**ASX ANNOUNCEMENT** 4 August 2020

# First Drilling Program Successfully Completed at Lake Throssell Sulphate of Potash Project

**26-hole program completed with results anticipated in August**

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

- A total of 26 rotary holes completed across the playa area of Lake Throssell.
- Holes targeted the surficial aquifer and drilled to a depth of up to 10 metres.
- Samples delivered to the assay laboratory with results anticipated in August.
- This program was designed to follow up the high-grade results generated from auger sampling in December 2019 of up to 14,800mg/L SOP.
- A bulk sample of more than 600L was taken for future evaporation trials and process flowsheet analysis.
- In-fill gravity survey field work completed with data processing underway to further refine locations for the planned air-core drilling program.

**Trigg Mining Limited (ASX: TMG) (Trigg** or **the Company)** is pleased to advise that it has completed the helicopter-supported shallow rotary drilling program across its 100%-owned **Lake Throssell Sulphate of Potash Project** in Western Australia ahead of schedule. This is the first stage of a comprehensive exploration program at high-grade Lake Throssell, targeting a maiden JORC Resource, subject to results.

The shallow (<10m) surface lake program (Figures 1 and 2) was designed to target near-surface brine mineralisation to depths suitable for potential trench-based extraction methods. Many of the holes encountered brine endowment with strong brine-flows seen in units with increased gypsum content and silty sand channels.

Layers of crystalline gypsum, ranging in grain size from fine to coarse (≥10mm), were evident within the majority of holes above ~5m depth (~80% of holes drilled), inter-layered with silty clays. The gypsum layers were up to ~20cm thick in some holes and were often associated with good to very good brine recharge rates. Minor channel deposits (sands and gravels) were also identified in three holes, with one hole (LTAG19) containing a clay/silt supported sand interval of at least 1.3m with rounded pebbles up to 30mm diameter.

Crystalline gypsum and channel deposit material are known to have high porosity and permeability and have the potential to contain significant brine volumes with good flow rates.

Trigg Mining's Managing Director, Keren Paterson, was on site during the program, with the following video summarising her in-field observations. https://www.triggmining.com.au/media

A 620L bulk brine water sample was abstracted from LTAG03 for future laboratory-based evaporation trials. This is anticipated to assist with future process flow sheet analysis.

The previously foreshadowed in-fill gravity survey (Figure 3) field work has now been completed with data processing underway, comprising 14 lines for 107km. Together with the survey conducted earlier in the year, the current survey will provide the first comprehensive and accurate picture of the entire tenement, helping the Company's exploration team to refine drilling locations for the air-core drilling program scheduled to begin during the current Quarter.

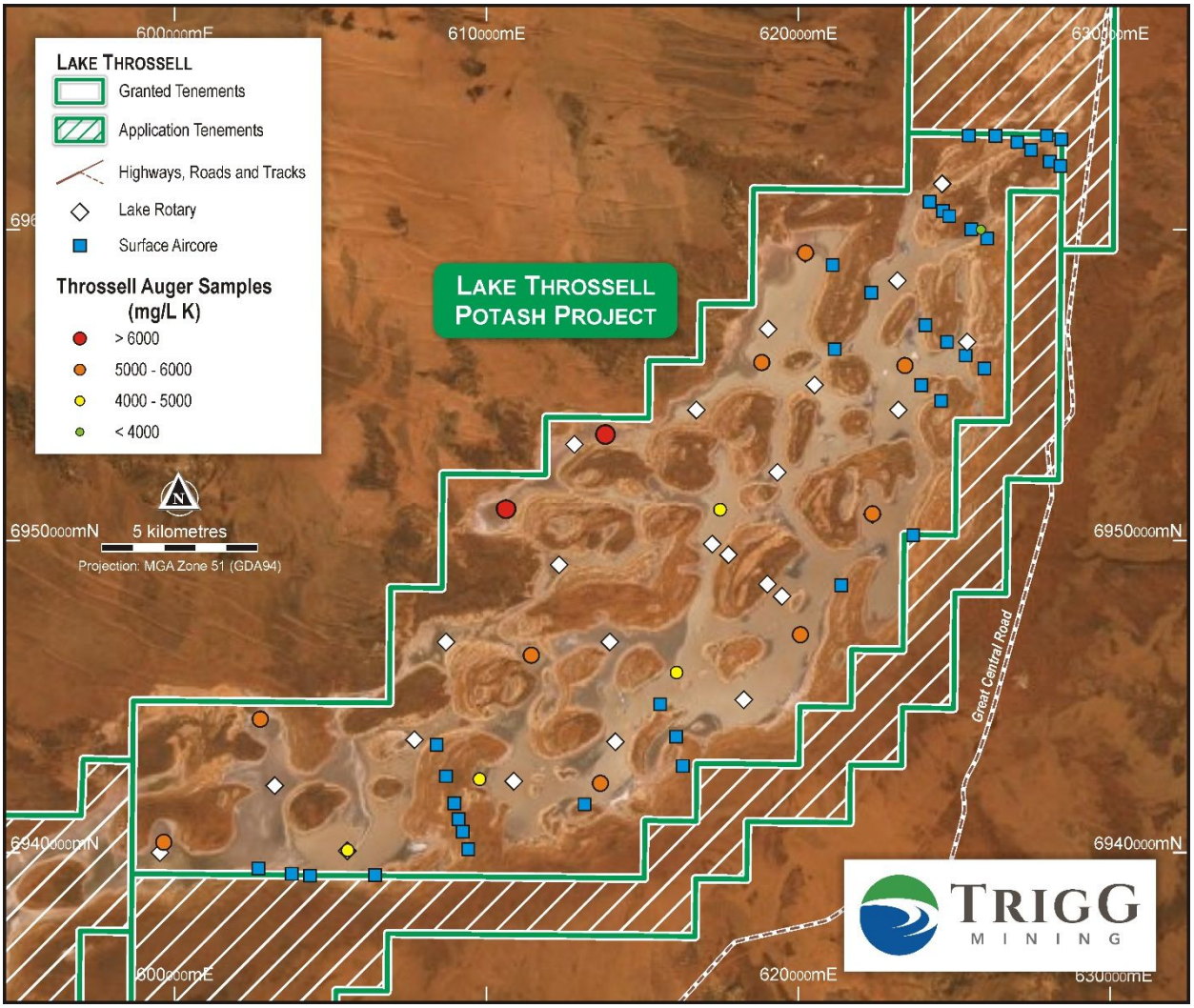


**Figure 1:** Lake drilling targets

**Figure 2:** Example of evaporitic medium to coarse crystalline sands at ~0.5m depth from auger hole LTAG10.

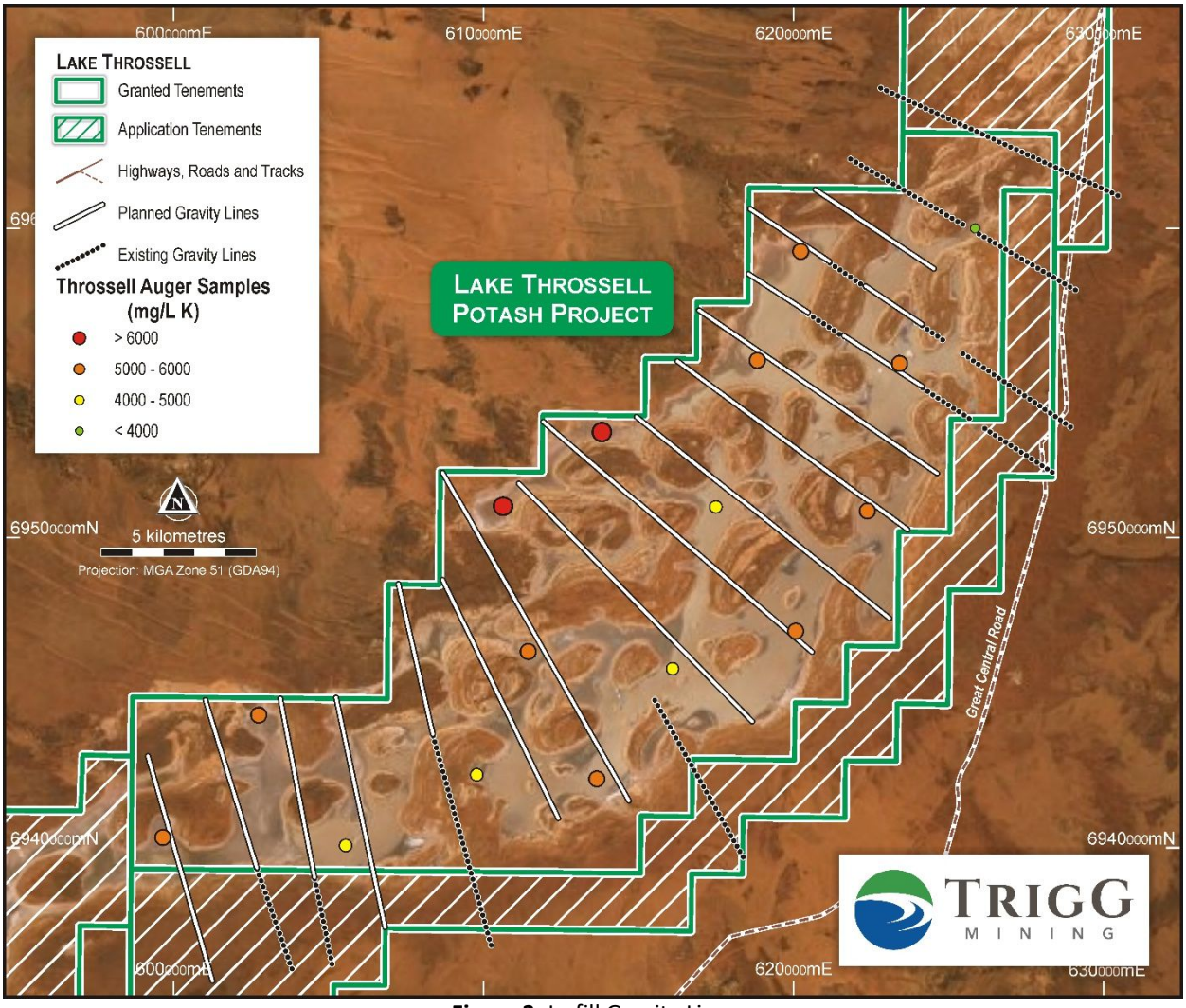


**Figure 3:** In-fill Gravity Lines

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

**Keren Paterson**
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**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 are located nearby established energy and transport infrastructure for access to Australian and international agricultural markets, approximately 170km east of Laverton in WA and including the high-grade discovery at Lake Throssell and a JORC Compliant Mineral Resource at Lake Rason. The Projects cover 1,660km$^2$ and contain over 380km$^2$ of salt lake playa and 170km 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 Technical Manager and Mr Jason Cherry, Exploration Manager. Mr Inwood is a Fellow of the Australasian Institute of Mining and Metallurgy and Mr Cherry is a Member of the Australasian Institute of Geoscientists and they 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 as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Inwood and Mr Cherry consent to the inclusion in the announcement of the matters based upon the information in the form and context in which it appears.

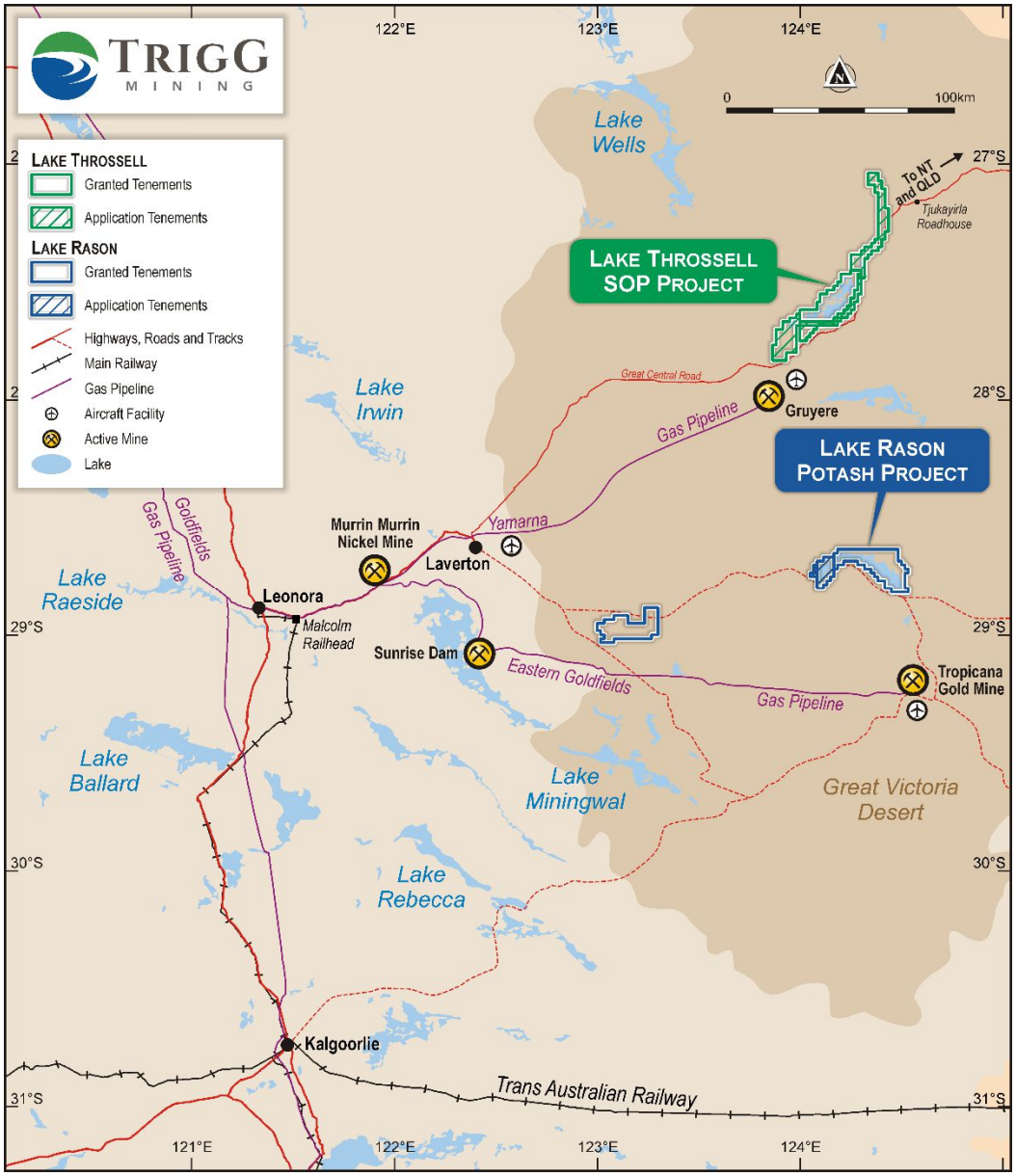


**Figure 4:** Location of Trigg Mining's SOP Projects showing established infrastructure

**Table 1:** Location of Surface Auger Samples

| Hole ID | Easting (GDA94Z51) | Northing (GDA94Z51) | Dip | Azimuth | Depth (m) | Brine interval (mbgl) | Lithological Summary |
|---|---|---|---|---|---|---|---|
| LTAG01 | 623,221 | 6,954,229 | -90 | 0 | 9.00 | 0 – 6.0 | Fine-med evaporitic sand, clay matrix |
| LTAG02 | 625,430 | 6,956,409 | -90 | 0 | 8.25 | 0.5 – 5.5 | Soft silty clay, intermittent coarse gypsum layers |
| LTAG03 | 619,489 | 6,948,228 | -90 | 0 | 7.00 | 0 – 5.5 | Soft silty clay, coarse gypsum layers |
| LTAG04 | 619,018 | 6,948,620 | -90 | 0 | 10.00 | N/A | Dune sand, lacustrine clay |
| LTAG05 | 617,768 | 6,949,560 | -90 | 0 | 6.25 | 4.7 – 5.5 | Silty clay, fine quartz grains |
| LTAG06 | 617,249 | 6,949,900 | -90 | 0 | 5.50 | 0- 4.25 | Med-course crystalline sand, silty clay/gypsum |
| LTAG07 | 618,264 | 6,944,914 | -90 | 0 | 7.00 | 0 – 6.7 | Silty clay with abundant med-large crystalline gypsum layers |
| LTAG08 | 613,965 | 6,946,765 | -90 | 0 | 4.50 | 0 – 4.7 | Silty clay / intermittent coarse gypsum layers |
| LTAG09 | 614,144 | 6,943,570 | -90 | 0 | 6.25 | 0.5 – 4.0 | Silty clay / intermittent coarse gypsum layers |
| LTAG10 | 610,882 | 6,942,305 | -90 | 0 | 5.50 | 0.5 – 4.0 | Silty clay / intermittent coarse gypsum layers |
| LTAG11 | 603,216 | 6,942,167 | -90 | 0 | 7.00 | 0 – 1.0 | Silty clay, minor gypsum, stiff clay |
| LTAG12 | 605,545 | 6,940,077 | -90 | 0 | 7.00 | 0 – 2.5 | Soft, silty to stiff clay, intermittent gypsum crystal layers |
| LTAG13 | 599,494 | 6,940,005 | -90 | 0 | 6.25 | 0 – 0.5 | Damp stiff clay, minor gypsum layers |
| LTAG14 | 607,702 | 6,943,633 | -90 | 0 | 7.00 | 0.5 – 5.5 | Firm wet clay, intermittent coarse gypsum layers |
| LTAG15 | 608,710 | 6,946,765 | -90 | 0 | 4.75 | 0 – 4.0 | Soft, silty to stiff clay, indurated fine sand |
| LTAG16 | 612,341 | 6,949,239 | -90 | 0 | 7.00 | 0 – 1.7 | Soft clay, minor gypsum to stiff clay |
| LTAG17 | 610,629 | 6,951,013 | -90 | 0 | 6.00 | 0 – 5.5 | Soft, silty to stiff clay, indurated fine sand |
| LTAG18 | 612,830 | 6,953,124 | -90 | 0 | 2.50 | 0.5 – 1.5 | Soft, silty clay, indurated fine sand |
| LTAG19 | 616,742 | 6,954,229 | -90 | 0 | 4.50 | 0.5 – 2.5 | Soft, silty to stiff clay, indurated fine-med sand with clay matrix |
| LTAG20 | 619,339 | 6,952,229 | -90 | 0 | 7.00 | 0.5 – 4.0 | Soft, silty to stiff clay, intermittent gypsum crystal layers |
| LTAG21 | 622,383 | 6,950,850 | -90 | 0 | 7.00 | 0 – 1.0 | Soft, silty to stiff clay, intermittent gypsum crystal layers |
| LTAG22 | 620,534 | 6,955,035 | -90 | 0 | 8.50 | 3.3 – 8.5 | Gritty clay with lithic fragments, soft, silty to stiff clay |
| LTAG23 | 619,041 | 6,956,827 | -90 | 0 | 5.80 | 0.5 – 5.5 | Firm wet clay, intermittent coarse gypsum layers, channel deposits |
| LTAG24 | 620,233 | 6,959,251 | -90 | 0 | 5.50 | 1.0 – 4.0 | Firm wet clay, intermittent coarse gypsum layers, channel deposits |
| LTAG25 | 623,191 | 6,958,379 | -90 | 0 | 6.25 | 0.5 – 2.2 | Soft, silty to stiff clay, intermittent gypsum crystal layers |
| LTAG26 | 624,624 | 6,961,485 | -90 | 0 | 6.00 | 2.5 – 5.5 | Soft, silty to stiff clay, intermittent gypsum crystal layers |

**Table 2:** JORC Tables

| Section 1: Sampling Techniques and Data | | |
|---|---|---|
| **Criteria** | **JORC Code explanation** | **Commentary** |
| *Sampling techniques* | • *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.* | • At Lake Throssell, a portable auger drill rig was used to complete a hole to the target depth of 6-10m.<br>• Geological core samples were collected using Lexan tubes at specific intervals.<br>• Brine samples were collected at the bit face for specific intervals down hole (geology dependant). Sample bottles were first rinsed with brine before collecting the final sample.<br>• The rate of brine recharge was recorded for each sample interval, and final Standing Water Level (SWL) was also recorded for each hole. |
| *Drilling techniques* | • *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).* | • Hollow Stem auger. |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | • >90% |
| *Geologic Logging* | • *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • Undertaken, compiled results pending. |
| *Subsampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • Water samples taken at key location - compiled results pending. |

| Section 1: Sampling Techniques and Data | | |
|---|---|---|
| **Criteria** | **JORC Code explanation** | **Commentary** |
| *Quality of assay data and laboratory tests* | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *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.*<br>• *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.* | • N/A |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • Not applicable. Detailed results pending. |
| *Location of data points* | • *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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • Sample locations displayed in diagrams in the report. Planned coordinates shown – likely accurate to within 20m. Detailed results pending. |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • Holes drilled on nominal 5-7km spacing. |
| *Orientation of data in relation to geological structure* | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *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.* | • Vertical Auger holes have targeted shallow sub-horizontal aquifer system. |
| *Sample security* | • *The measures taken to ensure sample security.* | • All samples have stayed in control of company geologists; and will be hand-delivered to the assay laboratory. |
| *Audits or reviews* | *The results of any audits or reviews of sampling techniques and data.* | • Not applicable. |

| Section 2: Reporting of Exploration Results | | |
|---|---|---|
| **Criteria** | **JORC Code explanation** | **Commentary** |
| *Mineral tenement and land tenure status* | • *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*<br>• *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.* | • EL380/3065 is 100% owned by Trigg's 100% owned subsidiary K2O Minerals Pty Ltd. |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | • Not applicable. |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | • Shallow surficial lake playa. |
| *Drill hole Information* | *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>• *easting and northing of the drill hole collar;*<br>• *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar;*<br>• *dip and azimuth of the hole;*<br>• *downhole length and interception depth; and*<br>• *hole length.*<br>*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.* | • Announcement refers to notification of completion of drilling program. Hole coordinates are shown in diagrams and supplied as a table. Detailed results and summary information will be supplied once field data has been compiled. |
| *Data aggregation methods* | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • Not applicable. |
| *Relationship between mineralisation widths and intercept lengths* | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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').* | • Not applicable. |
| *Diagrams* | • *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.* | • Refer to figures/tables in this announcement. |
| *Balanced reporting* | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | • All pertinent results have been reported. |

| Section 2: Reporting of Exploration Results | | |
|---|---|---|
| **Criteria** | **JORC Code explanation** | **Commentary** |
| *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.* | • Approximately 107 line km of gravity surveys over 14 traverses, approximately 3 to 5km apart, were conducted orthogonal to the lake trend with readings taken at a station spacing of 100m. |
| *Further work* | • *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Lake surface trenching and test pumping to confirm aquifer properties and potential flow rates.<br>• Infill air-core drilling at sites identified by the geophysical surveys.<br>• Installation of test production bores and hydraulic testing of the aquifer to determine aquifer properties, brine grade and allow estimates of sustainable pumping rates. |