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Vol. 10 No. 5

Published by Mining Journal Ltd.

May 1999



iSTT

OFFICIAL MAGAZINE FOR THE INTERNATIONAL SOCIETY FOR TRENCHLESS TECHNOLOGY



unusual interview. Paul travelled to The Railway Inn in Mansfield where 'coffin man' Geoff Smith was buried 6 ft underground in the pub garden. The son of the former 'buried alive' record holder, he has now reclaimed his mother's title by staying underground in a wooden coffin-like box for more than 141 days.

During his time underground Geoff was the focus of much media attention and one TV company, Ulster TV Live, decided that they would like their viewers to see what conditions were really like for Geoff living in such a confined space. Obviously they need to send down a camera, but with access limited to a small plastic tube, Geoff's only link to the surface, they needed to bring in expert help. Telespec U.K., a leading name in pipeline inspection equipment, were only too happy to oblige, providing a TS202R Camera complete with high powered ring of lights. The camera was fed down the plastic tube enabling the film crew to film and interview Geoff.

Another unusual assignment for Telespec came when the company received a telephone call from Ashford Price, Manager for the Dan yr Ogof Cave complex in Abercraf, South Wales. Ashford urgently needed a miniature camera to investigate an exciting new cave find. Cavers have spent years searching for caves in the Brecon Beacons National Park, and ten miles of caves, some of which are open to the public, have already been discovered. Now a team of geologists and mining engineers believe that they have uncovered at least the same distance again.

Engineers have been systematically drilling boreholes into the show caves, and have found new caverns. Keen to start exploring this new network, the telephone call resulted in Telespec's Stewart Hailstone and Julian Davies travelling to South Wales with the Telespec Microcam camera. This was threaded through a borehole just 35 mm in diameter, enabling geologists to confirm that the caves actually existed and to start a more detailed investigation.

Experts hope to find evidence of prehistoric occupation, since archaeological remains already discovered from connecting caves have indicated Bronze Age inhabitation. Said Ashford Price "We knew there were tunnels down there but finding the 'trap door' had proved impossible. We are grateful to the miners for showing us the way in, and now we want to see what we have found while causing as little damage as possible. The loan of the Microcam camera from Telespec, and the services of their engineers, enabled us to investigate the cavern in greater detail and determine the best place to cut through a new tunnel."

Powermole commencing backreaming in Scotland.



DRY ROCK DRILLING

Inverness in Scotland was the location of a dry-rock directional drilling project in December 1998. Powermole International, manufacturer, supplier and contractor of the new dry-rock technology, was contracted by Underground Moring Services for Turriff Contractors (BG Transco) to install a section of a new 7 bar gas main to supply northern areas of Scotland.

The project involved directionally drilling under the River Deveron, a high class salmon river. Following concerns of the Scottish Environmental Protection Agency, it was considered preferable to use a dry drilling system rather than conventional wet drilling methods which require drilling mud and water to drill through hard ground.

It took only seven hours for the 26 t pullback, 12,000 Nm torque, PM903 machine to complete the 154 m pilot bore. Various ground conditions were encountered during the drilling, including a large formation of strong grey quartz schist. This measured 133 MPa (20,000 lb/in²) in strength and would normally be drilled only with considerable difficulty. However, the material created no problems for Powermole International's new dry-rock system.

The drill head was initially steered to a depth of 1 m below the riverbed. Whilst boring, a sudden drop in resistance highlighted the presence of a void along the required bore path. It was discovered that the void was actually a recently created salmon pool, so the bore had to be deepened to 5.4 m. To achieve this, five drill rods were retracted and a new direction taken through the schist, beneath the salmon pool and rising to the original level at the other side of the pool. Redirecting from an initial bore is not normally considered possible in the drilling industry. During this project the Powermole system was able to steer 200 mm through a length of only 3 m in the schist. After 14 hours pre-reaming and only six hours of pullback the 180 mm HDPE pipe was installed.

Powermole International's dry-rock drilling system uses compressed air with a small quantity of biodegradable lubricant to

perform the drilling operation. The lubricant also produces a filter cake around the bore, which acts together with the compressed air to prevent bore collapse. Spoil is removed in the airflow through the borehole. The system employs a patented pneumatic/percussive head unit which is activated automatically when hard ground is encountered. Simultaneous drilling and percussion ensure effective and consistent penetration irrespective of ground conditions.

NAYLOR SUCCESS . . .

U.K. clayware pipe manufacturer Naylor Drainage has recently won major export orders in Sri Lanka and Singapore. The orders include the company's Denlok microtunnelling pipes and the System 2000 range of large diameter plain-ended pipes with glassfibre reinforced polyester sleeve joints.

. . . AND DISAPPOINTMENT

The proposed acquisition of Naylor Drainage Ltd and Naylor Plastics Ltd by Hepworth Building Products Ltd is not to proceed and Naylor will continue to trade as a separate drainage supply company.

The U.K.'s Office of Fair Trading (OFT) considered the merger as potentially against the best competitive interest of the building and construction industry after a three month investigation, a period described as very unsettling by Naylor's managing director Edward Naylor.

The company has now set itself main priorities subsequent to the unfavourable OFT decision including: to continue to offer a first class and personal service; to achieve many of the developments planned under the proposed merger in its own right; and to maintain its existing programme of innovation, capital investment and product development.

Edward Naylor said, "Our business has increased 70% since 1993 with year-on-year progression in turnover, profitability, innovation, quality and service and we look forward to continuing to grow as an established, independent supplier."