



# Exploration Activity

Much of this material appeared in an Update a year ago. Given the number of exploration drill rigs currently in operation on the surface and underground we thought it worth revisiting and updating.

## Why explore?

We are looking for gold deposits to extend the life of the mine. Exploration is an on-going part of our business. It takes

many 'hits' from a large number of drill holes to determine the grade and extent of an ore deposit and work out whether it can be mined. Think of exploration as being a bit like digging up potatoes, but imagine you have to do it with long stick instead of a spade. If you poke the stick into the ground and don't hit a potato on your first attempt, does that mean there are no spuds in your garden and you should stop? Conversely, if you poke your stick into the garden three times and hit a potato each time, does that mean your entire garden is full of potatoes? That's what exploration is like, but with very tiny potatoes which you think might be buried very deeply, or which may not actually be there at all. As an example, it took forty exploration drill holes to 'find all the potatoes' and confirm the extent and grade of the main section of the Correnso ore body.

## Hitting the TARGET

When we say we have had a 'hit' we mean that we have drilled into an area that, when the core is retrieved and analysed, shows a significant level of mineralisation. If we get a 'hit' we then need to decide whether the level of mineralisation present makes it worthwhile continuing to drill in that particular area.

Continuing with our analogies, if you are fishing and get a nibble you will probably stay in that spot a bit longer. You don't know whether the nibble was a tiddler or a kingfish, but you will keep fishing. The nibble doesn't mean you are guaranteed anything, or you may get an undersized fish that you have to throw back.

## SURFACE DRILLING

We currently have four exploration drill rigs operating on the surface; three around the pit rim and one near Waihi Central School on Moresby Avenue. This rig is investigating southward extensions of the old Edward vein that was mined pre 1952. We had a rig in almost exactly the same place in 2007. The three drill rigs around the open pit are investigating opportunities in that area.



One of three exploration drill rigs currently working on the pit rim.



Drill core showing quartz veins with sulphides (the dark spots and bands) and inesite (pink) manganese zeolite for which Waihi is the 'type locality' in the world.



Core received from the drill rigs is logged and analysed at the core shed.

## UNDERGROUND DRILLING

When we conduct exploration drilling from the surface the first 100 metres – sometimes more – is of no interest to us as it is not mineralised, that is, it does not contain mineable quantities gold. We have the expense of drilling through this ground to access the target area. If we can reach the target areas from underground it is cheaper and quicker as we are beginning the hole at depth. There's also another benefit. Drill holes started at the surface are angled so that they intercept the vertical vein systems prevalent in this area. Drilling from underground means that we can drill shorter holes at right angles to the vein systems to intercept them.

## Telling the STORY

Under our previous owners and as a very small part of a much larger business we didn't say much until we were pretty sure we were about to land a decent sized fish. Now, as OceanaGold, and being a large part of a much smaller company, stock exchange rules require us to say much more about what we are doing.

This is known as 'materiality'. If an activity has the potential to materially affect our share price it must be reported. Nothing else has changed, it just means that you may see frequent reports on where we are drilling. Just like before, it doesn't mean we have landed the big one. We are still fishing.