

## Core Sampling in Waihi

The first part of the mining process sounds obvious – it’s to find where the gold and silver is located. While the concept itself is simple, the technical reality of how you go about that is not. Exploration for gold and silver for modern mining in Waihi began in the 1970s and prospecting continued into the 1980s.

Core samples are used to assay (measure) for gold and map the underground geology. At Waihi, ours are typically obtained by wireline diamond drilling. A diamond impregnated drill bit allows a cylinder of rock to be ‘cored’ as the hole advances, and is then retrieved using a wireline to pull the core tube to the surface.

Drill holes are typically 100mm in diameter and can be several hundred metres long. Around 13,000 metres of drilling was completed in the Waihi exploration works of the 70s and 80s, with the deepest drill hole about 450 metres.



Drill hole targeting is a delicate balancing act of combining technical expertise and statistical modelling principles with real world conditions. If the core samples are taken from points too far apart, it can be hard to draw an accurate conclusion from the data returned, and if the points are too close together it can end up costing a lot of time and effort for data that doesn’t provide much new insight. The process is a bit like playing Battleships, but in three dimensions.

Research of a different sort followed; investigation and monitoring was carried out to assess potential environmental and social effects of a mining operation on the town of Waihi and the surrounding area. Information was gathered over several years before mining licence and water rights applications were lodged in 1985 and 1986. The Mining Licence and Water Rights were granted in July 1987.

## Site Trapping Initiative Continues

Possums, ferrets, stoats, and rats are the main predators of New Zealand’s indigenous plants and animals. Beginning in January 2023, the Waihi Operation’s Environment team introduced our largest pest trapping programme on site to date. 50 of the ‘DOC 200’ style traps and 50 bait stations have been installed around our Tailings Storage Facilities (TSFs) and in the surrounding areas. Additional traps and bait stations have been installed around our compost and electrical facilities. To date, we’ve trapped 49 pests; mostly comprising rats, ferrets, and stoats.

The trap network has been incorporated into the Trap.nz website and live statistics are publicly available.

In April, we began trialling an automated trap capable of resetting itself approximately 60 seconds after it’s been activated. The trap also contains a syringe of lure which self-replenishes when rearming, as well as batteries that

last up to six months. Being self-operated, a single trap can capture up to 10 pests in one night, minimising the need for human intervention and maximising capture rates.

In addition to helping improve the native bush and farmland both on, and neighbouring our operations, this is one way we’re working towards New Zealand’s nationwide goal of Predator Free 2050.

Our latest pest control statistics can be found on the Trap.NZ website:

[www.trap.nz/project/16172116/info](http://www.trap.nz/project/16172116/info)





CORRENTO NORTH

CORRENTO SOUTH

JULY 2023

TRIO

GLADSTONE RD

MATAURA RD

BARRY RD

DOBSON ST

SUPA (DAYBREAK)

ROYCROFT ST

KENNY ST

MARTHA SOUTH

MARTHA NORTH

### Mine Development Plan

Published at the start of each month as required by the Correnso Underground Conditions of Consent, the Slevin Underground Conditions of Consent, and the Project Martha Conditions of Consent.

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[www.waihigold.co.nz](http://www.waihigold.co.nz)



Key:



-  Existing Mining
-  Planned Mining
-  Backfill
-  Backfill of historic voids
-  Stopes

This information valid July 2023.