

UPDATE ON PREVIOUSLY ANNOUNCED EXPANDED STUMP TRIALS ACHIEVING EXCELLENT RESULTS

Highlights:

- ✓ Pine stump trials are successfully confirming that the higher yielding pine stumps are a suitable feedstock, which significantly increases the availability of wood supply for Leaf's unique pine chemical manufacturing process
- ✓ A 1,000 tonne stump trial has allowed optimisation of procedures for the harvesting, handling and processing of stumps and the ability to maximise productivity of feedstock supply at the Apple Tree Creek plant in Queensland
- ✓ Trials confirm that a 100kg pine stump can be extracted and processed within 1 minute
- ✓ Contractors have commenced procuring the specialist equipment for the commercial supply of stumps to Leaf Resources

Leaf Resources Limited (ASX: LER) ("**Leaf**" or "**Company**") is positioning itself to become a leading supplier of natural and renewable pine chemicals, as a replacement for petroleum based chemicals. The Company is pleased to provide an update and review of additional stump trial work carried out by the Company and HQ Plantations Pty Ltd ("**HQ**") over the past few weeks.

In July 2021 Leaf confirmed the viability of pine stumps as a feedstock to its natural pine chemical production process which both increases wood supply and yields while regenerating the forest for replanting. Since then, both Leaf and HQ have committed extensive time and resources to a 1,000 tonne stump trial to refine and optimise harvesting, handling and processing procedures to maximise productivity while determining occupational health and safety procedures required in a new approach to Australian forestry management. The advantage to Leaf of using stumps is a higher pine chemical content in processed feedstock.

As outlined in the following photos and commentary, significant advances have been made in the approach to harvesting and delivering stumps, as well as the supply handling and processing of stumps at the Apple Tree Creek site. Trials now confirm 100kg stumps can be harvested and processed within 1 minute.

Stump harvesting in the forest adjacent to Apple Tree Creek



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Unprocessed stumps as originally harvested, with low yielding tap roots



Stumps being unloaded at Apple Tree Creek site



Stump stock piles at Apple Tree Creek site



Large stump before being halved or quartered



At the outset of the trial, stumps were being transported unprocessed with soil content and tap roots. Tap roots are a lower yielding part of the stump and reduced the amount of higher yielding wood that could be transported in a given trip. In addition, large unprocessed stumps were harder to handle on site.

Innovative initiative and refinement in processes has led to the use of excavators with scissors to remove tap roots. This process also removes soil, leaving low yielding organic matter in the forest, improving future soil health in the forest. This means lower transportation cost through minimising soil content which further increases yields of each truckload delivered to Apple Tree Creek. An additional benefit is that large stumps can now be halved or quartered in the forest, creating more uniform supply for efficient processing.

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Excavator with scissors



Contractors employed in the trials are now designing and procuring the specialist equipment developed during the stump trials for the commercial supply of stumps to Leaf.

Halved stump with resinous core



Clean stump ready for transport to Apple Tree Creek



Stump trial data and associated analysis estimate available stump supply from surrounding plantations is ample for the requirements for planned and previously announced 16,000tpa expansion at the Apple Tree Creek plant.

Also critical to Leaf's proprietary process and optimal use of stumps is the chipping and sizing of the wood chip to ensure correct flow of biomass through the plant's extractor and desolventiser. Since July, the Company has also been optimising the front end processing of the stumps, which includes the chipper and a new purpose built screener which has been installed during the period.

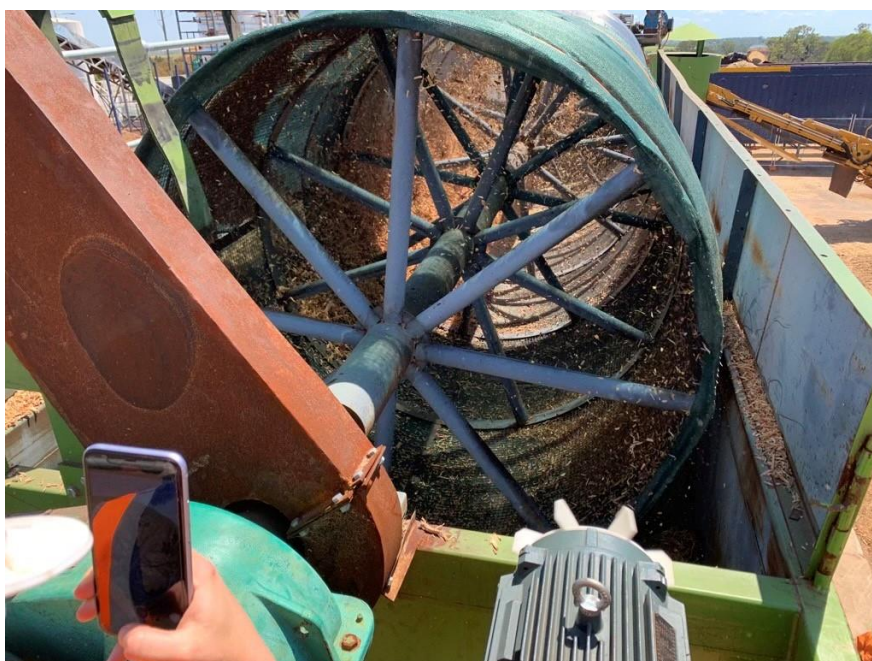
Woodchipper (right) feeds the screener (left) which ensures woodchip sizing is optimal for the plant



Wood handling excavator feeds stumps into the chipper



Screener sizing wood chip



High quality, optimally sized, resinous woodchip ready for processing in the Apple Tree Creek plant



AUTHORISATION STATEMENT

This update has been authorised to be given to ASX by the Board of Leaf Resources Limited.

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ABOUT LEAF RESOURCES

Following the acquisition of Essential Queensland Pty Ltd ("EQ") in December 2020, Leaf Resources is embarking on the biggest step-change the pine chemicals industry has experienced since the 1950's. It has developed a world-first, proprietary process for extracting pine chemicals in a sustainable and scalable way. Pine chemicals are used in multi-billion dollar end use markets.

Leaf applies the patented natural organic solvent production process to extract sustainable and clean pine chemicals from resinous pine logs and stumps at significantly lower cost than existing global supply, without the chemical additives traditionally used.

Leaf and EQ technologies enable the replacement of petroleum-based chemicals and plastics as society moves towards the bio economy.

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