw salt preparation and purification testwork in Germany, as well as confirm the brines ability to evaporate to dryness.
- 3. KLP engaged K-UTEC to carry out testwork and engineering studies to verify the evaporation pond and purification process design requirements to produce potential saleable products including Sulphate of Potash (SOP), Epsomite, Bischofite and Magnesium Hydroxide. 2m<sup>3</sup> of partially evaporated brine at a density of 1.28 g/cm<sup>3</sup> were sent to K-UTEC's facilities in Sondershausen, Germany, in order to perform a higher level of pilot evaporation and processing including:
  - Solar Evaporation of Beyondie Brine in a custom built evaporation chamber;
  - Pre-Treatment of raw KTMSalt in order to separate NaCl and MgCl<sub>2;</sub>
  - Decomposition of raw KTMSalt to primary Schoenite;
  - Cooling crystallization of secondary Schoenite from the SOP mother liquor;
  - Conversion of Schoenite to SOP;
  - Cooling crystallization of Epsomite from the bittern;
  - Crystallization of Bischofite by further evaporation of the bittern.

The recent K-UTEC solar evaporation test works were performed over a period of 6 months. Mineralogical investigation took place concurrently with chemical analysis of brines and harvested



salts. Test results essentially confirm K-UTEC's assumptions, in particular for the solar evaporation and processing of the Beyondie brine:

- Evaporation was completed at a specific gravity of approx. 1.350 g/cm<sup>3</sup>;
- Confirmation of the expected evaporation path and sequence of the crystallized salts;
- Confirmation of the evaporation rates;
- Confirmation of pre-treatment, decomposition, crystalisation and conversion to SOP.

## 12 Mineral Resource Estimates

For the purposes of the Technical Report, the assessment has been limited to defining Mineral Resources at different levels of certainty, varying from Indicated Resource to Exploration Target, based on the certainty provided by the data collected during the fieldwork [16]. Levels of assessment, as linked to data certainty are listed below, covering those areas that fall within the project tenements only.

Measured Resources can be estimated for areas where:

- Drilling has confirmed local site geology and aquifer configuration and the ability of the aquifer to support pumping;
- Aquifer hydraulic properties (permeability and specific yield) have been estimated from aquifer tests and /or grain size analysis;
- A number of brine samples have been collected from a selection of bores to confirm brine concentrations;
- Duplicate samples of all samples taken (10 % of all brine samples) have been analysed by a second (independant) certified laboratory. The analysis showed comparable results within an error range of less than 10 %;
- The laboratories have stated the analysis methods;
- Long term pumping tests according to accepted standards (e.g. ISO 5667 or AS/NZ 5667, ISO/DIS 22282-4) were performed;
- Monitoring boreholes occur in a wider range around the test boreholes (depending on aquifer conditions and catchment area)
- Precise hydrogeological model (aquifer/aquitard) based on measured data (seismic data, drilling data, well logging data).

As some of the required data is not available at this stage of investigation, no Measured Resoures are presented in this report.



Indicated Resources have been estimated for areas where:

- Drilling has confirmed local site geology and aquifer configuration and the ability of the aquifer to support pumping;
- Aquifer hydraulic properties (permeability and specific yield) have been estimated from aquifer tests and /or grain size analysis;
- A number of brine samples have been collected from a selection of bores to confirm brine concentrations;
- Duplicate samples of all samples taken (10 % of all brine samples) have been analysed by a second (independant) certified laboratory;
- The laboratories have stated the analysis methods
- Long term pumping tests according to accepted standards (e.g. ISO 5667 or AS/NZ 5667, ISO/DIS 22282-4) were performed.

Inferred Resources have been estimated, based on a lesser amount of data, where:

- No drilling has occurred, but geophysics data has been able to confirm a palaeochannel extent that is contiguous with other areas of palaeochannel for which drilling data are available;
- Aquifer properties can be inferred from tests undertaken in other, contiguous areas of the same palaeochannel;
- Brine concentrations have been measured from shallow auger holes and the presence of brine extending through sediments to depth, can reasonably be inferred;
- Augering has identified a shallow, permeable layer of lake bed alluvium/silts/gypsum sands with elevated K concentrations and where trenching could allow abstraction of the brine.

Exploration Targets have been estimated where:

- No brine chemistry data exists of any kind to confirm the brine quality, but some aquifer continuity with known brine resources may be expected on the basis of geophysics (for example along the palaeochannel extent between lakes)
- Shallow augering has provided evidence of high K concentrations which may be expected to occur throughout the sequence (on the basis of K-distribution with depth observed elsewhere), but there are no drilling or geophysics data to provide any geological context to the brine occurrence or infer what the sequence at depth may actually be. The locations of these different areas are shown in Figure 6.1 (Ten Mile Lake region) and Figure 6.2 (the whole palaeochannel within the tenement) in [16].



The brine volumes listed below cover each of the individual categories, so the total volume would be the summation of volumes calculated for each level of resource certainty listed below. Figure 16 shows the areas chosen for resource assessment.

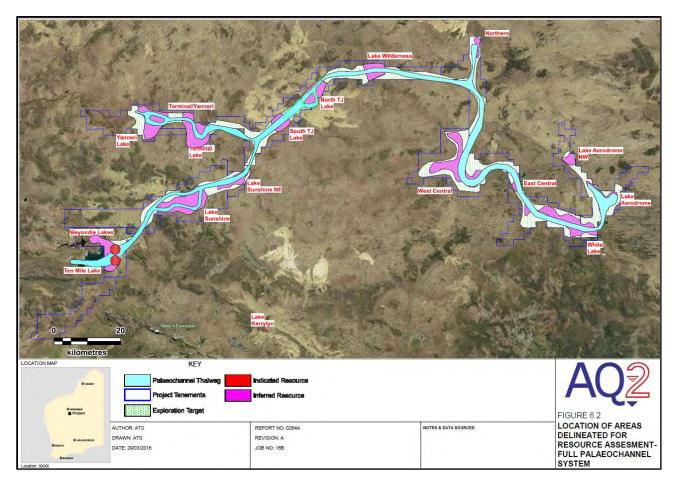


Figure 16: Location of Areas Delineated for Resource Assessment (taken from [16])



#### 12.1 Measured Resources

Currently no Measured Resources can be estimated.

#### 12.2 Indicated Resource

Based on the criteria listed above, the brine Indicated Resource is provided in the following Table 3.

#### Table 3:Indicated Resources

Geological Layer	Maximum Thickness	Coverage	Sediment Volume	Porosity	Total Stored Brine	Specific Yield	Drainable Brine	K Grade	K Mass	SO₄ Grade	SO₄ Mass	K₅SO₄
	(m)	(km²)	(10 <sup>6</sup> m <sup>3</sup> )	(P)	(10 <sup>6</sup> m <sup>3</sup> )	(Sy)	(10 <sup>6</sup> m <sup>3</sup> )	(mg/L)	(Mt)	(mg/L)	(Mt)	(Mt)
Alluvium	8	14.0	112	0.47	52.5	0.17	19.0	7,145	0.14	23,520	0.45	0.30
Clays	50	14.0	698	0.5	349.0	0.03	20.9	7,145	0.15	23,520	0.49	0.33
Basal Sands	7	9.6	67	0.4	26.9	0.28	18.8	7,145	0.13	23,520	0.44	0.30
Total					428.4		58.7		0.42		1.38	0.93

#### 12.3 Inferred Resource

Based on the criteria listed above, the brine Inferred Resource is provided in the following Table 4.

#### Table 4: Inferred Resources

Geological Layer	Maximum Thickness	Coverage	Sediment Volume	Porosity	Total Stored	Specific Yield	Drainable Brine	K Grade	K Mass	SO₄ Grade	SO₄ Mass	K₅SO₄
	(m)	(km²)	(10 <sup>6</sup> m <sup>3</sup> )	(P)	Brine (10 <sup>6</sup> m <sup>3</sup> )	(Sy)	(10 <sup>6</sup> m <sup>3</sup> )	(mg/L)	(Mt)	(mg/L)	(Mt)	(Mt)
Alluvium	8	514.7	4,118	0.47	1,935.3	0.17	700.1	6,051	4.24	17,231	12.06	9.45
Clays	50	330.8	16,540	0.5	8,270.0	0.03	496.2	6,051	3.00	17,231	8.55	6.70
Basal Sands	7	102.1	715	0.4	285.9	0.28	200.2	6,051	1.21	17,231	3.45	2.70
Total					10,491.2		1,396.5		8.45		24.06	18.85



### 12.4 Exploration Target

Based on the criteria listed above the Exploration Target is provided as a range, below in Table 5.

Geological Layer	Maximum Thickness	Coverage	Sediment Volume	Porosity	Total Stored Brine	Specific Yield	Drainable Brine	K Grade	K Mass	SO₄ Grade	SO₄ Mass	K₅SO₄
	(m)	(km²)	(10 <sup>6</sup> m <sup>3</sup> )	(P)	(10 <sup>6</sup> m <sup>3</sup> )	(Sy)	10 <sup>6</sup> m <sup>3</sup> )	(mg/L)	(Mt)	(mg/L)	(Mt)	(Mt)
Alluvium	8	683	5,466	0.4	2,186.5	0.1	546.6	1,100	0.60	1,890	1.03	1.34
Clays	50	867	43,359	0.45	19,511.6	0.01	433.6	1,100	0.48	1,890	0.82	1.06
Basal Sands	7	329	2,303	0.35	806.0	0.2	460.6	1,100	0.51	1,890	0.87	1.13
Total					22,504.1		1,440.8		1.59		2.72	3.53
Alluvium	8	683	5,466	0.5	2,733.1	0.2	1,093.2	4,515	4.94	13,092	14.31	11.01
Clays	50	867	43,359	0.55	23,847.5	0.04	1,734.4	4,515	7.83	13,092	22.71	17.46
Basal Sands	7	329	2,303	0.45	1,036.3	0.3	690.9	4,515	3.12	13,092	9.04	6.96
Total					27,616.9		3,518.5		15.89		46.06	35.43

Table 5: Exploration Target

The KLP BPP Exploration Target is based on a number of assumptions and limitations and is conceptual in nature. It is not an indication of a Mineral Resource Estimate in accordance with the JORC Code and it is uncertain if future exploration will result in the determination of a Mineral Resource.

#### 12.5 Total Brine Volume

For comparative purposes the following Table 6 has been provided to compare the above Indicated and Inferred Resources, as well as the Exploration Target which have all been based on Drainable Brine, against other Australian Listed Companies Resources which have been quoting Resources based on Total Brine Volume. As can be seen the Total Brine Volume is significantly higher than reporting against the CIM Guidelines of Drainable Brine. For production the drainable brine component is the most important part because not all of the total brine can be extracted.

Table 6:	Resources Summary
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Level	Total Brine Volume (10 <sup>6</sup> m <sup>3</sup> )	K* (10 <sup>6</sup> tonne)	SO₄* (10 <sup>6</sup> tonne)	SOP* (10 <sup>6</sup> tonne)
Total In-Situ volume associated with the Indicated Resource	428.4	3.06	10.08	6.83
Total In-Situ volume associated with the Inferred Resource	10,491.2	63.48	180.77	141.57
Total In-Situ Volume associated with the Exploration Target*	22,504 – 27,616	24.75 – 124.69	42.53 – 361.56	55.20 -278.06

\* Tonnage for K, SO4 and SOP was calculated from the average grades of K, SO4 and SOP and the Total Brine Volume for each resource.

For furture Feasibility Study purposes an investigation of the recharge rate of the aquifers should be provided, as the drainable brine volume could be higher and more qualified.

### 13 Mineral Reserve Estimation

To support the estimation of Ore Reserves through the completion of a suitable Study, it is recommended that further field trials, mainly extended duration pump and evaporation testing be undertaken to satisfy the requirements of the Modifying Factors and Table 1.

## 14 Mining Methods

There are two principal methods applicable to extract the brine from the surrounding sediments:

- **pumping from wells** in the basal sands (lower aquifer) plus leakage from potential brine bearing segments within the clays;
- pumping from trenches inside the alluvial sediments (upper aquifer).

It is likely that both methods will be used because of the properties of the different aquifers. The design of the bore field will be based on the brine demand and aquifer conditions.

### 15 Recovery Methods

The general mineral processing concept is comprised of the following areas:

- Brine winning;
- Brine concentration and crystallization of solid raw materials for the processing plant;
- Processing plant;
- Utilities.

According to the composition of the deposit brine the present process design considers the recovery of SOP as the principle product with the potential for producing the following by-products: Epsomite, Magnesium Hydroxide and Bischofite.

The process begins with brine entering the evaporation ponds whereby water is removed by solar evaporation. This causes gypsum, halite and astrakainite to crystallise subsequently in the first two sets of ponds. Unless determined economical to process, both compounds are left within the ponds, and will be harvested once full. The remaining brine crystallises producing a Kainite Type Mixed Salt (**KTMS**) consisting of leonitic, schoenitic and carnallitic mixed salts in the next set of



ponds. These salts are harvested and stored separately prior to mixing, pre-crushing and transferral to the SOP plant. The resultant bittern from the solar evaporation process may be transferred to the Epsomite and Brine Treatment plants.

The SOP plant converts the mixed salt into schoenite and halite through mixing with water and internal recycling of the brines. The resultant slurry is processed through reverse flotation to remove the halite, the resultant schoenite salts are decomposed into SOP. The halite is discarded to tailings unless otherwise economical to process.

The bitterns from the solar evaporation process contain a high magnesium sulphate content, meaning it may be economical to process into epsomite for sale. This is performed through cooling crystallisation of the slurry to produce epsomite. Left behind is a solution high in magnesium chloride. This solution undergoes an evaporation step to remove carnallitic mixed salt (returned to the SOP plant), and then undergoes de-sulphatisation by means of calcium chloride solution. This produces gypsum, which is discharged as tailings, leaving behind a concentrated brine of magnesium chloride. This stream is then split, magnesium hydroxide is precipitated from the solution by the addition of quicklime (CaO) and bischofite is produced from simple evaporation concentration.

K-UTEC's simplified flowsheets are shown in Figure 16. K-UTEC AG Salt Technologies have also provided typical layouts, block flow diagrams (BFD) and process flow diagrams (PFD) along with the detailed crystalliser and processing report [18].

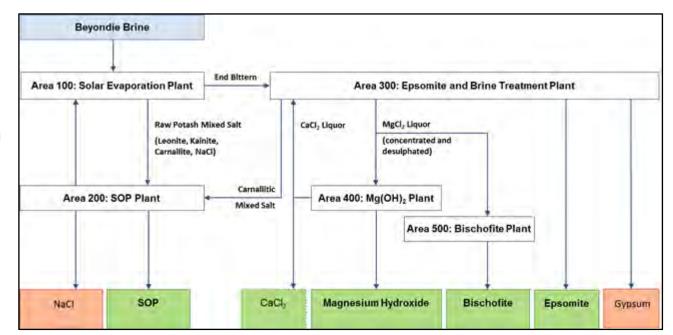


Figure 17: Simplified Process Scheme for Comprehensive Utilisation of Beyondie Brine



#### 16 Project Infrastructure

#### 16.1 Supporting Infrastructure

Supporting infrastructure will typically include offices, ancillary buildings, maintenance facilities, accommodation, diesel fuel, water, power, communications and Information Technology systems. Accommodation facilities will be required to house the workforce. It is the intention of the Company that fuel for power generation will be sourced initially from diesel supplied by road train, then gas supplied from a 78 km gas spur from the Goldfields Gas Pipeline. A Miscellaneous Licence (L52-162) has been granted for to cover the 78 km site access road, gas pipeline, communications and other infrastructure purposes.

#### 16.2 Site Access and Product Haulage

The Beyondie site is approximately 78 km east of the Great Northern Highway. Road haulage for transporting product from the Beyondie site to the various distribution centres via the public road network has been selected as the optimum solution for the BPP. This is based on the close proximity to existing public road infrastructure, the relatively low product haulage requirements and diversity of delivery locations. Trucking options for the BPP includes a combination of bulk loaded trailers, bulk loaded containers and break bulk cargo (i.e. bulk bags) loaded on flat top truck trailers and curtain sided taut liners.

#### 16.3 Port

KLP has investigated a number of port locations for export of product to the east coast of Australia and into Asian markets. Geraldton Port, which is run by the Mid-West Port Authority, has been determined as the preferred port due to the availability of existing port facilities, proximity to agricultural distributions centres, wider availability of real estate for product storage and stockpiling, as well as the availability of labour resources that will avoid fly in fly out operations for trucking and port operations. In September 2015 Kalium Lakes signed a Memorandum of Understanding with the Mid West Ports Authority, which sets out the investigation of a path to allow the Company to export potash products from the Port.



#### 17 Market Studies and Contracts

Kalium Lakes has conducted a review of the potash market utilising leading industry market research reports and has formed the view that although the Potassium Chloride (**KCI** or **MOP**) is well supplied, the premium Potassium Sulphate ( $K_2SO_4$  or **SOP**) is undersupplied.

Global SOP demand was estimated at just over 6.1 million tonnes (3.015Mt  $K_2O$ ) in 2015, which represents a significant rise in demand mainly due to a substantial rise in consumption in China. It is notable that there is also no potash production in Australia, a nation which consumes a combined total of ~230 ktpa of MOP and ~70 ktpa SOP.

Only five companies have capacity to produce greater than 350 ktpa of SOP and account for approximately 60% of global supply. China accounts for the largest percentage of supply and has seen a rapid increase in recent years.

#### 18 Environmental Studies, Permitting and Social or Community Impact

#### 18.1 Environmental Studies

KLP has initiated and substantially completed an extensive range of baseline environmental studies and investigations which have been conducted in consultation with government agencies and regulators including DMP, EPA, DPAW and DoW. The survey programme has been based on a future requirement to refer the full scale project to the EPA for formal assessment.

To date the following biological surveys in support of the Project have been undertaken by Phoenix Environmental Sciences:

- Aquatic invertebrate and waterbird surveys of Beyondie Lake and Ten Mile Lake;
- Level 2 terrestrial fauna survey associated with Beyondie Lake, Ten Mile Lake, haul road and evaporation ponds;
- Level 1 terrestrial fauna survey associated with the proposed evaporation pond area;
- Level 1 terrestrial fauna survey associated with Lake Sunshine and affiliated access tracks;
- Level 2 flora and vegetation survey at Beyondie Lake and Ten Mile Lake, haul road and evaporation ponds;
- Level 2 flora and vegetation survey associated with the proposed evaporation pond area;
- Level 2 flora and vegetation survey associated with Lake Sunshine and affiliated access tracks;



• A subterranean fauna desktop review investigating the likelihood of occurrence of stygofauna and troglofauna within calcrete associated with Beyondie Lake and Ten Mile Lake was also completed.

Work to characterise the environment is ongoing, but to date there has been no significant issues identified that could not be managed through proper planning or appropriate environmental management systems. The salt lake systems are reasonably common and extensive, however may offer a unique habitat for some species.

#### 18.2 Stakeholders

The KLP consultation strategy identifies key external stakeholders and determines how each will be impacted by the BPP and what influence those stakeholders have over the Project. The consultation strategy has been developed to secure the approvals necessary for the construction and operation of the mine, road and port facilities, which will require consultation with the following:

- Local Government;
- State Government;
- Commonwealth Government;
- Mining companies in the Western Pilbara;
- Aboriginal groups with a connection to the BPP lands;
- Other community stakeholders, e.g. Pastoralists.

#### 18.3 Native Title and Heritage

KLP has successfully negotiated two Land Access and Mineral Exploration Agreements with the underlying Native Title groups, Birriliburu (MNR) people and the Gingirana people, which has enabled KLP to undertake ground disturbing and non-ground disturbing exploration activities.

KLP and Gingirana have also executed a Mining Land Access Agreement for the Beyondie Potash Project. This agreement notably consents to mining at the projects commencement areas of Beyondie Lake and 10 Mile Lake. A similar agreement will be negotiated with MNR which will consent to mining to the east of the Gingirana claim area extending from Lake Sunshine to Lake Aerodrome.



A number of ethnographic and archaeological heritage surveys were completed during 2015, enabling access for exploration activities. Isolated heritages sites have been identified.

## 18.4 Permitting and Approvals

The Approvals Strategy is based on a staged approach to allow progressive and timely approvals for each development phase of the base case for the BPP. The development phases are:

- Pilot Scale Development Ponds and Pump Testing;
- Pilot Scale Development Purification Plant (Optional);
- Full Scale Project Development;
- Project Expansion and Enhancement.

KLP has reviewed the legislative requirements and has compiled a register of the environmental, heritage and planning approvals and permits necessary to scope, develop, construct and operate the BPP for each development phase. Each development phase will require; new specific approvals utilise approvals granted in the prior phase or seek to modify existing approvals.

Approvals for the Pilot Scale Development Ponds and Pump Testing are currently in place. The following is a list of likely approvals (Table 7) required.



## Table 7: List of Approvals

Approval	Nature of Approval		
Environmental Protection Act 1986 - Part IV	Part IV approval – API level of Assessment		
Environmental Protection and Biodiversity Conservation Act 1999	EPBC Act approval – bilateral approval via EPA		
Aboriginal Heritage Act 1972	Heritage Surveys		
Aboliginal Henrage Act 1972	Section 18 consent (if required)		
Mining Act 1978	Mining Lease Approval		
Numing Act 1970	Mining Proposal and Closure Plan		
	Dangerous Goods licence for diesel storage facilities		
Dangerous Goods Safety Act	Dangerous Goods Site licence		
	Security Risk Substance Storage Licence		
	5C licence for dewatering		
RIWI Act	26D Bore construction		
	Project Management Plan		
Mines Defets and last stimp det	Equipment Registration		
Mines Safety and Inspection Act	Registration of Principal Employer		
	Registration of Mine Manager and nominated site safety representatives		
	Works Approval Application – Evaporation Ponds (Cat 14 Solar Salt)		
	Works Approval Application - Processing (Cat 5 Processing facility)		
	Works Approval Application - Power Station (Cat 52 Electric power generation)		
Environmental Protection Act (Part V)	Works Approval Application - Village (Cat 85 Sewage facility)		
	Works Approval Application - Dewatering (Cat 6 Mine dewatering)		
	Works Approval Application - Road (Cat 80 Crushing and screening)		
	Licence Application for all of above categories.		
Petroleum Pipelines Act 1969	Pipeline Licence to Construct Pipeline Licence to Operate		
Health Regulation 1974	Approval to construct or install an apparatus for the treatment of sewage		
Port Authority Act	MWPA Port Authority Leases and approval to export		
Main Roads Act	Heavy Haulage Approval		
Building Approvals	Shire Building Licence		

At the completion of mining operations, disturbed areas will be rehabilitated.



#### 19 Capital and Operating Costs

#### 19.1 Capital Costs

The capital cost estimate for the Beyondie Potash Project was developed to an AACE Class 4 estimate accuracy of  $\pm 25$  %. It includes the capital expenditure for extraction, evaporation, processing, supporting infrastructure, road haulage, port facilities, utilities and services required for the development of the BPP. Capital Costs were developed by area as defined in the Work Breakdown Structure (WBS) for a range of Sulphate of Potash production scenarios between 20 ktpa and 450 ktpa.

### 19.2 Operating Costs

For the Beyondie Potash Project an operating cost estimate (OPEX) with accuracy better than  $\pm 25$  % has been developed. The OPEX includes the operating expenditure required to crystallise, process and transport product to Geraldton Port and various off-take locations, including shipping to the eastern states of Australia, China, Singapore, the USA and New Zealand. All costs are in 2016 Australian dollars.

Cash Operating Costs were developed for Ex-Works, Trucked to Depot and Free on Board (FOB) scenarios for a range of Sulphate of Potash production scenarios between 20 ktpa and 450 ktpa.

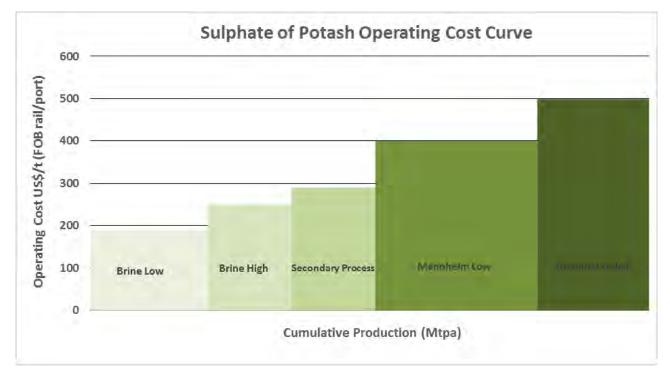


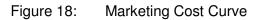
#### 20 Economic Analysis

Initial results are positive for a number of scenarios and the results justify KLP continuing to commit to the next stage of exploration and development. The key recommendations, among others, are to under take further drilling plus complete pilot scale pump and evaporation testing to enable a Mineral Reserve to be completed, a Production Target nominated and forecast financial information derived.

As KLP has not currently published a Mineral Reserve, the Austalian Securities and Investments Commission (ASIC) is of the view that there are not reasonable grounds for KLP to publicly state a production target, forecast financial information or income based valuations although the company might prepare these types of forward looking statements solely for internal management purposes.

Key sensitivities are likely to include discount rate, financial exchange rate, SOP pricing, OPEX, CAPEX and project delays. It is noted that existing brine hosted SOP producers are comparatively low cost when compared to secondary Mannheim (derived from MOP) SOP producers as detailed in leading industry market research reports. Figure 18, shows a simplified summary of existing SOP producer producer production costs derived from leading industry market research reports and other sources for various SOP production methods in US\$.







#### 21 Adjacent Properties

The BPP tenements were chosen because of the outlines of geological formations and the brine hosting sediments. Only two adjoining properties overlap with the area of BPP. The tenement E 69/3202 belongs to Kronos Gold LLC (fresh water feed points to Lake Yanneri) and E69/3247 is owned by Cosmopolitan Minerals (fresh water feed to Beyondie Lake /Ten Mile Lake and half of Ten Mile Lake). Neither companies are currently exploring for potash.

## 22 Other Relevant Data and Information

No other pertinent data or information.

## 23 Interpretation and Conclusions

As with all brine deposits, there is a risk that the brine grade is less than expected, highly variable or is unable to be abstracted from subsurface at the required rates. This may be due to any of the following:

- Variability in deposit could influence brine recovery;
- Brine volume and extraction assessment is inaccurate;
- Inability to abstract brine volumes due to low permeability of the aquifer material;
- Weather conditions;
- Aquifer lithology.

KLP has developed existing and ongoing mitigation strategies to reduce the risk, for example:

- Planned pilot scale testing program;
- Porosity, permeability and specific yield testing;
- Duplicate assay results, cross-check at different laboratories;
- Assess pumping options and develop best option for each area;
- Create a numerical model and brine extraction program to minimize variability;
- Conduct further hydrogeological drilling to understand sediment layers and connectivity;
- Benchmarking against other systems.

At the publication date of this Technical Report, a number of exploration works have been carried out. The results of the deposit exploration show the differences of the chemical composition of the brine from different well depths as well as laterally, e.g. from the auger holes. The results of the chemical analysis of the brine, constant rate pumping tests, grain size analysis, borehole tests, and geophysical exploration, have lead to values for indicated and inferred resource classification.



Furthermore, values for an exploration target could be extrapolated from the existing data and knowledge of the lake system within the underlying palaeochannel. As exploration work continues, the database as well as the classification of the Mineral Resources and size of the Mineral Resource will be increased.

The two possible mining methods were shown which lead into the production facility. The recovery method shows the potential production of SOP. According to the composition of the deposit brine the current process design considers the recovery of SOP as the principle product with the potential for producing the following by-products: Epsomite, Magnesium Hydroxide and Bischofite.

## 24 Recommendations

To increase the knowledge of the complete brine system a hydrogeological numerical model should be developed. If possible, data for replenishment of the aquifers should be obtained and monitored.

Several conditions can be defined more accurately with ongoing exploration work, such as long term pumping tests to include monitoring of a wider area or test trenches.

It is recommended that geophysical exploration be combined with borehole exploration including; geophysical borehole logging, insitu tests of permeability, porosity and hydrogeological flowrates. Doing so would enable the local knowledge for the different lakes in the tenement area to be improved. A more in-depth exploration programme was noted previously in the site visit report [13].



#### 25 References

- [1] JORC, 2012: Australasian Code for Reporting of Mineral Resources and Ore Reserves The JORC Code 2012 Edition.- The Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and the Minerals Council of Australia. 20 December 2012.
- [2] CIM Best Practice Guidelines for Resource and Reserve Estimation for Lithium Brines, Prepared by the Sub-Commitee on Best Practice Guidelines for Resource and Reserve Estimation for Lithium Brines.
- [3] Kalium Lakes Pty Ltd, 2015: Beyondie Potash Project Concept Study. April 2015.
- [4] Bureau of Meteorology (BOM): Meteorological Data
- [5] BULLEN Geological Survey of Western Australia, 1995: Australia 1:250.000 Geological Series. Sheet SG 51 – 1. Second Edition. 1995.
- [6] Kalium Lakes Pty Ltd, 2015: unpublished charts, figures or pictures
- [7] English PE, Bastrakov EN, Bell JG, Woltmann M, Kilgour PL and Stewart G., 2012: 'Paterson demonstration site report – Palaeovalley groundwater project', record 2012/07, Geoscience Australia, Canberra.
- [8] Magee JW, 2009: Palaeovalley groundwater resources in arid and semi-arid Australia A literature review, record 2009/03, Geoscience Australia, Canberra, 224p.
- [9] Johnson, S. L., Commander, D. P. & O'Boy, C. A., 1999: Groundwater resources of the Northern Goldfields
- [10] Berry, K., 1994: Groundwater exploration at Albion Downs and South Lake Way Basin. Update of numeric flow model: Western Mining Corporation, Exploration Division, Report No. HYD T036 (unpublished).
- [11] Heath, R.C., 1983: Basic Ground-Water Hydrology, US Geological Survey Water-Supply Paper 2220
- [12] Reward Minerals, 2014b: Dora West Potash Project Drilling Results, ASX Release, 10 November 2014.
- [13] Schicht, T., Penndorf, A., 2015: Report of the site visit to the Salt Lakes of the Beyondie Potash Project and the visit to the company AQ2 from August 17 to August 21, 2015, unpublished, 31 August 2015.
- [14] Grey, K. et al, 2005: Lithostratigraphic nomenclature of the Officer Basin and correlative parts of the Paterson Orogen. Western Australia Geological Survey of Western Australia. Report 93, 95p.



- [15] Kalium Lakes Pty Ltd, 2016: unpublished charts, figures or pictures.
- [16] AQ2, 2016: Assessment of the hydrogeology of Beyondie Project Saline Lake System, Pre-Feasibility Study Report. February 2016.
- [17] Kalium Lakes Pty Ltd, 2015: Beyondie Potash Project Draft PFS Works. March 2016.
- [18] K-UTEC AG, 2016: Pre-Feasibility Study for the Beyondie lakes potash project, Australia; Part Crystalisers, Processing. Unpublished draft, April 2016

# 26 JORC Code, 2012 Edition – Table 1 report template

**Section 1 Sampling Techniques and Data** 

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The sampling program involved the collection of brine samples and samples of the aquifer material. Brine was obtained during augering, during drilling and after drilling (by sample collection from installed monitoring bores and sample collection during aquifer testing).</li> <li>During diamond drilling, it was possible to pump brine samples out of the hole, when the core barrel was removed. These samples could be interpreted to come from the base of the hole, although the possibility of downhole flow outside of the casing from shallower aquifer cannot be excluded.</li> <li>With all other forms of drilling attempted (tricone or blade bit with mud rotary, blade bit with brine, air percussion with foam additives) brine samples could not be collected.</li> <li>50 mm piezometers and 100 mm-300 mm test bores have been installed, with screens covering the different aquifer horizons. Sampling of each of these piezometers has allowed the collection of a representative brine sample from that aquifer zone only. Sample collection from the piezometers follows the AS/NZ 5667 guideline on groundwater sampling. The lack of gravel pack and seal in 7 out of 21 bores equipped with casing, has raised some concerns over samples possibly emanating from areas in the bore that were not screened.</li> <li>Diamond drilling has allowed collection of the aquifer material encountered in the palaeovalley system. Representative core samples have been submitted to a laboratory (Soil Water Group) to assess porosity and specific yield.</li> <li>An auger hole drilling programme (to 1.5m depth) has allowed the collection of rilling programme (to 1.5m depth) has allowed the collection of fill with brine (generally with 5 minutes). After the sediment had settled in the bottle, a clean samples collected after the hole was allowed to fill with brine (generally with 5 minutes). After the sediment had settled in the bottle, a clean sample was decanted to a 250ml bottle, which was then kept cool until delivery to the laboratory.</li> </ul>

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Criteria	JORC Code explanation	Commentary
		• Sediment samples have also been collected for grain size analysis and laboratory analysis of the aquifer's porosity and specific yield - 8 sand samples from 6 bores, 2 clay samples from 2 bores and 12 lake bed alluvium samples from 3 different lakes (Lake Beyondie, Ten Mile Lake and Lake Sunshine).
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	<ul> <li>A number of drilling techniques have been utilized. Diamond drilling (HQ) was initially undertaken to allow the collection of core for laboratory analysis. Current drilling has included air percussion (to install surface casing), mud rotary drilling (with a tricone and/or blade bit), as well as and blade/tricone drilling with a brine as the drilling fluid, aircore drilling and augering.</li> <li>All holes were drilled vertically.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Brine samples have been collected during the diamond drilling, by pumping from within the casing (using the rig's bean pump). The brine sample is collected after pumping of about 15 – 30 min. With casing to the base of the hole, the sample collected could be representative of the aquifer at the base of the hole, although flow down the outside of the casing from shallow aquifers cannot be discounted.</li> <li>Sediment samples were taken in some cases by coring and in some cases by cuttings.</li> <li>Samples were also collected from 12 mini-aquifer tests (1hr pumping) and 16 samples collected during the Constant rates tests on two bores. During the constant rate tests, samples were collected at 1, 2, 4, 18, 16, 32, 72 hrs (where possible).</li> </ul>
Geologic Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All geological samples collected during all forms of drilling are qualitatively logged at 1 m intervals, to gain an understanding of the variability in aquifer materials hosting the brine. During mud rotary and brine fluid drilling, samples are collected and washed and stored in chip trays for future reference.</li> <li>The best sample quality was obtained from diamond core drilling.</li> <li>Core samples have been archived by photographic images as a permanent record.</li> </ul>
Sub- sampling techniques	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	<ul> <li>All samples collected are kept cool (&lt;20 °C), until delivery to the laboratory in Perth.</li> <li>Brine samples were collected in 500 ml bottles with little to no air.</li> </ul>



Criteria	JORC Code explanation	Commentary
and sample preparation	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Sample pH was measured in the field.</li> <li>Fields brine duplicates have been taken at a 1:10 ratio</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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 the derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Elemental analysis of brine samples are performed by a reputable Perth laboratory, the Burea-Veritas (formerly Amdel) mineral processing laboratories. Bureau-Veritas is certified to the Quality Management Systems standard ISO 9001. Additionally it has internal standards and procedures for the regular calibration of equipment and quality control methods.</li> <li>Laboratory equipment are calibrated with standard solutions</li> <li>Analysis methods for the brine samples used are inductively coupled plasma optical emission spectrometry (ICP OES), Ion Selective Electrode (ISE), Inductive coupled plasma mass spectroscopy (ICP- MS), volumetrically and colourimetrically. Elements analysed for all samples included – Ca, K, Mg, Na, P, S, CI. Selected samples have been analysied for a full 62 suite of elements including Au,Ag,As,Ba, Be,Bi,Br,Cd,Ce,Co,Cs,Cu,Dy,Er,Eu,Ga,Gd,Ge,Hf,Hg,Ho,In,La,Li,Lu,M o,Nb,Ni,Pb,Pd,Pr,Pt,Rd,Re,Sb,Sc,Se,Sm,Sn,Sr,Ta,Tb,Te,Th,TI,Tm,U, W,Y,Yb,Zn,Zr,Al,B,Ca,Cr,Fe,K,Mg,Mn,Na,P,S,Si,Ti,V</li> <li>The assay method and results are suitable for the calculation of a resource estimate.</li> <li>Check lab assays at a 1:10 ratio have been sent to an external lab (ALS Malaga)</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>In a number of bores samples have been collected during both drilling and aquifer testing.</li> <li>Multiple samples have also been taken from nearby locations during the sampling regime.</li> <li>During the auger sampling programme, 36 duplicate samples were collected and sent to two different laboratories (Bureau Veritas and ALS).</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<ul> <li>Data concerning sample location was obtained out in the field, data entry then performed back in the Perth office to an electronic database.</li> <li>Assay data remains unadjusted.</li> <li>Results have been verified by AQ2 and K-UTEC.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Hole location co-ordinates obtained from Rover GPS Trimble R1 (&lt;1m accuracy) by a qualified mines surveyor. Reduced levels are to be surveyed with a more accurate method in the future.</li> <li>The grid system used was MGA94, Zone 51.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	• The auger programme has allowed a 1 km sample grid over the lake surface (where the water level is shallower than 1.5m below surface).Drilling ensured a bore spacing of between 1 km to 3 km over the main palaeochannel area. This is better than the recommendations by Houston et al (2011) of 5 km spacing for an Indicated Resource.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Considering the deposit type this is not applicable.</li> <li>All drill holes are vertical given the flat lying structure of a salt lake</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples are labeled and transported by Kalium Lakes personnel to Perth. The samples are then hand delivered to Bureau Veritas laboratories by Kalium Lakes personnel.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been conducted at this point in time.



## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul> <li>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.</li> <li>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.</li> </ul>	
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>There has been no previous exploration at the Beyondie Potash Project.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	• The deposit is a brine containing the target potassium and sulphate ions that could form a potassium sulphate salt. The brine is contained within saturated sediments below the lake surface and in sediments adjacent to the lake. The lake sits within a broader palaeochannel system that extends over hundreds of kilometers.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information f all Material drill holes: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul></li></ul>	<ul> <li>Information has been included in drill collar tables and bore logs appended to this report</li> <li>All holes are vertical</li> </ul>

Criteria	JORC Code explanation	Commentary
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Not applicable due to exploration results being applicable to a brine and not a solid.</li> <li>No low or high grade cut-off grade has been implemented due to the consistent grade of the brine assay data</li> </ul>
Relationship between minerali- sation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Not applicable due to exploration results being applicable to a brine and not a solid.</li> </ul>
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.	<ul> <li>Refer to figures/tables in the report.</li> </ul>
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.	<ul> <li>All pertinent results have been reported.</li> </ul>
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.	<ul> <li>Approximately 150 kms of geophysical surveys have been undertaken by Atlas Geophysics including gravity methods. The tests were performed to define the deepest parts of the palaeochanel, with 28 traverses undertaken across the channel, extending from 10 Mile Lake to TJ Lake (see maps in report for locations).</li> <li>Eight sand samples, two clay samples and 12 lake alluvium samples were collected during diamond drilling/augering and submitted to the</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<ul> <li>laboratory at Soil Water Group, to analyse for porosity and specific yield.</li> <li>Metallurgical and Mineral Processing test work has been carried out by CQG and K-UTEC AG Salt Technologies. Including bench scale solar evaporation tests, milling, floatation and conversion. The results of the test work have enabled K-UTEC's technical team to tailor the process plant design to the Beyondie brine.</li> <li>Rum Jungle Resources, Agrimin Resources and Reward Minerals have performed exploration on nearby tenure for a similar brine deposit.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>More extensive drilling may occur to confirm the occurrence of basal sands throughout the whole palaeochannel system, and to increase the certainty related to the continuity in sand horizons around existing bores in the Ten Mile Lake area.</li> <li>Further geophysical surface exploration of the palaeochannels will determine the layering as well as the exact vertical and horizontal extension of the channels.</li> <li>Geophysical downhole logging will give insitu parameter of the porosity, permeability, electrical conductivity. These measurements will be used to determine the exact position for the hydraulic packer during the pumping tests.</li> <li>Short term permeability tests proposed in all 50 mm ID piezometers installed, to gain an understanding of the hydraulic conductivity of the different aquifer layers.</li> <li>Long duration aquifer testing (according to the accepted standard) planned in 4-6 tests bores (200mm ID), to understand aquifer parameters, especially hydraulic conductivity and specific yield.</li> <li>Isotopic assays will be carried out to determine the possible different ages of the aquifers as well as the connection of the aquifer.</li> <li>A long term hydrodynamic trial (+ 6 months of pumping) is planned and has been approved with pumping out of a wellfield around the current test bores at Ten Mile Lake, with the aim of measuring the aquifer response to pumping and to trial the operation of evaporation ponds.</li> <li>Data from the hydrodynamic trial will be used to help setup and calibrate a numerical model, which can be used to predict long term abstraction potential, wellfield design, drawdown impacts and changes to brine quality.</li> </ul>



## Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	Revision documents have been checked with the latest datasets to ensure integrity of current results.
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>AQ2 has undertaken three site visits over the last 6 months, including a continuous one-week period of drilling supervision.</li> <li>The visit has allowed the hydrogeologist to confirm drilling practices, geologic logging protocols and brine sampling procedures.</li> <li>Results have been verified by competent persons at K-UTEC that have also undertaken a site visit in August 2015 to observe KLP's diamond drilling, auger drilling and geophysics activities.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The degree of confidence in the geological interpretation of the mineral deposit is at the beginning. This is due to the geology of a brine hosted potash located in a palaeochannel system. Western Australian palaeochannel systems have been extensively studied and reported on (see attached reference list). Although there is some heterogeneity in layering, the general depositional environments are well understood. Palaeochannels are generally known to consist of an upper layer of lake sediments/alluvium, an intermediate zone of thick clays and a basal zone of alternating clays/sands/silts and gravels.</li> <li>The interpretation of the aquifer dimensions (the brine host) has been based on previous geological mapping of the area, geophysical traversing (gravity) and exploration drilling logs.</li> </ul>
Dimensions	<ul> <li>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.</li> </ul>	<ul> <li>The length of the mineral resource is defined by the company's tenement boundaries which have been fit to the margins of the salt lake/riverine system. Where the tenement boundary is wider than the palaeochannel system, the palaeochannel boundaries have been defined by geophysical traversing (gravity).</li> <li>The thickness of the hosting aquifer holding the brine mineral resources has been based on a groundwater elevation (measured as depth below surface) and a sediment thickness above the impermeable bedrock.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>The mineral resource extends laterally outside of KLP tenement boundaries in some cases.</li> <li>The volume of brine that can be abstracted has been based on laboratory analysis of the porosity and specific yield of core samples collected from holes drilled.</li> <li>Information on the specific yield of similar palaeochannel deposits has been obtained from press releases of other potash exploration companies working in the region and laboratory tests conducted by Soil Water Group.</li> </ul>
Estimation modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to th average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control th resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>concentration, by the volume of recoverable brine (utilizing the relevant specific yield for that aquifer horizon).</li> <li>Mine production records for this resource do not exist.</li> <li>Selective mining units have not been considered.</li> <li>There are no assumptions about correlation between variables.</li> <li>The geological interpretation was used to define the extent of the Indicated Resource, between bores where sands were encountered and where either aquifer tests or lab tests (for specific yield) were positive.</li> <li>The homogeneity of data prevented the use of capping or grade cutoffs.</li> </ul>
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul> <li>Tonnages of potassium have been estimated on a dry, weight volume basis (%w/v). For example 10kg potassium per cubic metre of brine.</li> </ul>
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The homogeneity of data prevented the use of capping or grade cut- offs.

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	Criteria	JORC Code explanation	Commentary
Mining factors or assumptions		<ul> <li>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.</li> </ul>	
	<i>Metallurgical factors or assumptions</i>	<ul> <li>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.</li> </ul>	<ul> <li>Metallurgical test work undertaken by K-UTEC on brine water has been carried out in both small scale lab benchtop trials and larger scale evaporation pilot ponds with results to the efficacy of standard metallurgical recovery methods.</li> </ul>
	Environmen-tal factors or assumptions	<ul> <li>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 potentia 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.</li> </ul>	<ul> <li>The project is expected to have a limited, localized environmental impact, with minor impacts on surface disturbance associated with excavation, adjacent "fresher" aquifer systems, stock piling of salt by-products, stygofauna and GDEs.</li> <li>The project is located in a very remote area and does not expect to contain significant quantities of waste tailings.</li> <li>Acid mine drainage is not expected to be an issue.</li> </ul>
	Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Tonnages of potassium have been estimated on a dry, weight volume basis (%w/v). For example 10 kg potassium per cubic metre of brine.</li> <li>As the resource is a brine, bulk density is not applicable.</li> </ul>

Criteria	JORC Code explanation	Commentary
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>This mineral resource estimate has been classified at different levels (Indicated, Inferred and Exploration Target) by the competent person, taking into account the amount of data available for different parts of the study area.</li> <li>The CIM Best Practice Guidelines for Resource and Reserve Estimation for Lithium Brines were used to determine these confidence categories.</li> </ul>
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	Audits are still to be undertaken.
<i>Discussion of relative accuracy/ confidence</i>	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	



#### 27 Appendix 1: Drill hole assays and details

												Ass	ays		
Lake Name	Easting	Northing	RL (m)	Drill Type	Dip	Azimuth	Down Hole Width (mm)	End of Hole Depth (m)	Solution Reference	Ca	к	Mg	Na	СІ	SO₄
												m	g/L		
10 Mile	233477	7257244	565	Mud Rotary	-90	0	380	90	19/12 WB10 23-30	594	7930	6600	58100	101000	22620
10 Mile	233477	7257244	565	Mud Rotary	-90	0	380	90	WB10 t=1	595	6790	5590	49900	86800	18870
10 Mile	233477	7257244	565	Mud Rotary	-90	0	380	90	WB10 t=2	587	7530	6330	55700	96500	21600
10 Mile	233477	7257244	565	Mud Rotary	-90	0	380	90	WB10 t=8	560	7990	6770	60700	104000	23310
10 Mile	233477	7257244	565	Mud Rotary	-90	0	380	90	WB10 Air Lift	557	8630	7200	64600	108000	25080
10 Mile	233891	7253931	561	Mud Rotary	-90	0	380	54	WB12 t=1	657	6080	6650	49900	85300	22590
10 Mile	233891	7253931	561	Mud Rotary	-90	0	380	54	WB12 t=1 3	689	6490	7080	53000	89100	23310
10 Mile	233891	7253931	561	Mud Rotary	-90	0	380	54	WB12 t=2	696	6480	7050	51800	88100	23580
10 Mile	233891	7253931	561	Mud Rotary	-90	0	380	54	WB12 t=2 2	672	6380	6890	51000	88600	22770
10 Mile	233891	7253931	561	Mud Rotary	-90	0	380	54	WB12 t=4	691	6700	7205	53400	89450	23475
10 Mile	233891	7253931	561	Mud Rotary	-90	0	380	54	WB12 t=8	660	6700	7090	54200	93800	23610
10 Mile	233891	7253931	561	Mud Rotary	-90	0	380	54	WB12 t=24	678	6660	7140	54800	92100	23940
10 Mile	233891	7253931	561	Mud Rotary	-90	0	380	54	WB12 t=32	646	6440	6910	52000	92600	23400
10 Mile	233891	7253931	561	Mud Rotary	-90	0	380	54	WB12 t=72	676	6300	6900	51800	89600	23730
10 Mile	233891	7253931	561	Mud Rotary	-90	0	380	54	WB12 12 pm 14/12	651	6210	6700	49800	89800	22890
10 Mile	233891	7253931	561	Mud Rotary	-90	0	380	54	WB12 12 am 15/12	648	6355	6780	50800	90450	23385
10 Mile	230482	7254260	561	Mud Rotary	-90	0	380	72	WB09TB01			No sa	mples		
10 Mile	235582	7257150	567	Diamond	-90	0	89	100	SDHTM09	156	1,110	600	6,750	12,000	1,890
10 Mile	230190	7259422	560	Hammer, Blade, Mud Rotary	-90	0	165 - 125	93	WB06D	378	13,300	8,360	94,700	152,000	32,700
10 Mile	230476	7257584	561	Blade, Diamond	-90	0	125 - 70	60	WB07	524	9,600	7,660	70,200	124,000	27,210
10 Mile	235565	7257151	568	Aircore Blade, Hammer	-90	0	140 - 135	91	WB19	230	1,870	1,130	12,400	21,900	3,450
10 Mile	233579	7257152	567	Aircore Blade	-90	0	250 - 140	77	WB23	265	2,290	1,590	16,000	27,500	5,070
10 Mile	235582	7257149	567	Aircore Blade, Blade	-90	0	225 - 140	25	WB25	476	1,120	560	6,575	10,800	2,520
10 Mile	233587	7257251	565	Aircore Blade	-90	0	200 - 140	30	WB10MBI	699	5,690	4,550	41,200	72,900	15,360
10 Mile	233468	7257249	566	Aircore Blade	-90	0	225 - 140	79	WB10MBD	707	5,280	4,050	36,800	65,300	13,110
10 Mile	233539	7255526	560	Blade, Downhole Hammer	-90	0	125 - 165	89	WB11MBI	842	4,550	4,510	35,900	62,600	15,750
10 Mile	233542	7255524	561	Downhole Hammer	-90	0	165	10	WB11MBS	830	4,990	5,100	39,800	67,500	17,190
10 Mile	233888	7253923	561	Diamond	-90	0	125	46	WB12MBI	999	4,840	4,470	38,300	64,600	15,510
10 Mile	233894	7253901	560	Aircore, Mud Rotary, Diamond	-90	0	171 - 89	55	WB12MBD	729	5,270	5,475	42,800	74,200	19,125
10 Mile	233468	7257249	566	Mud Rotary	-90	0	380	90	WB10	700	5,700	4,530	41,900	72,000	15,574
10 Mile	233540	7255533	560	Blade/Diamond	-90	0	241 - 89	53	WB11 TB2	803	4,480	4,560	37,000	61,200	16,173
10 Mile	233891	7253931	561	Mud Rotary	-90	0	380	54	WB12 1 hr	989	4,540	4,300	37,000	61,500	15,275
10 Mile	233891	7253931	561	Mud Rotary	-90	0	380	54	WB12 3 hr	668	6,205	6,805	51,700	86,500	23,481



Lake Name										Assays							
	Easting	Northing	RL (m)	Drill Type	Dip	Azimuth	Down Hole Width (mm)	End of Hole Depth (m)	Solution Reference	Ca	к	Mg	Na	СІ	so		
												m	g/L				
10 Mile	233888	7253923	561	Mud Rotary	-90	0	380	54	WB12 I	940	4,400	4,150	35,700	61,000	14,7		
10 Mile	236154	7257232	574	Blade bit with Casing Advancer, Diamond	-90	0	125 - 89	96	WB13	686	7,755	7,320	57,100	97,800	24,2		
				Diamond	-90	0	89	60	SDHB - 3 #1 (1.5 m)	530	11,000	6,440	69,400	119,000	24,5		
Beyondie	223400	7259044	559	Diamond	-90	0	89	60	SDHB - 3 #3 (9 m)	520	10,900	6,460	68,000	122,000	24,3		
				Diamond	-90	0	89	60	SDHB - 3 #4 (12 m)	525	10,800	6,350	66,800	126,000	24,6		
				Diamond	-90	0	89	60	SDHB - 3 #5 (15 m)	525	10,800	6,390	66,200	125,000	24,8		
				Diamond	-90	0	89	60	SDHB - 3 #6 (18 m)	525	10,900	6,610	66,500	125,000	25,0		
				Diamond	-90	0	89	60	SDHB - 3 #7 (21 m)	525	10,800	6,370	65,700	123,000	24,5		
				Diamond	-90	0	89	60	SDHB - 3 #16 (51 m)	545	10,900	6,590	69,200	125,000	25,5		
				Diamond	-90	0	89	60	SDHB - 3 #19 (60 m)	565	11,200	6,500	69,800	125,000	25,3		
				Diamond	-90	0	89	22.5	SDHB - 4 #1 (3 m)	860	6,300	4,650	45,200	78,200	18,		
Beyondie	225891	7260242	560	Diamond	-90	0	89	22.5	SDHB - 4 #2 (2 m)	870	6,280	4,720	45,800	78,700	18,9		
				Diamond	-90	0	89	22.5	SDHB - 4 #3 (9 m)	845	6,170	4,520	44,400	78,700	17,6		
				Diamond	-90	0	89	22.5	SDHB - 4 #4 (12 m)	858	6,210	4,590	43,400	79,050	18,0		
				Diamond	-90	0	89	22.5	SDHB - 4 #5 (15 m)	835	6,080	4,590	44,800	79,400	17,8		
				Diamond	-90	0	89	22.5	SDHB - 4 #6 (18 m)	840	6,270	4,810	45,900	80,400	18,7		
				Diamond	-90	0	89	22.5	SDHB - 4 #7 (21 m)	820	6,130	4,540	44,600	79,800	18,		
				Diamond	-90	0	89	27	SDHB - 5 #1 (1 m)	565	9,500	7,660	59,100	109,000	28,8		
Beyondie	224874	7259474	559	Diamond	-90	0	89	27	SDHB - 5 #2 (2 m)	580	9,600	7,890	58,800	110,000	29,2		
				Diamond	-90	0	89	27	SDHB - 5 #3 (9 m)	560	9,440	7,200	60,100	112,000	26,9		
				Diamond	-90	0	89	27	SDHB - 5 #4 (12 m)	560	9,440	7,600	61,800	112,000	29,8		
				Diamond	-90	0	89	27	SDHB - 5 #5 (15 m)	565	9,740	7,780	63,000	110,000	30,8		
				Diamond	-90	0	89	27	SDHB - 5 #6 (15 m)	575	10,000	7,940	65,600	114,000	30,5		
				Diamond	-90	0	89	27	SDHB - 5 #7 (18 m)	535	9,900	7,710	64,100	115,000	29,6		
				Diamond	-90	0	89	27	SDHB - 5 #8 (21 m)	545	10,100	8,220	65,200	115,000	31,1		
				Diamond	-90	0	89	27	SDHB - 5 #9 (27 m)	545	9,950	7,760	62,400	114,000	29,3		
				Diamond	-90	0	89	27	SDHB - 5 Test Pump 15 min EOH	540	10,200	7,870	63,300	118,000	30,2		
				Diamond	-90	0	89	22.5	SDHB - 6 #1 (3 m)	880	6,690	4,310	45,700	79,100	17,0		
Beyondie	227305	7259097	560	Diamond	-90	0	89	22.5	SDHB - 6 #2 (6 m)	870	6,590	4,240	45,200	78,500	17,2		
_ 0, 011010				Diamond	-90	0	89	22.5	SDHB - 6 #3 (9 m)	870	6,585	4,270	45,350	79,400	17,4		
				Diamond	-90	0	89	22.5	SDHB - 6 #4 (12 m)	855	6,560	4,250	43,400	78,000	17,0		
				Diamond	-90	0	89	22.5	SDHB - 6 #5 (15 m)	860	6,710	4,360	44,600	79,900	17,		
				Diamond	-90	0	89	22.5	SDHB - 6 #6 (18 m)	850	6,610	4,290	45,800	79,500	17,5		
				Diamond	-90	0	89	22.5	SDHB - 6 #7 (21 m)	860	7,010	4,580	46,600	83,000	17,6		



												Ass	says		
Lake Name	Easting	Northing	RL (m)	Drill Type	Dip	Azimuth	Down Hole Width (mm)	End of Hole Depth (m)	Solution Reference	Ca	к	Mg	Na	СІ	so
											•	m	g/L	1	
				Diamond	-90	0	89	22.5	SDHB - 6 Test Pump 25 min	870	7,130	4,500	46,200	83,100	17
				Diamond	-90	0	89	33	SDHB - 7 #1 (3 m)	905	5,190	3,990	39,400	66,200	15
				Diamond	-90	0	89	33	SDHB - 7 #2 (6 m)	915	5,190	4,020	38,900	66,800	15
10 Mile	228257	7260913	560	Diamond	-90	0	89	33	SDHB - 7 #3 (9 m)	905	5,180	4,020	38,900	64,600	15
				Diamond	-90	0	89	33	SDHB - 7 #4 (12 m)	915	5,170	4,020	39,000	65,900	15
				Diamond	-90	0	89	33	SDHB - 7 #5 (15 m)	930	5,200	3,990	38,100	66,900	16
				Diamond	-90	0	89	33	SDHB - 7 #6 (18 m)	940	5,300	4,020	39,200	65,700	15
				Diamond	-90	0	89	33	SDHB - 7 #7 (21 m)	940	5,260	4,030	38,600	65,800	16
				Diamond	-90	0	89	33	SDHB - 7 #8 (24 m)	940	5,330	4,100	38,700	66,400	16
				Diamond	-90	0	89	33	SDHB - 7 #9 (27 m)	950	5,360	4,140	39,300	66,200	16
				Diamond	-90	0	89	33	SDHB - 7 #10 (30 m)	915	5,240	4,060	38,100	66,200	16
				Diamond	-90	0	89	33	SDHB - 7 #11 (33 m)	910	5,210	4,030	37,900	66,200	15
				Diamond	-90	0	89	33	SDHB - 7 Test Pump 25 min	813	6,245	5,010	44,250	80,650	18
				Diamond	-90	0	89	51	SDHTM - 08 #1 (0 m)	737	7,780	5,450	51,250	88,000	23
10 Mile	230359	7259357	560	Diamond	-90	0	89	51	SDHTM - 08 #2 (3 m)	746	7,800	5,540	51,800	88,900	23
				Diamond	-90	0	89	51	SDHTM - 08 #3 (6 m)	742	7,780	5,510	52,800	90,400	23
				Diamond	-90	0	89	51	SDHTM - 08 #4 (9 m)	735	7,760	5,480	52,900	89,200	23
				Diamond	-90	0	89	51	SDHTM - 08 #5 (12 m)	731	7,630	5,370	51,800	88,000	22
				Diamond	-90	0	89	51	SDHTM - 08 #6 (15 m)	746	7,550	5,380	50,600	87,100	22
				Diamond	-90	0	89	51	SDHTM - 08 #7 (18 m)	758	7,670	5,430	51,900	86,900	22
				Diamond	-90	0	89	51	SDHTM - 08 #8 (21 m)	758	7,700	5,480	52,600	86,900	23
				Diamond	-90	0	89	51	SDHTM - 08 #9 (24 m)	735	7,540	5,340	53,700	86,900	22
				Diamond	-90	0	89	51	SDHTM - 08 #10 (27 m)	742	7,640	5,430	54,100	88,000	23
				Diamond	-90	0	89	51	SDHTM - 08 #11 (30 m)	763	7,900	5,600	54,800	88,000	23
				Diamond	-90	0	89	51	SDHTM - 08 #12 (33 m)	766	7,860	5,590	53,800	88,300	23
				Diamond	-90	0	89	51	SDHTM - 08 #13 (36 m)	745	7,670	5,585	51,500	88,150	22
				Diamond	-90	0	89	51	SDHTM - 08 #14 (39 m)	760	7,780	5,550	53,600	88,200	23
				Diamond	-90	0	89	51	SDHTM - 08 #15 (42 m)	748	7,820	5,570	53,300	87,800	23
				Diamond	-90	0	89	51	SDHTM - 08 #16 (45 m)	752	7,940	5,640	54,600	89,600	23
				Diamond	-90	0	89	51	SDHTM - 08 (48 m)	745	7,850	5,585	53,350	89,150	23
				Diamond	-90	0	89	51	SDHTM - 08 #17 Test Pump EOH	731	7,680	5,480	53,300	88,600	22
				Diamond	-90	0	89	51	SDHTM - 08 #18 Test Pump EOH	759	7,860	5,460	53,500	89,300	23



## 28 Appendix 2: Auger hole assays and details

													Assay		
Lake	Easting	Northing	RL (m)	Solution Reference	Drill Type	Dip	Azimuth	Down Hole Width (m)	End of Hole Depth (m)	Ca	к	Mg	Na	CI	SO₄
										1	10	5	10	5	-
	-										1	1	mg/L		
10 Mile	230925	7255738	563	B1	Auger	-90	0	0.25	<1.5m	699	7660	7180	57800	120000	21504
10 Mile	233648	7257946	563	B2	Auger	-90	0	0.25	<1.5m	1080	5380	2470	32100	56100	11441
10 Mile	230000	7258500	563	32	Auger	-90	0	0.25	<1.5m	785	7470	4390	46700	79500	19677
10 Mile	231000	7259500	565	33	Auger	-90	0	0.25	<1.5m	816	5310	4010	36700	63300	18509
10 Mile	231000	7258500	561	34	Auger	-90	0	0.25	<1.5m	776	8450	4490	48400	84400	19827
10 Mile	231000	7257500	562	35	Auger	-90	0	0.25	<1.5m	463	11000	6730	73000	133000	26745
10 Mile	231000	7256500	562	36	Auger	-90	0	0.25	<1.5m	513	10650	6750	70800	127000	26431
10 Mile	232000	7259500	564	43	Auger	-90	0	0.25	<1.5m	936	7400	4100	45100	84000	15904
10 Mile	232000	7258500	563	44	Auger	-90	0	0.25	<1.5m	839	6240	3880	40000	68500	17072
10 Mile	232000	7257500	563	45	Auger	-90	0	0.25	<1.5m	1000	4920	2820	31300	53400	12579
10 Mile	232000	7256500	561	46	Auger	-90	0	0.25	<1.5m	537	10000	7650	67200	125000	24889
10 Mile	232000	7255500	564	47	Auger	-90	0	0.25	<1.5m	832	5200	5180	39100	68400	18958
10 Mile	232000	7251500	564	51	Auger	-90	0	0.25	<1.5m	932	3520	3070	25200	43300	14077
10 Mile	233000	7256500	563	60	Auger	-90	0	0.25	<1.5m	860	4900	4390	37700	63500	16742
10 Mile	233000	7255500	563	61	Auger	-90	0	0.25	<1.5m	853	5880	5090	44200	78800	17161
10 Mile	233000	7254500	563	62	Auger	-90	0	0.25	<1.5m	877	6560	4870	46300	82300	16413
10 Mile	223799	7259792	561	TML1	Auger	-90	0	0.25	<1.5m	457	11392	7967	73701	132800	32850
10 Mile	226025	7255591	560	TMBH 1	Auger	-90	0	0.25	<1.5m	600	2910	2660	21600	35600	11084
10 Mile	228521	7257319	561	TMBH 2	Auger	-90	0	0.25	<1.5m	635	2930	2660	21700	34800	11714
10 Mile	233050	7252797	565	TME	Auger	-90	0	0.25	<1.5m	480	10400	9300	75400	147000	24026
10 Mile	222778	7253100	565	TMW	Auger	-90	0	0.25	<1.5m	415	12800	8760	79500	144000	36848
10 Mile	230375	7259340	564	H7	Auger	-90	0	0.25	<1.5m	903	4530	2790	29400	49300	13777
Aerodrome	378955	7276704	473	A1	Auger	-90	0	0.25	<1.5m	439	7960	8610	82300	138000	26326
Aerodrome	377806	7275416	474	A2	Auger	-90	0	0.25	<1.5m	480	8420	8590	88200	148000	23511
Aerodrome	375378	7279311	473	506	Auger	-90	0	0.25	<1.5m	398	9075	8270	76200	136000	21923
Aerodrome	376000	7278500	473	508	Auger	-90	0	0.25	<1.5m	453	9220	8500	85300	153000	23271
Aerodrome	"	"	473	508 (1)	Auger	-90	0	0.25	<1.5m	459	9280	8620	84300	151000	22762
Aerodrome	376842	7278311	473	513	Auger	-90	0	0.25	<1.5m	498	7580	7710	82500	143000	21594
Aerodrome	377000	7277500	476	514	Auger	-90	0	0.25	<1.5m	461	9130	8610	86100	154000	22043
Aerodrome	377284	7276752	479	519	Auger	-90	0	0.25	<1.5m	553	8795	6515	78300	135000	20156
Aerodrome	378000	7277500	473	520	Auger	-90	0	0.25	<1.5m	458	7640	7590	83900	149000	22522
Aerodrome	379000	7275500	478	527	Auger	-90	0	0.25	<1.5m	720	6740	6000	63500	113000	17431



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Lake	Easting	Northing	RL (m)	Solution Reference	Drill Type	Dip	Azimuth	Down Hole Width (m)	End of Hole Depth (m)	Ca	к	Mg	Na	CI	SO₄
									2 <b>0</b> p ()	1	10	5	10	5	-
													mg/L		
Aerodrome	379000	7274500	475	528	Auger	-90	0	0.25	<1.5m	431	8510	7870	81600	149000	23301
Aerodrome	379000	7273500	481	529	Auger	-90	0	0.25	<1.5m	401	9060	8720	83500	157000	23601
Aerodrome	379158	7272500	479	530	Auger	-90	0	0.25	<1.5m	370	10300	8190	88200	161000	25757
Aerodrome	379189	7271563	481	531	Auger	-90	0	0.25	<1.5m	561	7820	7000	71800	128000	20875
Aerodrome	379653	7276248	477	532	Auger	-90	0	0.25	<1.5m	390	8260	9580	84100	150000	27494
Aerodrome	380000	7275500	474	533	Auger	-90	0	0.25	<1.5m	415	7660	9730	82500	147000	26236
Aerodrome	380000	7274500	475	534	Auger	-90	0	0.25	<1.5m	916	4370	5390	47600	81500	15544
Aerodrome	380000	7273500	475	535	Auger	-90	0	0.25	<1.5m	535	7910	7050	78000	135000	20935
Aerodrome	380000	7272500	475	536	Auger	-90	0	0.25	<1.5m	578	7620	6410	73600	126000	21444
Aerodrome	380000	7271099	473	538	Auger	-90	0	0.25	<1.5m	456	8000	8515	83150	147000	24290
Aerodrome	381095	7274996	478	540	Auger	-90	0	0.25	<1.5m	1050	3740	4070	40100	68400	12369
Aerodrome	381000	7274500	478	541	Auger	-90	0	0.25	<1.5m	667	7460	5880	70000	116000	20097
Aerodrome	381000	7273500	477	542 (1)	Auger	-90	0	0.25	<1.5m	567	7670	5220	75100	125000	22313
Aerodrome	"	"	477	542	Auger	-90	0	0.25	<1.5m	554	7740	5100	75900	125000	22223
Aerodrome	381000	7272500	477	543	Auger	-90	0	0.25	<1.5m	588	8200	6760	79500	132000	21564
Aerodrome	381000	7271500	474	544	Auger	-90	0	0.25	<1.5m	676	6920	7020	68200	117000	19228
Aerodrome	382000	7275500	477	546	Auger	-90	0	0.25	<1.5m	717	6680	6840	68300	117000	19408
Aerodrome	"	"	477	546 (1)	Auger	-90	0	0.25	<1.5m	695	6750	6880	69300	118000	19003
Aerodrome	382000	7274500	477	547	Auger	-90	0	0.25	<1.5m	663	7830	6230	69900	117000	20546
Aerodrome	382000	7273500	477	548	Auger	-90	0	0.25	<1.5m	631	7370	5720	73200	123000	19737
Aerodrome	381874	7272595	477	549	Auger	-90	0	0.25	<1.5m	778	5820	7230	64400	112000	17251
Aerodrome	381527	7271878	478	550	Auger	-90	0	0.25	<1.5m	794	4230	5580	48900	81700	17311
Aerodrome	383000	7275500	476	552	Auger	-90	0	0.25	<1.5m	631	7760	6520	73700	125000	20815
Aerodrome	383000	7274500	476	553	Auger	-90	0	0.25	<1.5m	651	7850	6220	72700	126000	18869
Aerodrome	384000	7275500	474	557	Auger	-90	0	0.25	<1.5m	529	7840	9320	83400	144000	22103
Aerodrome	383685	7273658	475	559	Auger	-90	0	0.25	<1.5m	410	8890	9640	78600	137000	21923
Aerodrome	381187	7273011	476	A	Auger	-90	0	0.25	<1.5m	564	7880	6690	71600	133000	21660
Aerodrome (NW)	370281	7286454	483	A3	Auger	-90	0	0.25	<1.5m	1290	3880	5480	33200	64800	10243
Aerodrome (NW)	370831	7286573	485	A4	Auger	-90	0	0.25	<1.5m	1070	4530	5800	37500	72600	11531
Aerodrome (NW)	368000	7286500	485	461	Auger	-90	0	0.25	<1.5m	1100	4420	6470	39100	80800	11890
Aerodrome (NW)	369000	7285500	483	467	Auger	-90	0	0.25	<1.5m	1160	5210	6570	42900	87800	11381
Aerodrome (NW)	"	"	483	467 (1)	Auger	-90	0	0.25	<1.5m	1170	5320	6640	43800	89000	11531
Aerodrome (NW)	369347	7285288	483	468	Auger	-90	0	0.25	<1.5m	1360	4330	5500	37300	74500	10093
Aerodrome (NW)	369000	7286500	485	469	Auger	-90	0	0.25	<1.5m	1200	4610	5710	38000	74000	11052



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Lake	Easting	Northing	RL (m)	Solution Reference	Drill Type	Dip	Azimuth	Down Hole Width (m)	End of Hole Depth (m)	Са	к	Mg	Na	CI	SO₄
										1	10	5	10	5	-
													mg/L		
Aerodrome (NW)	370701	7284847	484	471	Auger	-90	0	0.25	<1.5m	1230	4650	5890	40200	78200	10752
Aerodrome (NW)	370000	7285500	483	479	Auger	-90	0	0.25	<1.5m	1240	4640	6050	37700	74800	10692
Aerodrome (NW)	370063	7284847	484	480	Auger	-90	0	0.25	<1.5m	1220	4860	5900	40300	77600	1123
Aerodrome (NW)	370496	7287689	484	488	Auger	-90	0	0.25	<1.5m	1360	3340	4750	28300	57100	9105
Aerodrome (NW)	371000	7285500	483	490	Auger	-90	0	0.25	<1.5m	1270	4490	5640	37500	71700	1057
Aerodrome (NW)	371284	7285067	484	491	Auger	-90	0	0.25	<1.5m	1160	4060	5430	36800	68900	1180
Beyondie	226163	7260513	563	B3	Auger	-90	0	0.25	<1.5m	604	3140	2070	20700	33500	1066
Beyondie	223939	7260371	563	B4	Auger	-90	0	0.25	<1.5m	1020	3530	2950	26200	47400	1135
Beyondie	226314	7259540	563	B5	Auger	-90	0	0.25	<1.5m	959	4620	2920	30400	52300	1308
Beyondie	227558	7259135	562	B6	Auger	-90	0	0.25	<1.5m	969	1180	713	7590	12500	4762
Beyondie	225000	7259500	563	11	Auger	-90	0	0.25	<1.5m	790	3700	2510	25400	32700	1201
Beyondie	"	"	563	11 (1)	Auger	-90	0	0.25	<1.5m	747	3360	2220	23100	38800	1081
Beyondie	228000	7261500	566	23	Auger	-90	0	0.25	<1.5m	862	6020	3940	40100	73600	1686
Beyondie	223597	7258770	561	BL2	Auger	-90	0	0.25	<1.5m	510	10100	6740	69800	123000	2396
Beyondie	224311	7259754	561	BL1	Auger	-90	0	0.25	<1.5m	567	8882	7741	66291	108300	2918
Beyondie Stream	217112	7257953	565	BS1	Auger	-90	0	0.25	<1.5m	880	3130	2225	21950	40050	731
Beyondie/10 Mile	232811	7251800	563	N2	Auger	-90	0	0.25	<1.5m	959	4100	2830	28200	46600	1278
Beyondie/10 Mile	224317	7258591	563	N4	Auger	-90	0	0.25	<1.5m	906	4980	3800	35700	59800	1599
Beyondie/10 Mile	228003	7261488	565	N6	Auger	-90	0	0.25	<1.5m	870	6240	4000	43500	73500	170
Beyondie/10 Mile	233000	7253500	562	N7	Auger	-90	0	0.25	<1.5m	861	5570	4560	41500	71900	167
Central (E)	357345	7270169	480	EC1	Auger	-90	0	0.25	<1.5m	807	5400	7070	39500	73000	2078
Central (E)	354473	7281618	478	425	Auger	-90	0	0.25	<1.5m	322	10900	10500	79800	141000	3953
Central (E)	354284	7281217	477	426	Auger	-90	0	0.25	<1.5m	337	11300	8520	78200	131000	4432
Central (E)	354630	7280847	477	427	Auger	-90	0	0.25	<1.5m	472	8350	9940	66200	120000	2905
Central (E)	353937	7278666	478	429	Auger	-90	0	0.25	<1.5m	803	2630	3920	22400	40200	1272
Central (E)	354315	7277351	479	430	Auger	-90	0	0.25	<1.5m	791	4500	6220	37800	68400	1844
Central (E)	"	"	479	430 (1)	Auger	-90	0	0.25	<1.5m	800	4500	6290	37600	67900	1901
Central (E)	354630	7279690	480	431	Auger	-90	0	0.25	<1.5m	696	8300	6040	51400	93900	2189
Central (E)	357575	7271067	481	434	Auger	-90	0	0.25	<1.5m	851	4700	5780	33300	63300	1662
Central (E)	352913	7277918	480	436	Auger	-90	0	0.25	<1.5m	800	2980	4880	29500	52000	1731
Central (E)	358284	7271193	482	442	Auger	-90	0	0.25	<1.5m	789	5200	6230	37500	67900	1949
Central (E)	359000	7270500	481	443	Auger	-90	0	0.25	<1.5m	629	7620	7365	46600	86900	2559



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Lake	Easting	Northing	RL (m)	Solution Reference	Drill Type	Dip	Azimuth	Down Hole Width (m)	End of Hole Depth (m)	Са	к	Mg	Na	СІ	SO₄
									Dopur(iii)	1	10	5	10	5	-
												•	mg/L	•	
Central (E)	"	"	481	443 (1)	Auger	-90	0	0.25	<1.5m	627	7630	7350	47200	87900	25038
Central (N)	335180	7292778	475	PC6	Auger	-90	0	0.25	<1.5m	463	10100	12000	74400	155000	25554
Central (S)	336052	7281468	476	PC8	Auger	-90	0	0.25	<1.5m	621	5400	9710	82400	163000	15518
Central (W)	335403	7281884	476	WC1	Auger	-90	0	0.25	<1.5m	1220	2570	4750	31700	59100	10902
Central (W)	336869	7282657	476	WC2	Auger	-90	0	0.25	<1.5m	387	6360	12000	93700	173000	20965
Central (W)	334065	7292685	477	WC3	Auger	-90	0	0.25	<1.5m	1030	3770	3840	25000	44700	12429
Central (W)	335913	7293437	478	WC4	Auger	-90	0	0.25	<1.5m	640	6260	7380	49300	93700	16892
Central (W)	337097	7291603	478	WC5	Auger	-90	0	0.25	<1.5m	1880	4310	5780	32900	70400	6679
Central (W)	336861	7290535	476	WC6	Auger	-90	0	0.25	<1.5m	1310	2240	2880	17400	34600	6020
Central (W)	339841	7280505	477	WC7	Auger	-90	0	0.25	<1.5m	386	6820	14800	83500	166000	23870
Central (W)	329000	7282500	477	319	Auger	-90	0	0.25	<1.5m	1010	1330	1440	8590	16200	5541
Central (W)	328811	7281847	476	320 (1)	Auger	-90	0	0.25	<1.5m	1040	1300	1560	10700	20000	5900
Central (W)	"	"	476	320	Auger	-90	0	0.25	<1.5m	1030	1290	1570	10800	20000	6080
Central (W)	329401	7284807	475	321	Auger	-90	0	0.25	<1.5m	980	1420	1500	10300	18000	6319
Central (W)	330000	7283500	475	323	Auger	-90	0	0.25	<1.5m	1085	3175	3400	20650	42300	9419
Central (W)	330000	7282500	476	324	Auger	-90	0	0.25	<1.5m	1100	2910	3300	21300	40800	9404
Central (W)	330622	7284902	477	325	Auger	-90	0	0.25	<1.5m	966	3780	4950	29100	56500	13178
Central (W)	"	"	477	325 (1)	Auger	-90	0	0.25	<1.5m	961	3820	5110	29000	56700	13418
Central (W)	331000	7283500	475	327	Auger	-90	0	0.25	<1.5m	898	5760	6150	40500	80700	14705
Central (W)	330779	7283067	475	328	Auger	-90	0	0.25	<1.5m	999	4850	5510	34700	68500	13148
Central (W)	332347	7284839	475	329	Auger	-90	0	0.25	<1.5m	812	5420	6940	41700	82600	16682
Central (W)	332000	7284500	474	330	Auger	-90	0	0.25	<1.5m	665	7070	7500	49900	98600	20486
Central (W)	332000	7283500	475	331	Auger	-90	0	0.25	<1.5m	966	4470	5050	32200	66400	12819
Central (W)	340412	7294346	479	332	Auger	-90	0	0.25	<1.5m	1580	1610	2180	11700	26600	4253
Central (W)	"	"	479	332 (1)	Auger	-90	0	0.25	<1.5m	1550	1580	2150	11600	26600	4103
Central (W)	333063	7285217	475	333	Auger	-90	0	0.25	<1.5m	773	4800	5550	37200	74600	16802
Central (W)	333000	7284500	475	334	Auger	-90	0	0.25	<1.5m	890	4730	5090	31900	65100	13987
Central (W)	333000	7283500	475	335	Auger	-90	0	0.25	<1.5m	1010	4720	5270	34900	69100	12669
Central (W)	333158	7283036	474	338	Auger	-90	0	0.25	<1.5m	917	3560	4640	29200	57300	13328
Central (W)	334126	7285185	474	339	Auger	-90	0	0.25	<1.5m	722	5780	5830	42500	85400	17730
Central (W)	334000	7284500	476	340	Auger	-90	0	0.25	<1.5m	930	5810	4650	36800	73400	12968
Central (W)	334000	7283500	476	341	Auger	-90	0	0.25	<1.5m	1110	3990	4490	32500	67800	10992
Central (W)	334000	7293500	479	342 (1)	Auger	-90	0	0.25	<1.5m	1070	3830	4180	28300	56100	11591
Central (W)	"	"	479	342	Auger	-90	0	0.25	<1.5m	1080	3840	4210	28800	56200	11740



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Lake	Easting	Northing	RL (m)	Solution Reference	Drill Type	Dip	Azimuth	Down Hole Width (m)	End of Hole Depth (m)	Са	к	Mg	Na	СІ	SO₄
										1	10	5	10	5	-
													mg/L		
Central (W)	340333	7293548	477	344	Auger	-90	0	0.25	<1.5m	1570	1400	2480	11700	26800	4582
Central (W)	334252	7282784	475	345	Auger	-90	0	0.25	<1.5m	908	4600	6150	40100	78300	16023
Central (W)	335000	7285500	477	346	Auger	-90	0	0.25	<1.5m	1100	4730	4230	32400	61200	12160
Central (W)	335000	7284500	476	347	Auger	-90	0	0.25	<1.5m	1240	2770	3580	25100	48600	9584
Central (W)	n	"	476	347 (1)	Auger	-90	0	0.25	<1.5m	1230	2750	3540	25300	48300	9524
Central (W)	335000	7283500	475	348	Auger	-90	0	0.25	<1.5m	550	6640	9610	76500	146000	19378
Central (W)	335315	7282689	475	349	Auger	-90	0	0.25	<1.5m	1080	4280	7740	48000	95700	13238
Central (W)	335819	7281036	475	351	Auger	-90	0	0.25	<1.5m	690	5090	8990	80900	153000	15185
Central (W)	335000	7293500	477	352	Auger	-90	0	0.25	<1.5m	636	7790	11200	62700	125000	22822
Central (W)	335000	7292500	475	353	Auger	-90	0	0.25	<1.5m	416	11200	12600	80200	155000	27075
Central (W)	335032	7291752	474	354	Auger	-90	0	0.25	<1.5m	468	10100	10200	74200	137000	29830
Central (W)	336000	7292500	474	356	Auger	-90	0	0.25	<1.5m	545	12600	13100	81800	163000	19378
Central (W)	336000	7291500	474	357	Auger	-90	0	0.25	<1.5m	1600	5870	6710	44600	89000	8596
Central (W)	336000	7290500	476	358	Auger	-90	0	0.25	<1.5m	660	2030	2230	15100	28100	5361
Central (W)	336819	7290004	475	359	Auger	-90	0	0.25	<1.5m	1320	4780	6740	38500	75600	11141
Central (W)	336630	7288847	475	360	Auger	-90	0	0.25	<1.5m	636	10000	12200	76600	153000	17341
Central (W)	336158	7287343	476	361	Auger	-90	0	0.25	<1.5m	873	7040	8250	58600	115000	15754
Central (W)	336189	7286185	474	362	Auger	-90	0	0.25	<1.5m	1070	5215	5195	40000	73400	14286
Central (W)	336000	7285500	475	363	Auger	-90	0	0.25	<1.5m	1210	4100	3930	33700	58000	12369
Central (W)	336000	7284500	475	364	Auger	-90	0	0.25	<1.5m	1250	3410	5720	40400	73500	12354
Central (W)	336000	7283500	475	365	Auger	-90	0	0.25	<1.5m	731	5790	13100	64600	128000	19917
Central (W)	336000	7282500	473	366	Auger	-90	0	0.25	<1.5m	452	7240	13400	98900	178000	21894
Central (W)	336000	7281500	475	367	Auger	-90	0	0.25	<1.5m	714	5440	9220	84600	152000	16293
Central (W)	336000	7280500	474	368	Auger	-90	0	0.25	<1.5m	330	7690	17100	90900	181000	24799
Central (W)	337000	7289500	476	370	Auger	-90	0	0.25	<1.5m	622	9020	10600	74100	146000	17102
Central (W)	337000	7288500	474	371	Auger	-90	0	0.25	<1.5m	554	9835	13750	80850	170000	15559
Central (W)	337000	7287500	477	372	Auger	-90	0	0.25	<1.5m	700	10200	13100	71700	153000	13987
Central (W)	336779	7286343	475	373	Auger	-90	0	0.25	<1.5m	1030	4410	7950	42800	86500	13807
Central (W)	337000	7285500	475	374	Auger	-90	0	0.25	<1.5m	723	6390	8580	59200	115000	17850
Central (W)	"	n	475	374(1)	Auger	-90	0	0.25	<1.5m	732	6500	8790	60300	115000	18210
Central (W)	337000	7284500	475	375	Auger	-90	0	0.25	<1.5m	490	6350	11500	78200	145000	23691
Central (W)	337000	7281500	474	378	Auger	-90	0	0.25	<1.5m	588	5440	9950	83000	154000	16682
Central (W)	"	"	474	378 (1)	Auger	-90	0	0.25	<1.5m	585	5360	9720	82400	155000	16592
Central (W)	338544	7291363	476	380	Auger	-90	0	0.25	<1.5m	1880	4800	6950	37300	83100	6619

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Lake	Easting	Northing	RL (m)	Solution Reference	Drill Type	Dip	Azimuth	Down Hole Width (m)	End of Hole Depth (m)	Ca	к	Mg	Na	CI	SO₄
								main (iii)	Deptir(iii)	1	10	5	10	5	-
											1	I	mg/L		
Central (W)	336370	7292311	474	381	Auger	-90	0	0.25	<1.5m	673	9500	11900	72000	149000	15245
Central (W)	337905	7285248	475	383	Auger	-90	0	0.25	<1.5m	915	4700	7580	49000	97200	14406
Central (W)	338000	7284500	475	384	Auger	-90	0	0.25	<1.5m	1220	3080	6000	35000	67900	11171
Central (W)	337811	7283784	475	385	Auger	-90	0	0.25	<1.5m	538	6090	12100	73200	145000	20097
Central (W)	337811	7282658	474	386	Auger	-90	0	0.25	<1.5m	1020	2300	5870	30900	61900	13208
Central (W)	337622	7282036	474	387	Auger	-90	0	0.25	<1.5m	593	5710	13400	71100	146000	17910
Central (W)	338000	7280500	475	388	Auger	-90	0	0.25	<1.5m	565	5320	10900	89400	167000	15484
Central (W)	338095	7279784	473	389	Auger	-90	0	0.25	<1.5m	582	5950	12100	75500	154000	16443
Central (W)	336141	7279666	474	390	Auger	-90	0	0.25	<1.5m	1260	2610	6180	35700	73900	9674
Central (W)	339544	7278949	473	391	Auger	-90	0	0.25	<1.5m	384	5920	14800	88300	174000	20576
Central (W)	338811	7281343	476	392	Auger	-90	0	0.25	<1.5m	590	5020	8110	77300	143000	16982
Central (W)	339000	7280500	473	393	Auger	-90	0	0.25	<1.5m	553	5470	9990	83300	158000	16383
Central (W)	339284	7280036	473	394	Auger	-90	0	0.25	<1.5m	418	6090	12100	90200	174000	19228
Central (W)	340000	7279500	474	398	Auger	-90	0	0.25	<1.5m	728	4560	8800	71200	133000	15634
Central (W)	"	"	474	398 (1)	Auger	-90	0	0.25	<1.5m	703	4640	8930	70300	135000	15634
Central (W)	340000	7278500	473	399	Auger	-90	0	0.25	<1.5m	440	5810	12100	94800	177000	17910
Central (W)	339937	7277973	473	400	Auger	-90	0	0.25	<1.5m	407	5620	13700	94200	180000	18869
Central (W)	341378	7281059	475	401	Auger	-90	0	0.25	<1.5m	681	4650	9160	68900	129000	17551
Central (W)	341000	7280500	474	402	Auger	-90	0	0.25	<1.5m	696	4950	8810	76700	137000	16053
Central (W)	341000	7279500	474	403	Auger	-90	0	0.25	<1.5m	237	9850	20600	90900	191000	31448
Central (W)	341000	7278500	476	404	Auger	-90	0	0.25	<1.5m	622	5250	10000	84600	154000	15963
Central (W)	342189	7282059	474	408	Auger	-90	0	0.25	<1.5m	649	4880	9900	74700	138000	17641
Central (W)	342000	7281500	476	409	Auger	-90	0	0.25	<1.5m	714	4590	9650	69600	133000	16263
Central (W)	342000	7280500	475	410	Auger	-90	0	0.25	<1.5m	491	5500	13000	79900	155000	20636
Central (W)	342000	7279500	476	411	Auger	-90	0	0.25	<1.5m	612	4810	9720	80800	149000	16503
Central (W)	342000	7278500	473	412	Auger	-90	0	0.25	<1.5m	363	5980	14400	94400	181000	21265
Central (W)	341622	7278036	473	420	Auger	-90	0	0.25	<1.5m	380	5860	15650	92850	181000	21115
Central (W)	342811	7282217	476	422	Auger	-90	0	0.25	<1.5m	1001	3095	5995	38200	72100	13612
Central (W)	"	"	476	422 (1)	Auger	-90	0	0.25	<1.5m	1020	3100	6000	39100	69300	13627
Central (W)	342685	7280689	475	423	Auger	-90	0	0.25	<1.5m	601	4960	10200	78900	146000	17341
Central (W)	342559	7279752	473	424	Auger	-90	0	0.25	<1.5m	431	5560	13400	80800	157000	21654
Central (W)	337000	7280500	473	379	Auger	-90	0	0.25	<1.5m	973	3595	8130	52800	96300	14032
Central (W)	333703	7284444	473	PC7	Auger	-90	0	0.25	<1.5m	550	9900	11000	65300	139000	22229
Northern	341252	7322626	501	406	Auger	-90	0	0.25	<1.5m	1150	1530	2220	13400	24900	6739

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Lake	Easting	Northing	RL (m)	Solution Reference	Drill Type	Dip	Azimuth	Down Hole Width (m)	End of Hole Depth (m)	Са	к	Mg	Na	CI	SO₄
								indui (iii)	Doput (iii)	1	10	5	10	5	-
												•	mg/L		
Northern	341000	7321500	501	407	Auger	-90	0	0.25	<1.5m	1140	5120	7460	42700	84600	12280
Northern	341433	7321933	500	413	Auger	-90	0	0.25	<1.5m	1010	5550	6430	41700	80600	13867
Northern	342000	7321500	500	414	Auger	-90	0	0.25	<1.5m	1310	3870	4060	26600	52400	8775
Northern	342000	7320500	502	415	Auger	-90	0	0.25	<1.5m	1430	4100	4970	31800	62500	9374
Northern	342000	7319500	501	416	Auger	-90	0	0.25	<1.5m	1560	2720	4120	21600	45700	7008
Northern	u.	"	501	416 (1)	Auger	-90	0	0.25	<1.5m	1560	2680	4080	21500	45900	6918
Northern	342000	7317500	500	418	Auger	-90	0	0.25	<1.5m	1470	1790	2670	13200	27400	5481
Northern	341590	7316689	501	419	Auger	-90	0	0.25	<1.5m	1130	1090	1630	7770	16000	4433
Sunshine	250567	7270569	534	LS1	Auger	-90	0	0.25	<1.5m	465	7938	8099	74071	127700	19117
Sunshine	250567	7270569	534	SL5	Auger	-90	0	0.25	<1.5m	425	13000	8920	79600	140000	37448
Sunshine	251204	7271670	534	S1	Auger	-90	0	0.25	<1.5m	515	8350	8510	82300	144000	21474
Sunshine	252058	7270801	534	S2	Auger	-90	0	0.25	<1.5m	620	8070	6620	72000	127000	19767
Sunshine	"	"	534	S2(1)	Auger	-90	0	0.25	<1.5m	621	8200	6830	73700	129000	20246
Sunshine	252953	7272362	535	S3	Auger	-90	0	0.25	<1.5m	547	8250	7540	80000	140000	20366
Sunshine	256979	7270642	532	S4	Auger	-90	0	0.25	<1.5m	557	7210	7750	79000	141000	19767
Sunshine	256972	7272301	534	S5	Auger	-90	0	0.25	<1.5m	838	5690	5360	54700	100000	15454
Sunshine	258021	7274313	538	S6	Auger	-90	0	0.25	<1.5m	841	5570	4640	53900	91800	16503
Sunshine	258088	7271383	536	S7	Auger	-90	0	0.25	<1.5m	1070	3265	3710	36450	62600	11890
Sunshine	259202	7274397	541	S8	Auger	-90	0	0.25	<1.5m	1120	4520	3670	42400	72300	11651
Sunshine	259221	7275346	538	S9	Auger	-90	0	0.25	<1.5m	978	4850	3840	47800	79300	13897
Sunshine	257681	7275541	539	S10	Auger	-90	0	0.25	<1.5m	1070	5380	4450	53100	89800	12998
Sunshine	"	"		S10(1)	Auger	-90	0	0.25	<1.5m	1045	5325	4255	51400	91200	12324
Sunshine	249558	7270017	536	124	Auger	-90	0	0.25	<1.5m	786	5270	5290	45500	81900	13987
Sunshine	250000	7270500	538	126	Auger	-90	0	0.25	<1.5m	512	8410	8350	83100	145000	21354
Sunshine	252000	7272500	535	134	Auger	-90	0	0.25	<1.5m	760	6630	7110	65800	130000	15814
Sunshine	252000	7271500	536	135	Auger	-90	0	0.25	<1.5m	473	8510	6910	78300	137000	23062
Sunshine	251666	7270132	532	137	Auger	-90	0	0.25	<1.5m	515	7840	8190	76600	137000	20785
Sunshine	252703	7272794	537	138	Auger	-90	0	0.25	<1.5m	379	8200	11000	84200	151000	26326
Sunshine	253000	7271500	534	140	Auger	-90	0	0.25	<1.5m	593	7650	6350	71400	126000	20246
Sunshine	253000	7270500	535	141	Auger	-90	0	0.25	<1.5m	580	8210	7330	77600	136000	19677
Sunshine	253666	7272203	540	143	Auger	-90	0	0.25	<1.5m	769	6440	5820	60600	106000	16622
Sunshine	254000	7271500	535	144	Auger	-90	0	0.25	<1.5m	604	7720	6160	72000	125000	18659
Sunshine	254000	7270500	535	145	Auger	-90	0	0.25	<1.5m	571	7990	6450	73100	128000	21624
Sunshine	255149	7272017	538	150	Auger	-90	0	0.25	<1.5m	721	5890	4400	56400	96200	17850



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Lake	Easting	Northing	RL (m)	Solution Reference	Drill Type	Dip	Azimuth	Down Hole Width (m)	End of Hole Depth (m)	Ca	к	Mg	Na	CI	SO₄
										1	10	5	10	5	-
													mg/L		
Sunshine	255000	7271500	535	151	Auger	-90	0	0.25	<1.5m	661	7570	6020	69600	119000	19168
Sunshine	255000	7270500	534	152	Auger	-90	0	0.25	<1.5m	634	6460	7550	69700	124000	19408
Sunshine	256000	7272500	537	156	Auger	-90	0	0.25	<1.5m	832	5220	5010	51400	85200	16862
Sunshine	256000	7271500	536	157	Auger	-90	0	0.25	<1.5m	556	8250	5460	75800	123000	22103
Sunshine	256000	7270500	533	158	Auger	-90	0	0.25	<1.5m	685	6710	6540	69600	119000	17521
Sunshine	"	"	533	158 (1)	Auger	-90	0	0.25	<1.5m	671	6660	6530	69200	124000	17341
Sunshine	257000	7273500	538	167	Auger	-90	0	0.25	<1.5m	666	7690	5450	71800	124000	18988
Sunshine	257000	7271500	535	169	Auger	-90	0	0.25	<1.5m	612	7800	5840	71600	124000	20396
Sunshine	257000	7274500	538	177	Auger	-90	0	0.25	<1.5m	691	7200	6320	69600	126000	17940
Sunshine	257740	7276091	536	179	Auger	-90	0	0.25	<1.5m	814	5560	5700	58600	104000	16952
Sunshine	258000	7273500	535	182	Auger	-90	0	0.25	<1.5m	489	7380	8230	78500	141000	23271
Sunshine	258000	7272500	536	183	Auger	-90	0	0.25	<1.5m	1020	3530	3980	38300	68400	13358
Sunshine	258443	7274058	537	195	Auger	-90	0	0.25	<1.5m	1190	4040	3080	39000	67700	10932
Sunshine (N)	272010	7280857	533	PC1	Auger	-90	0	0.25	<1.5m	1130	4300	5980	42500	87400	11863
Sunshine (NE)	269298	7279748	535	TJ1	Auger	-90	0	0.25	<1.5m	978	3610	5650	44500	79200	15005
Sunshine (NE)	271524	7278932	535	TJ2	Auger	-90	0	0.25	<1.5m	1050	3900	5040	38900	70900	13418
Sunshine (NE)	265000	7276500	535	218	Auger	-90	0	0.25	<1.5m	1100	2340	3100	22800	40500	10273
Sunshine (NE)	267777	7276946	534	224	Auger	-90	0	0.25	<1.5m	1060	3610	4310	33500	60000	13298
Sunshine (NE)	"		534	224 (1)	Auger	-90	0	0.25	<1.5m	1060	3610	4320	34300	60500	13388
Sunshine (NE)	269703	7280017	535	229	Auger	-90	0	0.25	<1.5m	1610	2620	5350	35900	71800	8146
Sunshine (NE)	271000	7280500	536	233	Auger	-90	0	0.25	<1.5m	1220	3680	5500	40700	77200	11591
Sunshine (NE)	271000	7277500	536	236	Auger	-90	0	0.25	<1.5m	1055	3930	4815	39100	69900	14121
Sunshine (NE)	272000	7280500	536	237	Auger	-90	0	0.25	<1.5m	1260	3280	4280	34400	63100	10453
Sunshine (NE)	271443	7277909	534	240	Auger	-90	0	0.25	<1.5m	1180	3780	4960	38700	69400	12429
Sunshine (NE)	272284	7281437	534	241	Auger	-90	0	0.25	<1.5m	1440	2780	4640	33500	62300	9464
Sunshine (NE)	273000	7280500	538	243	Auger	-90	0	0.25	<1.5m	1140	3360	4280	36900	64000	12309
Sunshine (NE)	"		538	243 (1)	Auger	-90	0	0.25	<1.5m	1160	3420	4340	36700	64500	12429
Sunshine (NE)	272182	7280058	535	244	Auger	-90	0	0.25	<1.5m	1060	4370	5750	44700	80700	14077
Sunshine (NE)	272000	7279500	538	238	Auger	-90	0	0.25	<1.5m	1090	3870	5040	40200	68700	12938
Sunshine (SW)	247000	7270500	540	120	Auger	-90	0	0.25	<1.5m	1050	4140	4770	37500	66500	15095
Sunshine (SW)	247405	7270132	541	123	Auger	-90	0	0.25	<1.5m	1100	4140	3570	32300	54600	11651
Terminal	258296	7291599	541	T1	Auger	-90	0	0.25	<1.5m	841	5350	4810	40600	73000	16952
Terminal	257000	7293500	540	171	Auger	-90	0	0.25	<1.5m	859	5890	5350	44600	82300	17221
Terminal	258000	7293500	540	186	Auger	-90	0	0.25	<1.5m	686	6010	6800	49400	92000	22672



													Assay		
Lake	Easting	Northing	RL (m)	Solution Reference	Drill Type	Dip	Azimuth	Down Hole Width (m)	End of Hole Depth (m)	Са	к	Mg	Na	CI	SO₄
										1	10	5	10	5	-
													mg/L		
Terminal	258000	7292500	540	187	Auger	-90	0	0.25	<1.5m	1020	3580	3230	27900	47100	12579
Terminal	257546	7293754	541	191	Auger	-90	0	0.25	<1.5m	716	5090	6070	44700	77400	21175
Terminal	259000	7293500	540	196	Auger	-90	0	0.25	<1.5m	752	7090	6470	52900	94500	21414
Terminal	"	"	540	196 (1)	Auger	-90	0	0.25	<1.5m	728	6920	6290	51200	92700	21115
Terminal	259000	7290500	541	199	Auger	-90	0	0.25	<1.5m	928	4570	4150	34800	62800	15305
Terminal	258562	7293835	540	201	Auger	-90	0	0.25	<1.5m	773	5440	6290	47800	85100	20815
Terminal	260000	7293500	541	204	Auger	-90	0	0.25	<1.5m	822	5840	6020	44300	81400	20007
Terminal	260000	7292500	540	205	Auger	-90	0	0.25	<1.5m	969	5760	5020	42400	77400	15095
Terminal	260000	7291500	540	206	Auger	-90	0	0.25	<1.5m	1100	3900	3730	30300	55800	11890
Terminal	259481	7293819	540	209	Auger	-90	0	0.25	<1.5m	960	4640	4930	38900	67500	15724
Terminal	260189	7293170	540	211	Auger	-90	0	0.25	<1.5m	979	4800	4390	36100	62500	15095
Terminal	260465	7292673	540	215	Auger	-90	0	0.25	<1.5m	1095	4385	3905	33100	59000	13103
Terminal	257000	7292500	541	172	Auger	-90	0	0.25	<1.5m	973	6660	6740	50500	90400	14825
Terminal	255695	7294630	544	IL2	Auger	-90	0	0.25	<1.5m	315	16400	14100	80700	153000	51228
TJ	293407	7306315	513	PC3	Auger	-90	0	0.25	<1.5m	822	6490	7270	48400	99200	14679
TJ	295133	7307154	514	TJ	Auger	-90	0	0.25	<1.5m	1050	5650	5070	41100	76800	12849
TJ (N)	291000	7303500	514	267	Auger	-90	0	0.25	<1.5m	1070	5350	6440	46200	85800	14346
TJ (N)	291000	7302500	514	268	Auger	-90	0	0.25	<1.5m	1330	4470	6020	42500	80500	11082
TJ (N)	292000	7303500	514	272	Auger	-90	0	0.25	<1.5m	1000	5650	6380	45500	85600	14316
TJ (N)	293000	7306500	515	274	Auger	-90	0	0.25	<1.5m	1220	3030	3300	24000	44000	8895
TJ (N)	293000	7305500	515	275	Auger	-90	0	0.25	<1.5m	884	4080	4640	30800	57800	9584
TJ (N)	293000	7304500	515	276	Auger	-90	0	0.25	<1.5m	1140	5140	6190	40100	76700	13178
TJ (N)	293000	7303500	515	277	Auger	-90	0	0.25	<1.5m	1350	3280	4750	31300	57100	10123
TJ (N)	294000	7307500	514	279	Auger	-90	0	0.25	<1.5m	1040	5815	5890	43800	81550	13957
TJ (N)	294000	7305500	514	281	Auger	-90	0	0.25	<1.5m	979	6110	7330	51100	96200	15185
TJ (N)	"		514	281 (1)	Auger	-90	0	0.25	<1.5m	979	6090	7350	50500	96200	14975
TJ (N)	294000	7304500	514	282	Auger	-90	0	0.25	<1.5m	1150	4640	5880	40600	75700	12729
TJ (N)	295000	7307500	515	283	Auger	-90	0	0.25	<1.5m	1000	7120	5250	44800	84900	14316
TJ (N)	295000	7306500	514	284	Auger	-90	0	0.25	<1.5m	931	5090	5720	41400	75500	16293
TJ (N)	294703	7305723	514	285	Auger	-90	0	0.25	<1.5m	1090	4310	5560	37200	67500	13478
TJ (N)	294658	7307222	514	PC4	Auger	-90	0	0.25	<1.5m	984	6580	6500	48600	96700	13960
TJ (S)	282000	7295500	522	258	Auger	-90	0	0.25	<1.5m	1590	3440	4220	32000	59700	8296
TJ (S)	283000	7296500	521	259	Auger	-90	0	0.25	<1.5m	1525	3250	4480	32100	59200	9255
TJ (S)	282907	7295593	523	260	Auger	-90	0	0.25	<1.5m	1490	2400	2890	21400	41100	7278

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Lake	Easting	Northing	RL (m)	Solution Reference	Drill Type	Dip	Azimuth	Down Hole Width (m)	End of Hole Depth (m)	Ca	к	Mg	Na	СІ	SO₄
									2 <b>0 p</b> ()	1	10	5	10	5	
													mg/L	I	1
TJ (S)	284000	7296500	522	261	Auger	-90	0	0.25	<1.5m	1520	3470	4410	32900	62300	9195
TJ (S)	290985	7302991	514	PC2	Auger	-90	0	0.25	<1.5m	1055	5600	7635	51350	108000	12448
White Lake	362764	7271645	483	WL1	Auger	-90	0	0.25	<1.5m	602	5690	4840	46200	73500	20486
White Lake	362828	7270349	477	WL2	Auger	-90	0	0.25	<1.5m	380	9760	9750	75800	137000	34143
White Lake	364119	7271740	480	WL3	Auger	-90	0	0.25	<1.5m	402	9000	7540	73900	125000	29082
White Lake	364959	7271231	476	WL4	Auger	-90	0	0.25	<1.5m	384	9280	8370	79600	137000	30849
White Lake	364755	7269083	476	WL5	Auger	-90	0	0.25	<1.5m	303	9950	10600	84000	147000	38037
White Lake	368055	7268763	477	WL6	Auger	-90	0	0.25	<1.5m	388	9550	7940	80700	141000	31448
White Lake	"		477	WL6(1)	Auger	-90	0	0.25	<1.5m	393	9530	8070	80900	143000	32047
White Lake	370287	7265617	476	WL7	Auger	-90	0	0.25	<1.5m	811	4130	3920	38800	64500	18240
White Lake	369960	7269333	477	WL8	Auger	-90	0	0.25	<1.5m	464	8420	6985	73600	129000	26745
White Lake	371107	7268655	481	WL9	Auger	-90	0	0.25	<1.5m	478	7800	8190	76300	142000	27464
White Lake	376247	7266387	478	WL10	Auger	-90	0	0.25	<1.5m	841	3730	4060	41100	68400	16982
White Lake	"	"	478	WL10(1)	Auger	-90	0	0.25	<1.5m	842	3730	4030	40400	68000	17281
White Lake	362110	7271020	475	446	Auger	-90	0	0.25	<1.5m	508	7640	7830	58200	106000	25278
White Lake	364000	7269500	479	449	Auger	-90	0	0.25	<1.5m	397	8470	12600	69400	128000	35341
White Lake	365779	7270248	475	453	Auger	-90	0	0.25	<1.5m	324	9140	8980	83000	150000	32945
White Lake	366842	7269154	475	456	Auger	-90	0	0.25	<1.5m	277	9690	10700	83900	151000	38336
White Lake	367000	7268500	475	457	Auger	-90	0	0.25	<1.5m	263	11300	11800	86600	163000	38336
White Lake	367347	7267910	475	458	Auger	-90	0	0.25	<1.5m	319	10100	8550	81900	149000	33844
White Lake	369000	7269500	478	463	Auger	-90	0	0.25	<1.5m	437	8010	6800	64000	114000	26176
White Lake	369000	7266500	477	466	Auger	-90	0	0.25	<1.5m	458	8300	6940	67000	122000	27374
White Lake	370748	7269059	478	481	Auger	-90	0	0.25	<1.5m	392	8790	8460	77000	135000	29052
White Lake	"	"	478	481 (1)	Auger	-90	0	0.25	<1.5m	391	8600	8375	76050	134000	28527
White Lake	371000	7267500	479	483	Auger	-90	0	0.25	<1.5m	479	8090	5050	71100	114000	31448
White Lake	371000	7266500	476	484	Auger	-90	0	0.25	<1.5m	493	8500	5590	65900	107000	28662
White Lake	371000	7265500	478	485	Auger	-90	0	0.25	<1.5m	420	9320	5900	81800	125000	33544
White Lake	371000	7264500	477	486	Auger	-90	0	0.25	<1.5m	474	8990	5890	73300	121000	29052
White Lake	371000	7263500	483	487	Auger	-90	0	0.25	<1.5m	725	6380	5860	58100	102000	19348
White Lake	372000	7267500	479	493	Auger	-90	0	0.25	<1.5m	535	7950	6280	67500	117000	24230
White Lake	371716	7266626	477	494	Auger	-90	0	0.25	<1.5m	645	6640	5120	56100	91900	23391
White Lake	372000	7265500	476	495	Auger	-90	0	0.25	<1.5m	479	8925	6195	74800	122000	30220
White Lake	372000	7264500	477	496	Auger	-90	0	0.25	<1.5m	878	5840	5670	52700	92300	16652
White Lake	"	"	477	496 (1)	Auger	-90	0	0.25	<1.5m	868	5730	5600	53600	92800	16772

													Assay		
Lake	Easting	Northing	RL (m)	Solution Reference	Drill Type	Dip	Azimuth	Down Hole Width (m)	End of Hole Depth (m)	Ca	к	Mg	Na	CI	SO₄
								maan (iii)	Doput (iii)	1	10	5	10	5	-
											1		mg/L		
White Lake	372496	7268248	478	498	Auger	-90	0	0.25	<1.5m	482	8090	8400	75100	131000	27434
White Lake	372401	7267500	480	499	Auger	-90	0	0.25	<1.5m	964	3760	3730	36500	62800	14226
White Lake	372905	7266847	479	500	Auger	-90	0	0.25	<1.5m	802	6160	4220	50100	82900	18958
White Lake	373000	7265500	479	501	Auger	-90	0	0.25	<1.5m	478	8700	5700	75300	121000	29621
White Lake	373095	7263744	476	502	Auger	-90	0	0.25	<1.5m	914	4840	4850	44000	75700	15574
White Lake	373905	7265847	477	503	Auger	-90	0	0.25	<1.5m	631	7000	6470	66000	114000	21205
White Lake	375567	7266721	477	504	Auger	-90	0	0.25	<1.5m	831	4630	5080	49100	81100	18000
White Lake	374969	7265878	477	505	Auger	-90	0	0.25	<1.5m	452	7000	8790	77300	130000	27704
White Lake	376000	7265500	477	510	Auger	-90	0	0.25	<1.5m	504	8210	7400	75300	127000	25547
White Lake	377000	7266500	478	515	Auger	-90	0	0.25	<1.5m	372	9890	10200	84500	155000	27135
White Lake	"		478	515 (1)	Auger	-90	0	0.25	<1.5m	364	9800	10100	84400	156000	27255
White Lake	377000	7265500	478	516	Auger	-90	0	0.25	<1.5m	413	8490	7660	78800	135000	29621
White Lake	377000	7264500	480	517	Auger	-90	0	0.25	<1.5m	777	5210	5480	52500	90400	17940
White Lake	375834	7264981	476	518	Auger	-90	0	0.25	<1.5m	507	7350	7470	70400	119000	25727
White Lake	377779	7265406	479	523	Auger	-90	0	0.25	<1.5m	927	3620	4190	35700	61100	14466
White Lake	378000	7264500	477	524	Auger	-90	0	0.25	<1.5m	788	4380	5250	42400	72100	19078
White Lake	370802	7266910	476	WL	Auger	-90	0	0.25	<1.5m	511	9130	6600	75200	126000	30258
Wilderness	309577	7311102	505	PC5	Auger	-90	0	0.25	<1.5m	765	7390	8340	56600	121000	17885
Wilderness	320586	7310804	510	U1	Auger	-90	0	0.25	<1.5m	2570	1400	2560	11200	26200	3115
Wilderness	309000	7311500	508	289	Auger	-90	0	0.25	<1.5m	1030	3920	4160	30800	57600	11471
Wilderness	309158	7310689	510	290	Auger	-90	0	0.25	<1.5m	745	4480	4490	33800	62600	10572
Wilderness	310000	7313500	504	291	Auger	-90	0	0.25	<1.5m	615	5590	7190	45100	88000	15814
Wilderness	310000	7312500	506	292	Auger	-90	0	0.25	<1.5m	1300	3400	3820	22500	44300	9075
Wilderness	310000	7311500	506	293	Auger	-90	0	0.25	<1.5m	908	6220	6900	46000	85400	17850
Wilderness	310000	7310500	506	294	Auger	-90	0	0.25	<1.5m	969	5940	6370	47500	88500	15305
Wilderness	310158	7310193	506	295	Auger	-90	0	0.25	<1.5m	404	4490	5420	34500	68000	11411
Wilderness	311000	7312500	506	296	Auger	-90	0	0.25	<1.5m	1230	4170	4380	30100	57900	10932
Wilderness	311000	7311500	506	297	Auger	-90	0	0.25	<1.5m	960	6520	6810	45900	86600	15724
Wilderness	311000	7310500	506	298	Auger	-90	0	0.25	<1.5m	861	6950	6740	52400	99000	16413
Wilderness	"	n	506	298 (1)	Auger	-90	0	0.25	<1.5m	858	6930	6710	51800	96200	16323
Wilderness	312000	7312500	507	299	Auger	-90	0	0.25	<1.5m	1125	5915	6030	43200	84250	13343
Wilderness	312000	7311500	506	300	Auger	-90	0	0.25	<1.5m	870	6790	8920	58500	117000	14196
Wilderness	311842	7310721	507	301	Auger	-90	0	0.25	<1.5m	763	2260	2980	20000	38600	7008
Wilderness	313000	7312500	505	302	Auger	-90	0	0.25	<1.5m	723	6560	6715	47050	96000	9225



Lake	Easting	Northing	RL (m)	Solution Reference	Drill Type	Dip	Azimuth	Down Hole Width (m)	End of Hole Depth (m)	Assay						
										Ca	к	Mg	Na	СІ	SO₄	
										1	10	5	10	5	-	
										mg/L						
Wilderness	312685	7311815	506	303	Auger	-90	0	0.25	<1.5m	1240	3540	5540	34300	67400	10273	
Yanneri	243334	7294635	550	IL1	Auger	-90	0	0.25	<1.5m	425	10600	9420	57100	101000	38945	
Yanneri	241573	7298445	546	IL3	Auger	-90	0	0.25	<1.5m	693	6535	7200	52550	97250	22963	
Yanneri	242442	7297381	547	Y1	Auger	-90	0	0.25	<1.5m	613	9220	10900	52700	98500	37737	
Yanneri	245664	7295084	547	Y2	Auger	-90	0	0.25	<1.5m	865	6880	5030	39200	70100	17970	
Yanneri	244852	7295411	544	Y3	Auger	-90	0	0.25	<1.5m	744	6420	6340	38500	71500	22552	
Yanneri	242844	7294628	543	Y4	Auger	-90	0	0.25	<1.5m	686	6830	7400	39500	68500	27524	
Yanneri	242453	7293438	545	Y5	Auger	-90	0	0.25	<1.5m	665	5870	7470	38500	67800	28273	
Yanneri	242549	7292557	549	Y6	Auger	-90	0	0.25	<1.5m	827	6640	6380	38900	71800	19857	
Yanneri	243821	7292698	546	Y7	Auger	-90	0	0.25	<1.5m	767	6040	7280	40200	73600	20935	
Yanneri	242840	7291276	547	Y8	Auger	-90	0	0.25	<1.5m	827	5120	6090	35300	64000	19557	
Yanneri			547	Y8(1)	Auger	-90	0	0.25	<1.5m	835	5090	6110	35200	63100	19647	
Yanneri	242397	7291525	548	Y9	Auger	-90	0	0.25	<1.5m	723	7345	6895	43500	78000	24409	
Yanneri	240441	7298445	546	86	Auger	-90	0	0.25	<1.5m	861	2710	3320	16100	29200	11980	
Yanneri	245000	7294500	546	104	Auger	-90	0	0.25	<1.5m	794	6870	6640	39900	76400	19887	
Yanneri			546	104 (1)	Auger	-90	0	0.25	<1.5m	798	6810	6530	39900	75550	19872	
Yanneri	245000	7293500	546	105	Auger	-90	0	0.25	<1.5m	819	6750	5640	37700	68500	19138	
Yanneri	245000	7292500	545	106	Auger	-90	0	0.25	<1.5m	824	5620	6820	41900	77800	19737	
Yanneri	246158	7297658	545	110	Auger	-90	0	0.25	<1.5m	676	4880	6380	35900	61600	25008	
Yanneri	246000	7296500	545	111	Auger	-90	0	0.25	<1.5m	530	8470	7810	46600	86100	26356	
Yanneri	246000	7294500	545	113	Auger	-90	0	0.25	<1.5m	900	6990	4940	39500	73800	15604	
Yanneri	247000	7297500	546	117	Auger	-90	0	0.25	<1.5m	598	6620	7550	47000	79900	30549	
Yanneri	247347	7296563	545	118	Auger	-90	0	0.25	<1.5m	643	7360	6840	49200	81100	25907	
Yanneri	246811	7295721	545	119	Auger	-90	0	0.25	<1.5m	766	6990	5970	44600	75250	21265	
Yanneri			545	119 (1)	Auger	-90	0	0.25	<1.5m	755	6830	5885	43100	75100	20875	
Yanneri	247842	7297374	543	121	Auger	-90	0	0.25	<1.5m	642	6140	7180	45400	74400	27913	
Yanneri	248032	7296815	545	122	Auger	-90	0	0.25	<1.5m	714	6210	6150	42300	71800	22822	
Yanneri Feed	235010	7295291	547	YLF1	Auger	-90	0	0.25	<1.5m	935	2768	3860	17391	30100	12478	
Yanneri/Terminal	254096	7296955	542	YT1	Auger	-90	0	0.25	<1.5m	811	5440	4910	37700	67000	19827	
Yanneri/Terminal	247630	7297225	543	YT1	Auger	-90	0	0.25	<1.5m	615	7180	7600	47600	90900	28310	
Yanneri/Terminal	254232	7297072	542	YT2	Auger	-90	0	0.25	<1.5m	794	5730	5390	41600	74700	19413	