

GeoTAP™ MAKES IMPOSSIBLE ACCESS POSSIBLE



GeoTAP is a pre-drill technology that has been utilized in the United States, Canada, and Europe. This unique injection development of “drilling and filling” gains access to challenging geologies.

DPT REFUSAL?

Overburden injection can typically be completed using direct-push technology (DPT) methodologies. However, subsurface conditions exist that may prevent the use of standard DPT to reach the targeted depth interval for geologic and contaminant assessment and treatment. These obstructions can be naturally occurring (hardpan/caliche, chert layers, dense fine-grained sediments, gravel, partially weathered rock, saprolite, etc.) or anthropogenic (cut and fill, buried rubble like concrete, etc.)

DRILL LIKE IT'S CONSOLIDATED; INJECT LIKE IT'S UNCONSOLIDATED

Each injection location is first pre-drilled to the desired depth interval using sonic (Figure 1), air rotary, or hollow-stem augers. The drilling tooling is slowly retracted, and the evacuated borehole is backfilled in lifts with hydrated bentonite (chips or pellets, coated or uncoated, depending on application) to seal the bore wall. DPT injection rods are then pushed through the bentonite column to reach the desired injection depth intervals without compromising the bore seal. Injections are completed in a top-down manner, just like high-energy overburden injections. This technique has been used successfully on 55+ project sites worldwide, accessing depths as great as 180 feet below ground surface.



Figure 1

WHAT ARE ALTERNATIVES?

Currently, there is no other DPT alternative to accessing geologic intervals with refusal. Additionally, trying to inject these same intervals as if they are fractured bedrock settings also fails – borehole collapse and difficulty maintaining injection packer seal. When the alternative is “do nothing,” and you must act – GeoTAP gives you access for remediation.

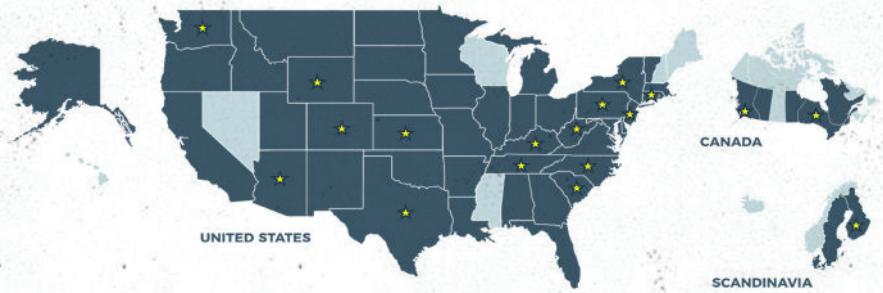


Figure 2. GeoTAP project locations marked with stars.