

# GOING UNDERGROUND WITH DALRADIAN



Gold vein at Curraghinalt outlined in blue



**The Sperrins are spectacular from any angle, but in the last couple of years over 1,300 people have enjoyed a rather different perspective with a look at how the area looks from the inside!**

Since the summer of 2016 Dalradian has provided tours of its existing underground operations and supporting above ground infrastructure at the Curraghinalt gold deposit. So far we've welcomed local people, including schools, sports, social and voluntary groups, as well as visitors from as far afield as North America and South Africa.

The tours are part of our ongoing work with the local community to explain Dalradian's proposed underground gold mine and to address any questions face-to-face.

Curraghinalt will bring once-in-a-generation economic opportunities for Tyrone, including 350-plus jobs with average salaries of £40,000. Although this is not a new industry in Ireland (Europe's largest zinc mine has been operating in Navan for 40 years) it is new to the local area and people are interested in finding out more. There's no better way to do so than to visit the existing site with a firsthand trip underground.

Proposals for underground mining at Curraghinalt date back over 30-years and as part of the exploration process almost two kilometres of tunnels have been created. Although just under half of the tunnel workings pre-date Dalradian's involvement, we have extended and updated the tunnels to modern standards so that they could be used to aid in understanding the extent and richness of the gold veins.

## Beneath the Sperrins

Part of the excitement of a tunnel tour is to experience in part what it is to be a miner. Participants wear similar safety gear, including hard hats, lights, safety goggles, boots and gloves. In line with industry best practice, participants are also given a tag with their name which they must hang up before entering the exploration tunnel and then return on their exit.

The journey begins following a detailed health and safety briefing. Although the tunnel is rough underfoot, it is easily passable for most with care. There are also no steep gradients to navigate - the tunnel goes

into the hillside on the level rather than descending via a vertical shaft.

Accompanied by at least two guides, visitors are struck initially by the sounds of the tunnel ventilation fans and captured water being drained away to a nearby water treatment facility. They may also notice its coolness, although in operational mines which do descend deep into the earth, mine temperatures underground will be significantly warmer than those closer to the surface.

The gold in Curraghinalt is hosted in veins across the hillside and is in the top ten of unmined deposits in the world by grade. In other international mining locations these veins can contain less than five grams of gold for every tonne of rock mined. In Curraghinalt the average is about 15 grams per tonne, but in some places it is over 100 grams per tonne. Pyrite, which is closely linked to the presence of gold in this deposit, can be clearly seen glistening brightly in the exposed rock.

The tour also includes a description of how mining takes place – a complex scientific and systematic approach involving an intricate zig-zag pattern that allows miners to tackle gold-bearing veins from below and above, as well as backfilling rock to minimise the amount which is eventually stored above ground.

## Water Treatment

On the return to the tunnel entrance, visitors make their way to the state-of-the-art water treatment facility. Water is captured from the site and tunnel network, and a settling pond is used to trap sediment. Water which requires further treatment passes through a multi-stage water purification system before being discharged into

a local burn. Visitors can read the real-time monitoring equipment and compare for themselves the treated water's clearness compared to the naturally occurring brackish water of the stream. Strict water standards are set by the Northern Ireland Environment Agency and the system includes an automatic stop should any consent limits be approached.

## Arrange a Tunnel Tour

Curraghinalt will be one of the biggest economic opportunities for County Tyrone in living memory. We're proud of what we're proposing and excited about its potential to create high quality jobs, but we're also committed to delivering a project that meets and exceeds strict environmental regulations and co-exists with the natural beauty of the Sperrins.

Dalradian wants to explain its plans to the local community, be that through the technical detail contained within its 10,000-page planning application, or more bite-sized information available through drop-in sessions, articles such as these or tunnel tours.

If you have questions, why not come and join us on a tunnel tour?



**You can book a TUNNEL TOUR & SITE VISIT by calling Dalradian's Gortin Office on 028 8164 8012**

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GOLD

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