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## ASX ANNOUNCEMENT

ASX: TMG

# Successful completion of Lake Throssell sighter test work program

*Results support the design of the proposed bulk evaporation program to simulate operational steady-state brine evaporation and generate salt products for testing*

### Highlights

- A successful sighter evaporation trial has been completed on a representative sample of brine from the Lake Throssell SOP Project to determine salt production rates and characteristics.
- The results will assist with the design of a proposed bulk evaporation trial, expected to commence later this month, to support the planned Pre-Feasibility Study (**PFS**) for the Lake Throssell development.
- Test work also provides the baseline data for an initial Dynamic Mass Balance Pond Model that will be used in the early stages of the PFS engineering to generate a preliminary mass balance, estimate the required pond areas, as well as the required number and layout of the ponds.
- The next phase of the bulk evaporation trial will aim to produce several mixed potassium (**KTMS**) salts for processing test work to produce an export-quality Sulphate of Potash (**SOP**) product for engagement with and analysis by potential off-take partners.
- This next phase will also evaluate the possibility of producing other salt precipitates, e.g. magnesium sulphate.

Trigg Mining Limited (**ASX: TMG**) (**Trigg** or the **Company**) is pleased to announce the completion of a successful sighter evaporation trial on brine samples from the Company's flagship 100%-owned Lake Throssell Sulphate of Potash (**SOP**) Project, located in the Laverton region of Western Australia.

The sighter evaporation trial was undertaken at the Nagrom laboratory facilities in Kelmscott Western Australia on a 29L sample of brine sourced from a combination of trench and bore brine collected from Lake Throssell.

The aim of the sighter program was to establish baseline data for the planning of a bulk evaporation program to simulate operational steady-state brine evaporation and salt production from Lake Throssell.

Results from the bulk program will provide data for the engineering design work to be undertaken as part of the Lake Throssell PFS, as well as for product quality analysis by prospective off-take partners.

The brine evaporation program was carried out over 92 days with continuous gentle agitation of the brine was performed to simulate operational conditions of brine flow through the ponds under natural conditions of wind, waves and sunlight (Figures 1 and 2).



*Figure 1: Test rig*

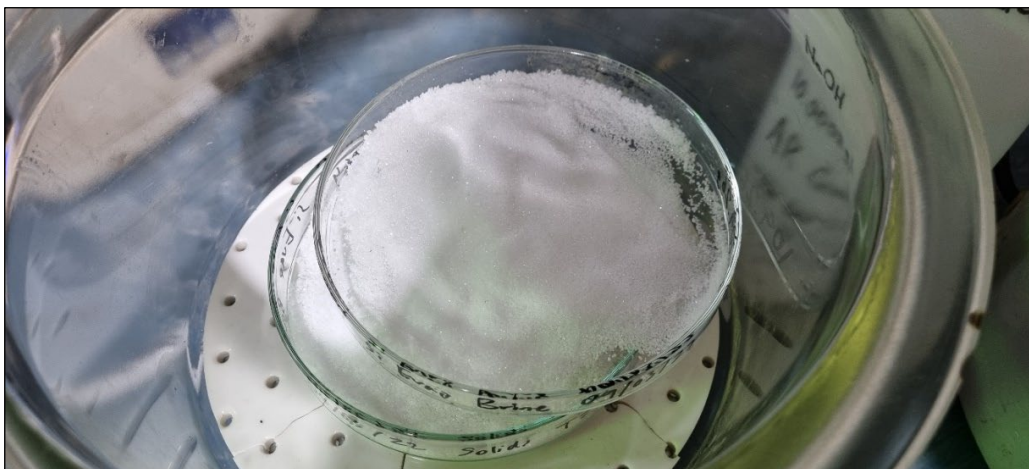


*Figure 2: Agitation and probes*

The logged data gathered from the sighter evaporation program will be used to establish the guideline conditions for the proposed bulk evaporation program, which is planned to commence later this month. This bulk program is aimed at simulating operational steady-state brine evaporation and generate salt products for testing optional SOP processing routes.

The salts, both as individual species salts and KTMS, will be tested to generate operational and engineering design data. The blended KTMS will also be processed to produce an export quality SOP product for inspection and analysis by potential off-take partners.

The recovery of the salt products (Figure 3) from the starting brine concentrations provides the basis for a mass balance of ions and conversion to salts based on assay analysis.



*Figure 3: Recovered potassium salts*

Results of the sighter evaporation program have provided Trigg with the necessary data to establish the guidelines for the proposed bulk evaporation and salt production trial, as well as baseline data for an early design Dynamic Mass Balance Pond Model that will be used in the early stages of the PFS engineering to estimate the required pond areas and the required number and layout of the ponds.

The modelled salting path, based on the phase diagram for the K<sub>2</sub>, Mg and SO<sub>4</sub> ion species (Janecke Diagram), indicates the predicted salts produced at increasing ion concentrations under continued brine evaporation conditions. The modelled salting path and the interpreted salt species recovered from the program are consistent within the accuracy of the interpretation of data from the program.

The next phase of the bulk evaporation trial, to commence later this month, aims to produce KTMS salts for processing test work and to produce export-quality SOP for engagement with and analysis by potential off-take partners. This next phase will also evaluate the possibility of producing other salt precipitates, e.g. magnesium sulphate.

**Trigg Mining Managing Director Keren Paterson said:** *“This initial sighter evaporation program has provided Trigg with the information to confidently design the guidelines for a larger bulk evaporation program at Lake Throssell, with the aim of simulating steady-state operating conditions for the evaporation and salting of brines.*

*“In addition, we also now have sufficient data for the development of a preliminary Dynamic Mass Balance Pond Model to underpin the engineering of pond areas, mass balance and pond layout design in the PFS.*

*“The next phase of the program – the bulk evaporation program – will further enhance this model and provide more detailed and accurate data for engineering support and design to support the Lake Throssell Project development.”*

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

*Keren Paterson .*

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