



ASX ANNOUNCEMENT

16 December 2019

High-Grade Sulphate of Potash Discovery at Lake Throssell

Lake Throssell Sulphate of Potash Project

High-grade discovery at Lake Throssell:

- Hand-auger brine samples returned high grades of up to 6,660 mg/L potassium (K) or 14.8 kg/m³ SOP equivalent.
- Average grade of 5,296 mg/L potassium, or 11.8 kg/m³ SOP equivalent from 18 samples.
- Planning is underway to target the basal sand aquifer of the palaeochannel in 2020 including geophysical surveys and exploration drilling.

Trigg is in the unique position of having:

- 100% ownership of this significant sulphate of potash salt lake system covering 752 km² and 106 km of trend.
- Major transport infrastructure adjacent to the Project and only 20 km from the Yamarna Gas Pipeline.

Trigg Mining Limited (ASX: TMG) (Trigg or the Company) announces the results of the initial hand-auger sampling program over Lake Throssell, establishing the potential for a high-grade deposit with potassium results of up to 6,660 mg/L K with an average grade of 5,296 mg/L K (or 11.8 kg/m³ SOP). The samples exhibit favourable characteristics for solar evaporative concentration and lower waste salts with a low Na:K ratio of 15.5:1 and a high SO₄ concentration. This brine composition is comparable to peers who have produced high grade SOP samples indicating equivalent process techniques can be used.

Planning has commenced to enable an initial air core drilling program in 2020 to map and sample the underlying palaeochannel; as well as additional near-surface sampling, with an aim to establishing an initial JORC Mineral Resource.

This early indication of the potential mineralisation has led the Company to apply for two new tenements to the north and the south of Lake Throssell along the interpreted underlying palaeochannel, securing the Lake Throssell system. This takes the Project area to 752 km² and it is all prospective for SOP mineralisation with a 106 km trend.

Managing Director, Keren Paterson commented, *"The Lake Throssell Sulphate of Potash Project is shaping up to be a significant SOP project. These high-grade results across the playa and the potential scale of the underlying palaeochannel makes this discovery one of the most important for Australia's emerging SOP industry and our nation's food security."*

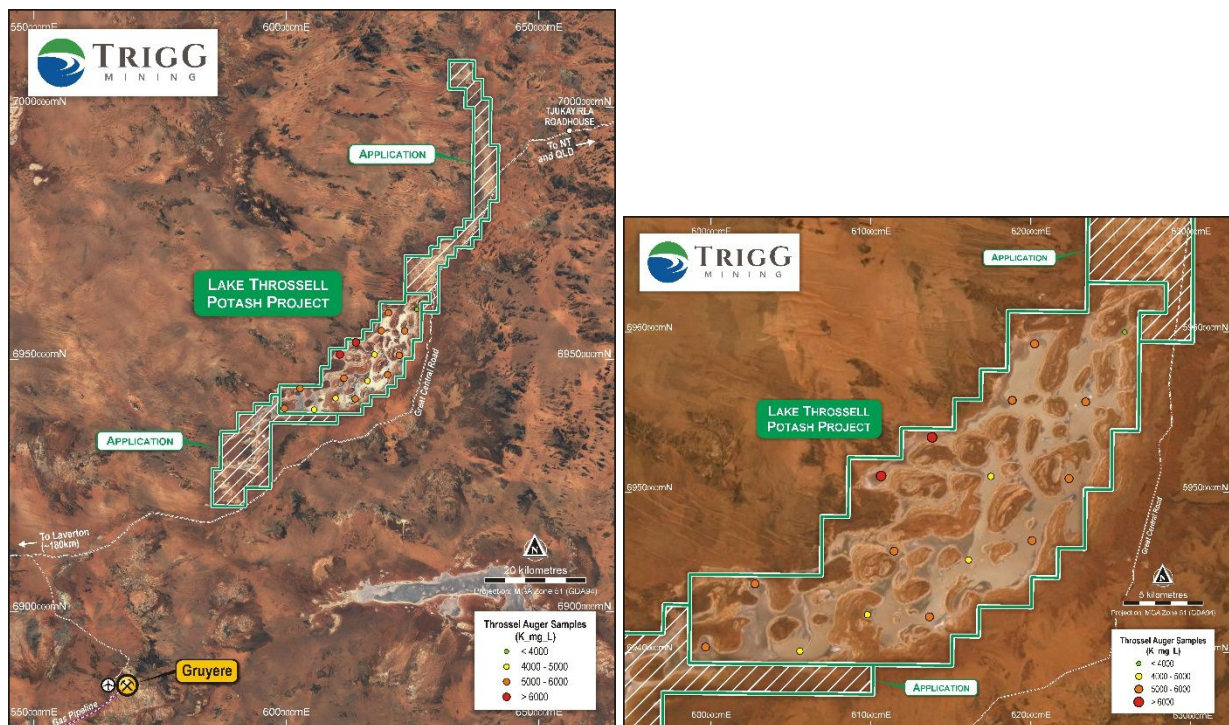


Figure 1: Sample Locations – showing approved and pending tenements

Lake Throssell Sulphate of Potash Project

The Lake Throssell Sulphate Potash Project (**Lake Throssell**) lies approximately 180 km east of Laverton along the Great Central Road (through to Queensland), and covers approximately 752 km² of tenements including the Lake Throssell playa lake and underlying palaeochannel for 106 km. In 2017, Trigg and the Ngaanyatjarra traditional owners entered into an exploration access agreement and under this agreement a heritage survey has now been completed paving the way forward for on-ground exploration activities.

Reconnaissance sampling was completed immediately after the heritage survey, collecting the very first brine samples from the lake to determine the tenor of the brine throughout the surface aquitard. A hand-auger was used to establish pits up to 2m in depth and free-flowing brine was encountered 30 – 70 cm below surface in all 16 pits (Figures 1, 2 & 3 and Table 1). 35 samples and duplicates were taken with results of the 18 samples submitted for analysis averaging 5,296 mg/L potassium, or 11.8 kg/m³ SOP equivalent with the highest result being 6,660 mg/L potassium, or 14.8 kg/m³ SOP equivalent (sample no. LTBS014 from auger position LT016).

The next phase of exploration at Lake Throssell will target the palaeochannel and the basal sand aquifers.



Figure 2: Sampling activities over Lake Throssell (LHS)

Table 1: Lake Throssell Hand-auger Locations (MGA51 Z51)

Site ID	Easting	Northing	RL (m)	Water level (cm below surface)	Hole depth (cm)	K (mg/l)	SOP Equiv. ¹ (K ₂ SO ₄) (mg/l)	Mg (mg/l)	Cl (mg/l)	Na (mg/l)	SO ₄ (mg/l)	TDS (mg/l)
LT001	625864	6959997	364	70	120	3,840	8,556	5,440	94,250	57,600	13,700	187,000
LT002	620233	6959250	365	30	110	5,120	11,407	9,750	145,650	85,800	25,000	284,000
LT003	618832	6955734	366	50	120	5,090	11,341	6,740	122,550	75,900	20,600	237,000
LT004	623424	6,955635	363	33	120	5,610	12,499	7,830	143,900	88,500	20,900	276,000
LT005	622383	6950849	364	32	110	5,150	11,474	6,510	136,400	82,700	18,000	256,000
LT006	617496	6950979	365	39	120	4,910	10,939	4,920	115,400	69,900	15,300	220,000
LT007	610629	6951011	363	36	110	6,580	14,660	7,180	133,600	81,000	23,900	259,000
LT008	620071	6946977	369	38	120	5,240	11,675	8,250	149,000	89,100	20,300	280,000
LT009	616099	6945768	368	39	120	4,820	10,739	5,910	125,550	78,200	18,800	235,000
LT010	611438	6946320	371	39	120	5,600	12,477	6,740	145,850	89,500	20,300	272,000
LT011	613656	6942220	365	38	120	5,040	11,229	8,170	141,300	84,900	21,700	269,000
LT012	609780	6942352	369	81	110	4,840	10,784	7,420	133,750	84,400	23,000	263,000
LT013	605549	6940072	371	51	120	4,880	10,873	7,220	118,550	72,100	20,500	231,000
LT014	599651	6940332	374	50	100	5,370	11,964	12,100	160,350	92,900	30,300	317,000
LT015	602745	6944274	370	95	110	5,980	13,323	13,300	160,150	91,900	32,400	322,000
LT016	613817	6953422	364	42	80	6,660	14,838	10,300	156,150	92,100	28,200	308,000

¹ SOP equivalent is calculated by converting the molecular mass of K to K₂SO₄ – utilising a factor of K * 2.228.
 When reporting as kg/m³ 10,000mg/L SOP is stated as 10kg/m³

Other Projects

Trigg has also entered into an agreement to purchase an additional tenement covering the western portion of Lake Rason (Figure 3). The Company has agreed to pay purchase price of \$20,000 (exclusive of GST) for exploration licence E38/3437 which will increase the Project area by 96.2 km² to 511 km² upon grant. The purchase price will be settled by the issue of fully paid ordinary shares in the capital of Trigg, the deemed issue price of which will be based on the volume weighted average price for the 5 trading days immediately prior to the grant of the tenement. The tenement is not expected to be granted until Q3 FY20.

The additional ground in the Lake Rason area has the potential to enhance the anticipated Mineral Resource estimate following completion of sampling and drilling programs with 10 km of direct lake trend to be added to the existing 42 km lake trend.

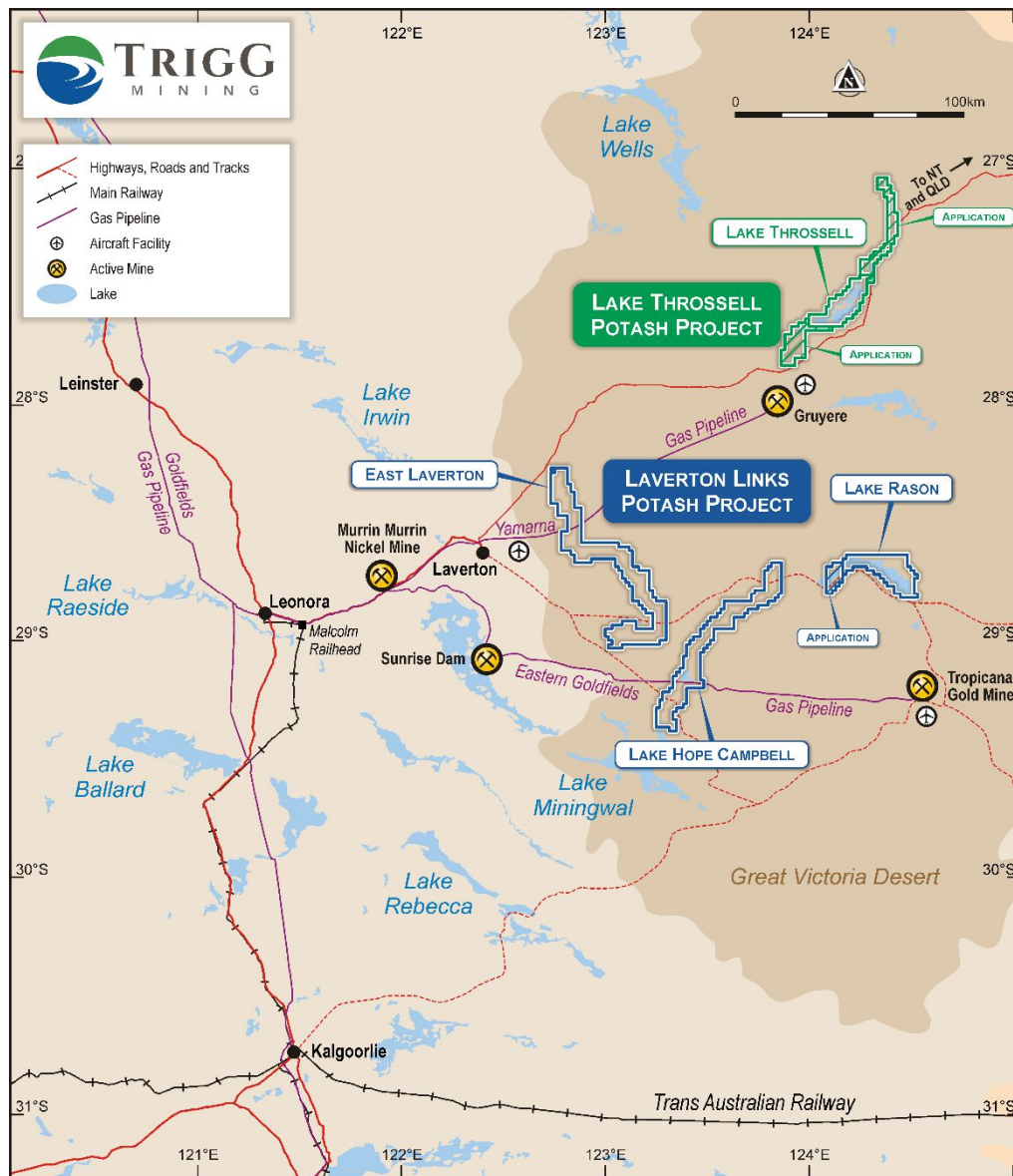


Figure 3: Location of Trigg Mining's SOP Projects showing established infrastructure and Prospect Locations

Trigg Mining Limited

Keren Paterson

Keren Paterson
 Managing Director

About Trigg Mining

Trigg Mining is looking to secure Australia's sustainable agriculture future through the exploration of essential potassium fertiliser, sulphate of potash (SOP), necessary for global food production and human nutrition. SOP provides essential macro nutrients for plant growth without any detrimental elements, such as chloride found in muriate of potash (MOP). In addition, SOP can be produced sustainably through the solar evaporation of potassium-rich hypersaline brine water, without the need for large open pits or waste-rock dumps.

The Trigg Mining SOP Projects (Figure 3) are located nearby established energy and transport infrastructure for access to Australian and international agricultural markets, approximately 200 km east of Laverton in WA and include a JORC Compliant Exploration Target. The Projects cover more than 3,000 km² and contain over 400 km² of salt lake playa and 375 km of interpreted palaeochannels (ancient underground rivers) all highly prospective for brine hosted SOP.

Competent Person Statement

The information in this announcement that relates to exploration results is based upon information compiled by Mr Neil Inwood, as Trigg's Technical Manager. Mr Inwood is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Inwood consents to the inclusion in the announcement of the matters based upon the information in the form and context in which it appears.

Table 3: JORC Tables

Section 1: Sampling Techniques and Data		
Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> At Lake Throssell, a hand auger was used to complete a hole to the target depth of ~1.2 metres. The rate of brine recharge in the hole was recorded along with the final standing water level (SWL). The brine was allowed to stand for several minutes to allow fine suspended sediment to settle. Sample bottles were first rinsed with the brine, and the final sample obtained by decanting from the top of the water column.
Drilling techniques	<ul style="list-style-type: none"> Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Lake Hope Campbell air core drilling was at 3.5" diameter. Lake Throssell auger holes were hand augered with 8" solid flight augers. All holes were drilled vertically.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Lithological sample recovery was very good from air core drilling, indicated by large piles of lithological sample.
Geologic Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> 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. Geological logging and other hydrogeological parameter data is recorded within a database. Drilling lithological samples are washed and stored in chip trays for future reference.
Subsampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, 	<ul style="list-style-type: none"> No sample results are reported.

Section 1: Sampling Techniques and Data		
Criteria	JORC Code explanation	Commentary
	<p>including for instance results for field duplicate/ second-half sampling.</p> <ul style="list-style-type: none"> Whether sample sizes are appropriate to the grain size of the material being sampled. 	
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> All samples have been submitted to Bureau Veritas Pty Ltd in Perth for analysis. Brine samples (250 ml bottles) have been submitted for determination of Ca, Mg, K and S (as SO₄) via ICP-AES analysis. Other parameters including TDS (Gravimetric), pH, chloride and SG will also be determined. Selected samples have also been submitted for a comprehensive multi-element suite via ICP-MS determination. Duplicates have been submitted at a rate of 1 in 10 samples for QA/QC purposes.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> No sample results are presented.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Hole location coordinates obtained by handheld GPS. The grid system used was MGA94, Zone 51.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> At Lake Hope Campbel Drilling has resulted in drill hole spacing of approximately 300 m along drill transects and 7 km in the south and 10 km in the north. Data spacing at Lake Thriossel is shown in figure 1 and is approximately at a 3 to 5 km spacing. No geological modelling, Mineral Resources or Ore Reserves have been estimated.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> Not applicable, considering the deposit type. All drill holes are vertical.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples collected during the work programs were delivered directly from site to the laboratory by field personnel.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul style="list-style-type: none"> None.

Section 2: Reporting of Exploration Results		
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> E38/3065, 100% owned by K2O Minerals Pty Ltd, a 100% owned subsidiary of Trigg Mining Limited. E38/3458 and 3459 have been applied for by K2O Minerals Pty Ltd, a 100% owned subsidiary of Trigg Mining Limited., and are pending. Trigg Mining has an Exploration Access Agreement with the Ngaanyatjarra, traditional owners of the Lake Throssell area.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Areva completed two drilling transects at the north of Lake Hope Campbell. The results of this drilling was used to plan drill holes at the very north of Lake Hope Campbell. AEM surveys completed by Geoscience Australia over Lake Hope Campbell tenements was used to plan gravity surveys and some drilling targets. In many cases the high conductance of the palaeovalley sediments and brine meant that the signal penetration was limited to <50 m depth.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The deposit is a brine containing potassium and sulphate ions that could form a potassium sulphate salt. The brine is contained within saturated sediments. Brine hosted drilling targets include the lake surfaces and palaeochannel sand aquifers.
Drill hole Information	<p>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</p> <ul style="list-style-type: none"> easting and northing of the drillhole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar dip and azimuth of the hole downhole length and interception depth hole length. <p>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.</p>	<ul style="list-style-type: none"> Information has been included in drill collar tables. All holes are vertical.
Data aggregation methods	<ul style="list-style-type: none"> 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. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> Not applicable due to exploration results being applicable to a brine and not a solid. No low or high grade cut-off grade has been implemented.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. 	<ul style="list-style-type: none"> Not applicable due to exploration results being applicable to a brine and not a solid.

Section 2: Reporting of Exploration Results		
Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known'). 	
Diagrams	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Refer to figures/tables in this announcement.
Balanced reporting	<ul style="list-style-type: none"> 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 style="list-style-type: none"> All pertinent results have been reported. Brine and lithological sample analysis is due to be completed in Q3 FY20 Reporting is limited to drill hole data.
Other substantive exploration data	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Gravity geophysical surveys have been completed across the southern section of Lake Hope Campbell where the AEM survey does not penetrate the depth of palaeochannel. These surveys have helped define the margins of the palaeochannel and map its footprint between drilled locations. In addition to brine grade, qualitative information on brine flows from airlift data is an important indicator of the prospectivity of a brine deposit. "Strong brine flows" are indicative of flow rates that are only constrained by the drilling method not the formation.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Geophysical surveys to define the palaeovalley and basal sand aquifer Exploration drilling to sample the confirm extent and grade of brine pool at depth Geological and Resource modelling to potentially establish maiden Mineral Resources. Drilling of test production bores, aquifer testing and geophysical logging to determine aquifer properties of the identified geological units, Additional exploration drilling to close the drill spacing. On lake trenching and test pumping.