White Young Green Skipton

Client Name:

White Young Green

Location:

Skipton

Description of the Works:

Geotechnical Exploration Services were awarded the Site Investigation works for the Flood Elevation Scheme 2013 which was part of the Environment Agencies Corporate Plan. In accordance to their corporate strategy this would not only reduce flooding risk but would also provide an additional amenity and wildlife habitat to the benefit of the local

people and the environment. **Drilcorp** was required to carry out a full Site Investigation to gain a better insight of the ground strata's in and around the proposed reservoir sites. Not only did **GES** have to obtain 100% sample recovery but also gather information on the hydrogeology of the rock beneath the site. The borehole locations on this project were scattered across the countryside of Skipton including locations on a popular golf course, rural farm land and incredibly difficult valley side and bottoms. The range of sites proved difficult to manoeuvre large heavy plant and equipment. **GES** Project Management team concluded that the best way to carry out the works safely and efficiently would be to use the Company's low ground bearing track mounted rotary rigs along with its innovative track mounted air compressors which are unique to **Drilcorp.** This allowed maximum stability as well as rapid deployment along steep hillsides and valley bottoms whilst causing minimal damage to the landscape. To gather optimum information, in situ testing methods such as U100 and SPT testing were used in the overburden along with high pressure packer testing in the lower rock formations.

Geotechnical Exploration Services

How the Work Was Carried Out:

All **Geotechnical Exploration Services** plant and equipment was mobilised to site where a safe secure compound at Skipton Auction Mart had been established. Local farmers assisted in moving equipment along the public highways to each location. The early strategic planning carried out before operations began ensured smooth and cost effective completion of the project. Cable percussive techniques were used to penetrate and case difficult strata consisting of large boulders and cobbles in the valley bottom.

The bedrock was highly fractured and initially posed a problem when rotary coring was attempted. However **Drilcorp's** in-house troubleshooting team swiftly adapted the rotary equipment and selection of core bits to cope with the adverse ground conditions.
The clients on site hydrogeologist logged the cores and specified a packer testing regime

to investigate the permeability of the strata. **GES** designed a self-sufficient packer testing trailer which comprised of a1000ltr water carrier, high pressure water pump and a duel packer system towed behind a Track Mounted Air Compressor to each location

where complex packer testing was carried out to the client's specification. All information gathered from the tests was logged onto a factual report along with the geotechnical information and the in-situ test results. This was submitted to the client ahead of schedule.