

Directional Boring Services

Fact Sheet

Clean Harbors provides directional boring services to the oilfield and municipalities by installing pipelines, gas, fibre optics, cable, and water and sewer lines. We cross a variety of areas including roadways, railways, waterways, buildings, and environmentally-sensitive areas. Our personnel are experienced in all ground conditions, are efficient and accurate in limited time frames, and perform pre-bore and post-bore profiles.

Directional Drilling

Clean Harbors is capable of drilling pipe sizes up to 24 inches in diameter and distances up to 1,500 meters in length. Our extensive fleet of 100,000 lbs. and smaller rigs is one of the largest in Western Canada and allows us to drill large-scale projects with multiple rig requirements.

Our directional drills are sent to the field with complete support equipment including mud systems, water trucks, and drill pipe. We can also use rotary downhole hammers (air drilling) to replace mud motors for bedrock drilling applications.

Our equipment includes the Ditch Witch JT4020 Mach 1 All Terrain drill. This innovative drill uses a patented internal rod system to turn a mud motor, reducing the high volumes of water normally used when mud motoring. The drill's dual stem gives us the capability to drill through solid rock at 15 gpm versus a normal mud motor that requires 300 gpm, decreasing the chances of a frac out. By pumping less water, less fluid is returned and a reclaimer is normally not required.

Pipe Fusion

Clean Harbors provides pipe fusion of both PVC and HDPE pipe. We are the only contractor in Western Canada licensed to fuse PVC pipe up to 24" in diameter, and each fused PVC joint is logged and reviewed by one of our licensed, qualified technicians. Fusible PVC is an excellent option for trenchless installations and waterline relining.

Pipe Ramming

Clean Harbors pipe ramming is designed for use in adverse ground conditions with large diameter pipes. Hammers are available in 12-, 16-, and 20-inch diameters. Applications of pipe ramming are conductor barrel process, drill stem recovery and pipe extraction, and directional drill assist methods including washover casings and pullback assist.



FEATURES

Why use Clean Harbors Directional Boring?

- **Experience** - With over 40 years in the boring industry, Clean Harbors has experience drilling in all ground conditions, allowing crossings to be executed efficiently and accurately in limited time frames. Our management team has over 60 years combined experience, and we have many long term, skilled employees.
- **One-Stop Shop** - As part of the Clean Harbors group, we can offer a wide range of services to complement directional boring including geotechnical drilling, hydrovacs for locating, and pressure trucks for pressure testing. This offering reduces the number of contractors you need to manage.

Pipe ramming reduces set up and maintenance costs when placing steel casing. It can keep casing size to a minimum in cobble by swallowing the material whole, and it eliminates the risk of creating a void in sand conditions as the material is not removed until after the casing is installed.

RG-05 Rock Shield

RG-05 Rock Shield is designed specifically for "pulled in place" applications, and it can cover 3 and 4-inch YJ pipe. Features and benefits include –

- Available in 3-, 4-, 5-, and 6-inch sizes
- Pre-installed, pre-lubricated O-ring remains water tight under bend conditions, preventing YJ pipe corrosion
- Spline lock connection mobilizes the pulling strength of raceway with no product deformation.
- Easily assembled with 10 and 20-foot lengths and no inconvenient fusion equipment is required
- Schedule-40 pipe walls absorb rock gouging and are dependable in all weather conditions