

MINING SERVICES

PROJECT NEWS



At the former Waterside Colliery, located in Kirkintilloch, approximately 13 km (8 mi) Northeast of central Glasgow, Boart Longyear utilized its *MINISONIC™* drilling technology to sample and determine the coal content of the colliery waste tip (also known as a “bing”).

REC Ltd., was contacted by the owners of the Waterside bing, who were interested in sampling to determine the coal content of the bing. This was necessary to decide if the recovery of coal would be economic. The former Waterside Colliery was noted for the production of high quality anthracite coal, therefore, any recovered coal would be of particular value. Consequently, an accurate and representative sampling would be crucial to the study.

Sonic Drilling for Determining Coal Content of a Colliery Waste Tip

Location: Kirkintilloch, Scotland
Service: *MINISONIC™* Drilling
Completion: March 2006
Reference: REC (Resource and Environmental Consultants Ltd.)



Sampling

On the first day, the rig was mobilized and tracked into position near the summit of the bing. Drilling commenced and a 30 m (98 ft) sample was recovered before the rig was moved to a place of safety for the night. The samples included sections of timber and boulders of mudstone and sandstone.

Boart Longyear crews were able to recover representative samples for laboratory testing from throughout the borehole, while the entire profile of the material was laid out allowing the client to see exactly what was present. It was considered that in similar circumstances, a traditional cable percussive rig would have achieved less than 10 m (33 ft) of progress and would probably have been obstructed by timber at 3.5 m (11 ft) requiring a new start at an adjacent location.

REC had been aware that Boart Longyear was about to introduce Sonic Drilling techniques in the UK. This method, where a continuous soil sample can be obtained, uses a rotary-based technique and low amplitude vibrations to assist the casing and drill string in penetrating soils. The continuous sample of the material penetrated can be logged, photographed and sampled on-site. It is capable of penetrating boulders, metal and timber. As a new technique, the rates of production were uncertain, but were demonstrated to be very much faster than cable percussive techniques.

The *MINISONIC™* was able to drill each borehole to target depth and also to penetrate through any obstructions in the bing – a significant advantage to the project. Due to the high quality of the sample and the rate of production, REC was notably satisfied with the results obtained by Boart Longyear and will be using Boart Longyear on future projects in this type of application.



Site layout



Samples

For a better drilling solution, contact Boart Longyear today!

Drilling is our business!



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