

## OIL & GAS FIELD SERVICES

### Environmental and Geotechnical Drilling

Clean Harbors provides expert environmental, geotechnical and civil construction drilling services that allow environmental consultants and contractors to accurately assess areas for soil and groundwater contamination and plan any necessary remediation.

It can be challenging finding competent environmental and geotechnical drilling contractors who have the resources available and are capable of carrying out the job. Clean Harbors can solve your problem. Our diverse range of equipment and knowledgeable and experienced personnel who follow strict safety protocols are available to you across Western Canada and the Territories.

#### Solid Stem Auger Drilling

With augers five feet in length and six inches in diameter, our technique is a fast and effective way to retrieve soil samples and install monitoring wells in areas where no sloughing is present. Our solid stem augers are ideal for geotechnical drilling in consolidated soils.

#### Hollow Stem Auger Drilling

Our 4-1/4" ID tri-lock hollow stem augers allow us to install monitoring wells in soils that are sloughing and where solid stem augers aren't feasible. Using three-foot long by three-inch diameter split spoon A-casings to retrieve soil samples while drilling, these hollow stem augers ensure clients obtain a large enough sample to fulfill their site requirements. Our hollow stem augers are ideal for unconsolidated soils, wet conditions and monitoring well installations.

#### Monitoring Well Installations, Decommissioning/Abandonment and Repair

We supply all types of consumables for monitoring well installations and decommissioning. We offer varied sizes of PVC pipe and an assortment of end and top caps. Whether flush-mount or stick-up wells, we have everything you need.

With extensive well repair experience, we can easily remove and replace damaged flush-mount road boxes efficiently and cost effectively.



For Service Call 403.237.6437 • [www.cleanharbors.com](http://www.cleanharbors.com)



#### Soil Sampling (Split Spoon and Shelby Tubes)

Our two-foot long by 1-1/8" diameter SPT split spoon samplers are ideal for geotechnical drilling, and our three-foot long by three-inch diameter split spoon sampler is frequently used in environmental drilling. We also offer Shelby tube samplers, which are two-feet long by three inches in diameter and made from stainless steel.

#### Automatic SPT Hammer

All of our drills are equipped with an automatic SPT hammer allowing for consistent blow counts for geotechnical purposes.

#### Grouting

We offer several different types of grouting units, some mounted on track units for hard to access locations and units mounted on trailers. All units are equipped with mixing hoppers and hose reels which makes them a far superior option than the typical tremie pipe and Moyno™ pump grouting units.

#### Additional Services Available

- Underground utility and buried facility locating
- Soil bag pickup and disposal
- Hydro vac services