



## TOPTUNG LIMITED

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Quarterly Activities and Cash Flow Statement  
For the 3 months ending 31 December 2017 (Quarter)

### COMPANY OVERVIEW

TopTung Limited (TopTung) (Company) (ASX: TTW) is a mineral exploration company listed on the Australian Securities Exchange (ASX).

Activities since the Quarterly report lodged with the ASX for the 3 months ending 30 September 2017 include:

- Compilation of the geological and assay data for the Wild Kate and Mt Everard 2012 JORC Code resource estimations based on the Company's combined 400 hole RC percussion and diamond drill programme. H&S Consultants Pty Ltd (Brisbane) has been appointed to undertake the resource estimates based on this drilling for both tungsten and for the volume of silicite to allow for the calculation of contained topaz. It is expected that the resource estimation will be completed during the first quarter 2018.
- The topaz research programme at the UNSW is ongoing; however the commencement of the ARC Linkage funded fibre project has been delayed due to construction and delivery issues associated with the new furnace. Expected delivery and commissioning of the furnace is now scheduled for late January 2018. In the interim, one of the two scientists appointed to the fibre project has been studying aspects of the project that do not require the use of the furnace. These include:
  - 1) Obtaining potential alternative substrates, including single-crystal alumina, polycrystalline alumina, single-crystal quartz (all of which are compatible with mullite) and a coarser aligned mullite (similar to that used previously in the existing furnace)
  - 2) Green processing of fly ash template samples in preparation for use in the new furnace
  - 3) The preceding process has involved the use of different types of fly ashes in the existing lower temperature furnace since their properties are variable
  - 4) Investigation of rheological additives (deflocculant and binder) in order to improve vibratory casting of templates
  - 5) Investigation of vacuum forming in order to remove the residual porosity during forming
  - 6) Using high-temperature X-ray diffraction in order to examine the mineralogical changes in fly ash during heating
  - 7) Dilatometry in order to determine more accurately the physical changes in fly ash during heating
  - 8) Commencement of milling studies in order to reduce the temperature requirement for viscous flow
  - 9) Further research on related crystal growth techniquesThe second scientist will join the project once the new furnace is operational.
- Company funded research has continued into uses for the kaolinitic clay that is sometimes associated with the (tungsten) host silicite bodies, for example as a soil ameliorant, or feedstock for the production of geopolymers.

- There has been increasing interest in the potential use of the Torrington topaz concentrate as an abrasive in sand blasting and high pressure water cutting applications. Research is being conducted on methods to remove any residual silica from the concentrate. There are also a range of tests required into the physical attributes of the topaz product to prove its suitability. If successful, this is a lower value bulk market application which could consume the topaz produced from a tungsten gravity recovery plant. Tungsten content in the host silixite of approximately 0.2% W is deemed economic at current prices. Topaz constitutes approximately 20% of the silixite, i.e. about 100 times more topaz than tungsten will be produced by the processing plant. This is why bulk industrial markets for the topaz are being sought, as it will have a profound effect on the project economics.
- The Torrington Tungsten and Topaz Project Mining Lease application (MLA) had to be resubmitted to include a potential ore haul road corridor. This resulted in a number change from MLA546 to MLA547 with no delay (Figure 1).
- RW Corkery & CO. PTY. LIMITED was appointed to lead the various MLA studies related to the Conceptual Project Development Plan (CPDP) and Environmental Impact Statement (EIS). The associated third party Heritage and Ecological field studies were completed in December. The Right to Negotiate (RTN) public notices was placed in the newspapers as required during December and no procedural delays are envisaged in the MLA processing.
- Two additional prospective silixite areas have been outlined and review of environmental factors (REF) studies undertaken simultaneously with the EIS studies. One of these (NW Prospect) falls within the MLA and the other (Sheep Station Prospect) is located to the southeast. Both will be subjected to limited drilling once approvals are received to test new prospecting methods based on what has been learnt from the 2017 drilling programme. The new (REF) areas occur within either the Torrington State Forest or Lot 20, both of which are subject to existing Access and Compensation agreements (Figure 2).

## **CAPITAL STRUCTURE AND CASH POSITION**

The Company's summarised capital structure at 31 December 2017 is as follows:

Issued fully paid ordinary shares:	153,247,653
Options (listed and unlisted):	Nil
Cash at Bank:	\$3.95 million

Shareholders and potential investors should also review the Company's Annual Report and audited Financial Report for the year ending 30 June 2017 and the Financial Report for the half-year ended 31 December 2016 to fully appreciate the Company's financial position.

Cash balances are placed on short-term deposit and are monitored on a month to month basis in order to ensure funds are available for drilling and associated field based activities for the coming quarter.

## **MINERAL TENEMENT INFORMATION**

<b>Project</b>	<b>Tenement. No.</b>	<b>% Interest</b>	<b>Location</b>
Torrington 1	EL 8258	100%	New South Wales
Torrington 2	EL 8355	100%	New South Wales

For, and on behalf of, the Board of Directors of TopTung Limited,

Dr Leon Pretorius  
Executive Chairman  
TopTung Limited  
9 January 2018

For any enquiries please contact

Martin Kavanagh on 0419 429 974, or Leon Pretorius on 0419 702 616

### **Competent Person**

The information in this document that relates to exploration results and activities for the Torrington Project has been compiled by Dr Leon Pretorius. The activities and information in this document that relate to the R&D programme being conducted at the UNSW is in collaboration with Dr Leon Pretorius as member of the R&D team. Dr Pretorius has sufficient experience which is relevant to the Torrington Project and to the Topaz Research activities being undertaken to act as a competent person.

Dr Pretorius is the Executive Chairman of TopTung Ltd and is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM) (CP) and a Member of the Australian Institute of Geoscientists (MAIG). He has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activities, which he is undertaking. This qualifies Dr Pretorius as a "Competent Person" as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). Dr Pretorius consents to the inclusion of information in this report in the form and context in which it appears. Dr Pretorius holds shares in TopTung Ltd.

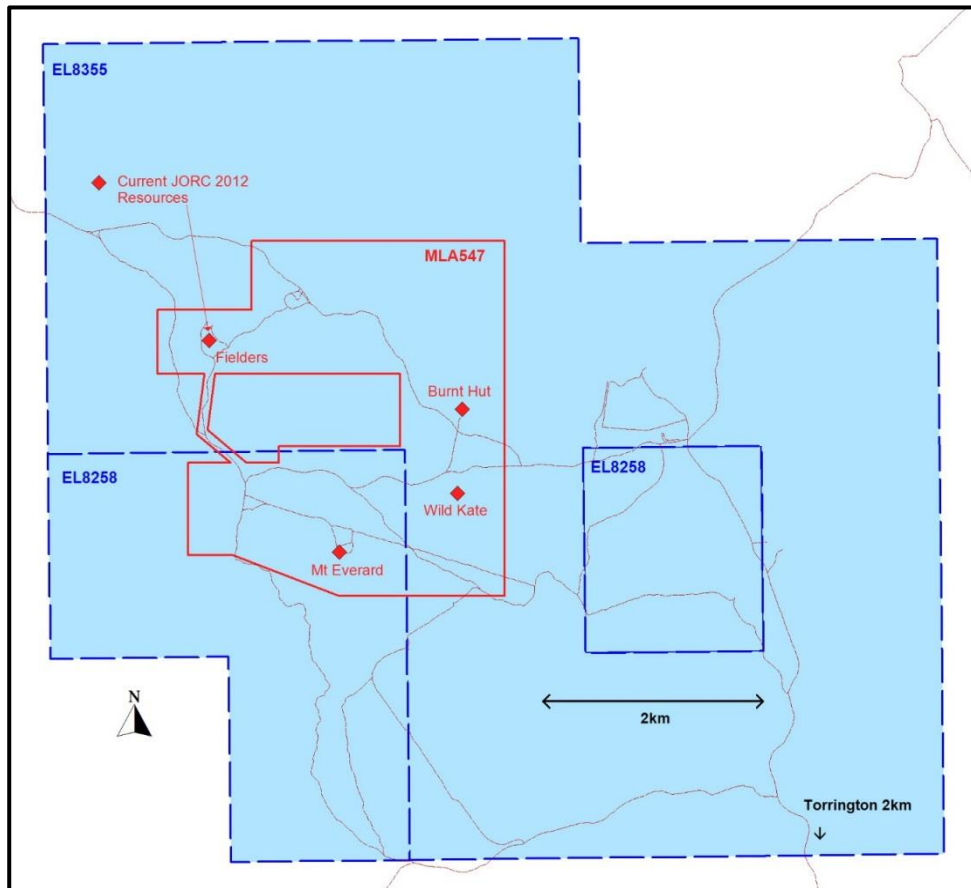


Figure 1: MLA547 location plan showing current JORC 2012 resource areas as per ASX announcement of 12<sup>th</sup> August 2015. New JORC resource estimations for the Wild Kate and Mt Everard prospects are in progress based on 2017 drilling.

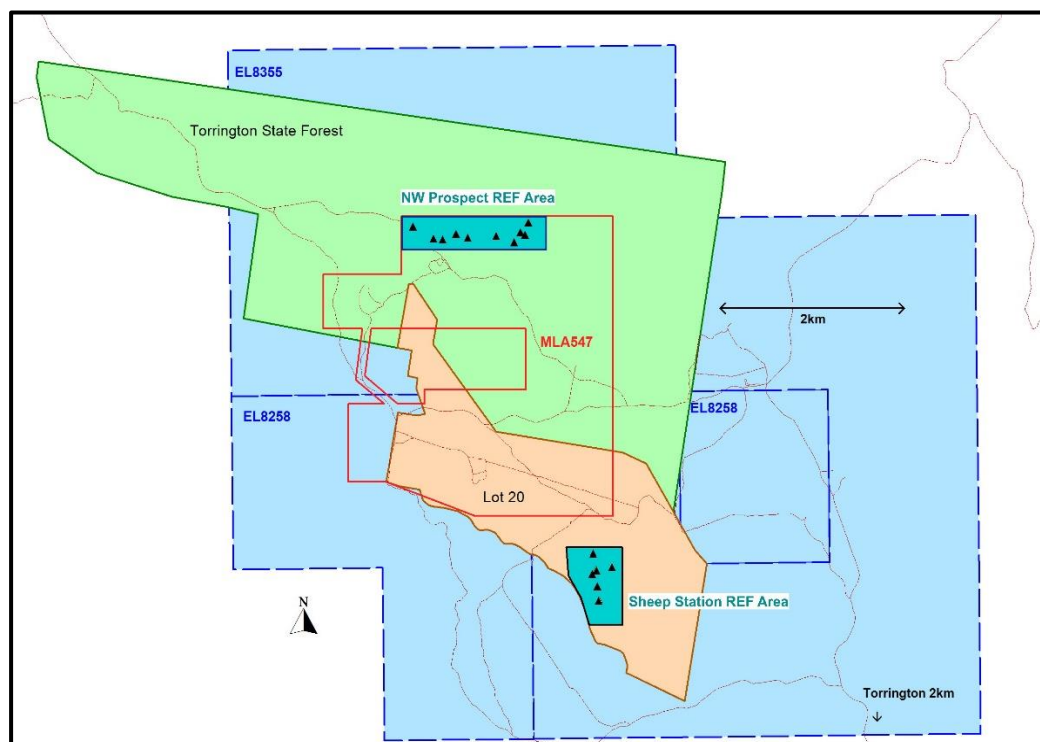


Figure 2: NW Prospect and Sheep Station REF Areas showing silicite (topaz ± tungsten) targets (▲) identified for drilling in 2018 after necessary approvals.