WEORA Limited

Project update – November 2022

Drill hole GHD001 completed: Dunite to 800 m

Weora's work programme towards commercialising carbon mineralisation technology in NZ continues to steadily progress with the successful competition of the first drill hole (GHD001) into the Greenhills Ultramafic Igneous Complex near Bluff to a final depth of 801 m.

Core samples from the bore reveal the Greenhills Dunite rock formation extends vertically from the surface uninterrupted to at least 800 m and remains open at depth (map, right; core photos, lower right). Initial logging and geochemistry data are highly encouraging and confirm the Igneous Complex is a large reservoir of chemical potential energy, with mineralogy suited to react with CO_2 and undergo carbonation.

Measured composition of Dunite recovered from GHD001 to date is 45-50 % MgO, 7-10 % Fe_2O_3 and 35-40 % SiO_2 . These data, together with confirmation that the Igneous Complex continues with depth validates the major potential for both exsitu and in-situ mineral carbonation applications at Greenhills.

In addition to these geological data, Weora has recently contracted the empirical testing of recovered drill core for exsitu mineral carbonation processing and by-product assessment. This research work will employ 3rd party proprietary technical knowledge to rapidly decompose rock core samples followed by silica, iron, magnesium, and potential strategic mineral recovery trials, in conjunction with CO₂ sequestration capacity testing. Results from this work will help assess ex-situ commercial feasibility and inform designing a pilot scale carbonation plant.

In terms of site development, Weora has completed freehold purchases at Greenhills consisting an 18 Ha rural parcel with surface exposed Dunite (see photo below) and a further 2 Ha for a local operations and driller's base. Renovations and infrastructure have been completed and Weora's Greenhills station is now fully operational.



Map: Greenhills Ultramafic Igneous Complex on Bluff peninsula

Immediate upcoming project work:

- The Imdex drill rig is presently being prepped to begin Weora's second drill hole (GHD002) in early November with its target depth now extended to 1000 m.
- Geophysical surveying consisting of airborne magnetic and electromagnetic measurements over Greenhills will be completed in November. The survey will cover 40 line-km and scope entire terrestrial Igneous Complex as well as the submarine near shore around the Bluff peninsula.
- Data obtained in the surveys will be used in conjunction with drilling results to carefully model the underlying geology and aid future drill planning.
- With drill core now available proposals are being finalised with several universities and research organisations to evaluate reaction conditions, yields, mineral reactivity, and CO₂ storage capacities for modelling in-situ carbonisation.



www.weora.com • office@hardiepacific.com