

SAMPLING IN REMOTE LOCATIONS

TRACK MOUNTED DIRECT PUSH TECHNOLOGY (DPT) AND HQ CORING FOR SOIL AND WATER SAMPLING

Complex lithology often requires multiple drilling technologies on a single site. In the right soil types, direct push can quickly produce many high-quality samples, generally up to 200 ft per day. However, when hard rock is encountered, like at this project, diamond coring provides the downward pressure and high-speed rotation necessary to obtain core samples in hard rock conditions.

CLIENT: CDM Smith / Former Ski Resort

PROJECT: Soil and water sampling

LOCATION: Yosemite National Park, CA

TECHNOLOGIES: Direct Push Technology (DPT) and HQ coring

PROJECT OVERVIEW

Cascade was hired to collect soil and groundwater samples in a remote wilderness setting. Track-mounted DPT rigs were ideal for overcoming challenges due to such a location: access restrictions, stream crossings, muddy surfaces, heavily wooded areas, and complex lithologies.

The two rigs combined production included over 700 shallow boings for soil sampling and over 20 DPT for water sampling.

During the sampling efforts, when hard rock was encountered, an HQ coring approach was adopted, in lieu of the DPT approach.

RESULTS

Flexibility with regards to specific tooling on site allowed this project to run smoothly and efficiently. Knowing the limitations of drilling rigs and their suitability for specific lithologies, is important, especially for projects operating in remote locations, where mobilization costs can already be at a premium.

