

Horizontal Soil Sampling in Inaccessible Areas

Soil samples were required in areas that were not accessible with vertical drilling methods to delineate the extent of impacts at a former power plant. To overcome the challenging site access restrictions, horizontal sampling techniques were used. This included sampling 6 locations with horizontal drilling technology to complete subsurface investigation activities.

Main advantages of horizontal soil sampling include:

1. Horizontal sampling tool gives precise, repeatable samples over relatively large areas without disrupting building occupants or facility operations.
2. Sampling is possible even under dense foliage or wetlands, avoiding damage to sensitive habitats.
3. Many samples can be retrieved daily with shorter boring lengths.
4. Samples can be collected under areas that are not accessible with traditional vertical sampling techniques.

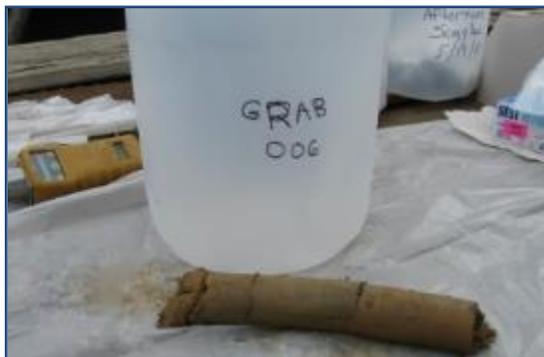


Figure 1: Horizontal Soil Sampling

Horizontal technology uses field locators and instrumentation to accurately determine the exact location of the soil samples in the subsurface. For the sampling activities at the former power plant, horizontal borings were advanced approximately 30 to 50 feet to collect discrete and undisturbed soil samples using a specialized horizontal sampling tool.

The horizontal sampler is mechanically opened and locked into position upon reaching the designated vertical and horizontal target depth. Samples volumes are sufficient to meet analytical laboratory testing requirements.

In 1996, our first horizontal sampling project was the successful collection of 8 soil samples beneath sensitive infrastructure. Since then, over the last 20 years, Directional Technologies has used horizontal soil sampling technology in a wide variety of soils.

Call us at 877-788-4HRW or email us at drilling@directionaltech.com to bring this level of experience and knowledge to your next project.