



21 DEC 2020

## ASX ANNOUNCEMENT

ASX: TMG

# Wide Palaeovalley Confirmed in Initial Drilling at Lake Throssell SOP Project

*Maiden air-core drilling identifies wide palaeovalley system saturated in hypersaline brine with southern portion of the project still to be tested in early 2021*

### Lake Throssell Sulphate of Potash Project – new high-grade discovery

- Successful initial air-core program confirms broad palaeovalley at least 1km wide and may be up to 3-4km wide in places, with a gravity signature extending for 46km within the granted tenement.
- The palaeovalley appears to be around 100m deep with multiple potential aquifers.
- 16 holes for 1,806m completed, representing approximately half the planned program.
- Preliminary field analysis of salinity is comparable to the salinities encountered within the surficial aquifer.
- Drilling temporarily interrupted due to a weather system delivering approximately 80mm of rain in the Project area. Drilling to re-commence in the New Year as soon as weather conditions permit.
- Brine samples have been submitted for analysis, with results expected in the New Year.
- Maiden Mineral Resource estimate expected to be released in 2021 once all drilling is completed and the results analysed.

**Trigg Mining Limited (ASX: TMG) (Trigg or the Company)** is pleased to provide an update on its inaugural air-core drilling program at the high-grade Lake Throssell Sulphate of Potash (**SOP**) Project, located 170km east of Laverton in Western Australia.

The air-core program, which commenced in late November, was designed to test the basal aquifer within the interpreted 46km palaeovalley target derived from the ground gravity surveys.

The drill program is being carried out by Ausdrill with a track-mounted air-core rig (Figure 1) with 16 holes completed for 1,806m to a maximum depth of 130m (Figure 2 and Table 1).



Figure 1: Air-core drilling at the Lake Throssell Sulphate of Potash Project

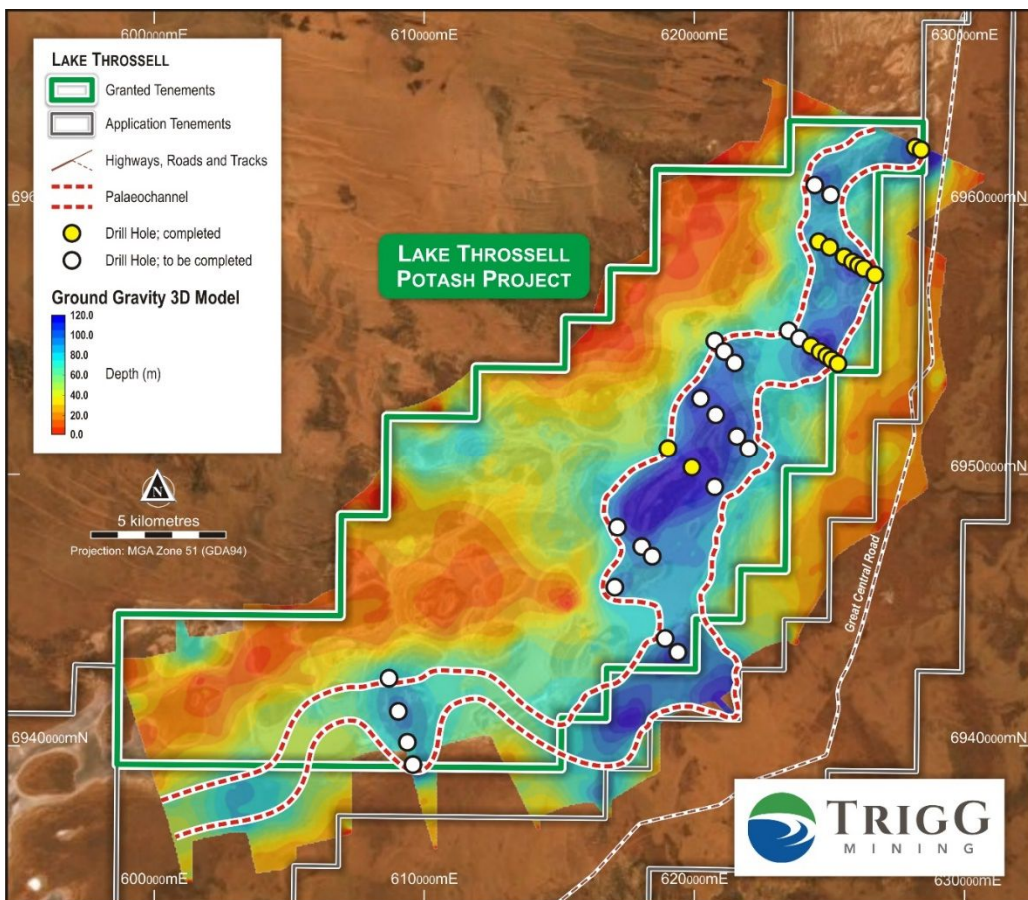


Figure 2: Drilling completed to date and remaining holes to be completed.

The drilled holes are located in the northern portion of the central tenement E38/3065 and have **confirmed the presence of a broad palaeovalley system approximately 100m deep.**

Preliminary interpretation based on visual inspection of drill samples suggests that the palaeovalley system comprises multiple aquifer zones with a thick upper sequence of lacustrine<sup>1</sup> clays and sequences of polymictic medium-coarse grained rounded to angular lithic clasts (e.g. gravels and rock fragments) occurring towards the base of the sequence.

These zones are likely to have the highest porosity/permeability within the palaeovalley sequence and may therefore host the most significant brine resources. These gravel-dominated zones occur in sequences of between a few metres and up to 9m thick, inter-bedded with silt and clay-dominated zones, and are present across the deep sections of the palaeovalley.

**Importantly, the palaeovalley appears to be at least 1km wide and may be up to 3-4km wide in places.**

Preliminary field analysis of salinity from the air-core drilling completed to date is comparable to the salinities encountered within the surficial aquifer, where previous hand and rotary drilling programs encountered brine with high grades of up to 14,800mg/L SOP. Brine samples collected have been submitted for analysis, with results expected in the New Year.

Following a significant rain event where approximately 80mm of rain fell in 48 hours, the drilling program has been temporarily suspended. The program is expected to re-commence in the New Year when weather and access conditions improve.

The lakes of the north-eastern goldfields are known to experience these sporadic heavy rain events, most commonly during the summer months when the north of Australia encounters tropical lows and cyclones. Some of these weather systems carry southward and can deposit large volumes of water in a short period of time.

With the lakes being the collection point for much of the surface run-off, conditions can deteriorate quickly, but can also recover quickly as the water seeps into the aquifers or evaporates, with daytime temperatures reaching highs of more than 45°C and approximately 3m of evaporation per year.

**Trigg Mining's Managing Director, Keren Paterson, said:** *"We are very encouraged by these early results from the maiden air-core drilling program at Lake Throssell, which build on the high-grade results encountered in the surficial aquifer and continue to show Lake Throssell has the potential to be a significant new sulphate of potash project. As soon as weather conditions permit, we anticipate re-commencing the drilling program to continue to delineate this exciting high-grade SOP discovery."*

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



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

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<sup>1</sup> Lacustrine - relating to or associated with lakes

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### Competent Person Statement

The information in this announcement that relates to exploration results is based upon information compiled by Mr Jason Cherry, Exploration Manager and Mr Adam Lloyd, Principal Hydrogeologist. Mr Cherry and Mr Lloyd are Members of the Australasian Institute of Geoscientists and have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and the activity to which they are undertaking to qualify as a Competent Person for reporting of exploration results as defined in the 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Cherry and Mr Lloyd consent to the inclusion in the announcement of the matters based upon the information in the form and context in which it appears.

Table 1: Air-core drill hole location

| Collar ID | Easting (GDA94, z51) | Northing (GDA94, z51) | Azimuth | Dip | RL  | Depth (m) |
|-----------|----------------------|-----------------------|---------|-----|-----|-----------|
| LTAC001   | 628388               | 6962021               | 0       | -90 | 372 | 105       |
| LTAC002   | 628176               | 6962125               | 0       | -90 | 372 | 102       |
| LTAC003   | 625859               | 6957880               | 0       | -90 | 383 | 105       |
| LTAC004   | 626076               | 6957761               | 0       | -90 | 387 | 110       |
| LTAC005   | 626271               | 6957639               | 0       | -90 | 380 | 103       |
| LTAC006   | 625599               | 6958044               | 0       | -90 | 375 | 102       |
| LTAC007   | 625013               | 6958442               | 0       | -90 | 374 | 105       |
| LTAC008   | 625073               | 6954204               | 0       | -90 | 380 | 120       |
| LTAC009   | 624590               | 6954598               | 0       | -90 | 370 | 109       |
| LTAC010   | 624330               | 6954770               | 0       | -90 | 381 | 129       |
| LTAC011   | 624900               | 6954397               | 0       | -90 | 344 | 105       |
| LTAC012   | 625321               | 6954113               | 0       | -90 | 378 | 120       |
| LTAC013   | 626684               | 6957399               | 0       | -90 | 376 | 87        |
| LTAC014   | 624598               | 6958634               | 0       | -90 | 374 | 106       |
| LTAC015   | 619031               | 6950979               | 0       | -90 | 370 | 97        |
| LTAC016   | 619951               | 6950276               | 0       | -90 | 369 | 130       |

Table 2: JORC Table

| Section 1: Sampling Techniques and Data |   |   |
|---|---|---|
| Criteria                                | JORC Code explanation   | Commentary  |
| <b>Sampling techniques</b>              | <ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Brine sampling was carried out via airlifting during drilling at specific depths governed by the geology and brine inflow encountered. Brine samples were collected in a bucket, with approximate flow rates measured during sample collection. Fine sediment was allowed to settle prior to the brine sample being collected by decanting from the top of the bucket.</li> <li>Brine samples are considered indicative of the zone directly above the current drill depth, but maybe skewed due the geology and potential for minor volumes to flow down hole in low permeability zones.</li> </ul> |
| <b>Drilling techniques</b>              | <ul style="list-style-type: none"> <li>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-</li> </ul>  | <ul style="list-style-type: none"> <li>Lake Throssell air core drilling was at 3.5" diameter.</li> <li>All holes were drilled vertically.</li> </ul>  |

| Section 1: Sampling Techniques and Data              |   |  |
|--|---|--|
| Criteria   | JORC Code explanation   | Commentary   |
|  | <i>sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>  |  |
| <b>Drill sample recovery</b>                         | <ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>   | <ul style="list-style-type: none"> <li>• Lithological sample recovery was very good from air core drilling, indicated by large piles of lithological sample.</li> </ul>  |
| <b>Geologic Logging</b>                              | <ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>  | <ul style="list-style-type: none"> <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.</li> <li>• Geological logging and other hydrogeological parameter data is recorded within a database.</li> <li>• Drilling lithological samples are washed and stored in chip trays for future reference.</li> </ul>  |
| <b>Subsampling techniques and sample preparation</b> | <ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul> | <ul style="list-style-type: none"> <li>• No sample results are reported.</li> </ul>  |
| <b>Quality of assay data and laboratory tests</b>    | <ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>   | <ul style="list-style-type: none"> <li>• Field analysis has been completed using a refractometer as an estimate of the total dissolved solids in the brine at a coarse scale. Laboratory analysis is required to validate the field analysis.</li> <li>• All samples are being submitted to Bureau Veritas Pty Ltd in Perth for analysis.</li> <li>• Brine samples (250ml bottles) have been submitted for determination of Ca, Mg, K and S (as SO<sub>4</sub>) via ICP-AES analysis.</li> <li>• Other parameters including TDS (Gravimetric), pH, chloride and SG will also be determined.</li> <li>• Selected samples have also been submitted for a comprehensive multi-element suite via ICP-MS determination.</li> <li>• Duplicates have been collected at a rate of 1 in 10 samples for QA/QC purposes.</li> </ul> |

| Section 1: Sampling Techniques and Data                        |  |  |
|--|--|--|
| Criteria   | JORC Code explanation  | Commentary   |
| <b>Verification of sampling and assaying</b>                   | <ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>                                  | <ul style="list-style-type: none"> <li>• No sample results are presented.</li> </ul>   |
| <b>Location of data points</b>                                 | <ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>   | <ul style="list-style-type: none"> <li>• Hole location coordinates obtained by handheld GPS.</li> <li>• The grid system used was MGA94, Zone 51.</li> </ul>  |
| <b>Data spacing and distribution</b>                           | <ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>                        | <ul style="list-style-type: none"> <li>• At Lake Throssell to date drilling has resulted in nominal drill hole spacing of between 300-500m along drill transects and between 3-5km along strike.</li> <li>• No geological modelling, Mineral Resources or Ore Reserves have been estimated to date.</li> </ul> |
| <b>Orientation of data in relation to geological structure</b> | <ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul> | <ul style="list-style-type: none"> <li>• Not applicable, considering the deposit type.</li> <li>• All drill holes are vertical.</li> </ul>   |
| <b>Sample security</b>   | <ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>   | <ul style="list-style-type: none"> <li>• Samples collected during the work programs were delivered directly from site to the laboratory by field personnel.</li> </ul>   |
| <b>Audits or reviews</b>                                       | <i>The results of any audits or reviews of sampling techniques and data.</i>   | <ul style="list-style-type: none"> <li>• None.</li> </ul>  |