

PROJECT HIGHLIGHT

TIGHT FORMATIONS REQUIRE EXPERT SOLUTIONS FOR REMOVING CONTAMINANTS

Permeability enhancement via fracturing must be conducted carefully by experienced remediation experts—but it can be an ideal solution for hard-to-treat formations.

LOCATION: Southeastern US

TECHNOLOGY: Pneumatic fracturing, sonic, air sparge-soil vapor extraction

SERVICE: Drilling, well installation, fracturing

PROJECT OVERVIEW

At the site of a former industrial facility, chlorinated solvent contamination was discovered deep below ground, locked into a tight silt formation. The client attempted air sparging and soil vapor extraction multiple times to remove the contaminants, but to no avail—they were unable to strip out any of the volatile organic compounds (VOCs).

Cascade was brought in by the client to install additional wells and enhance the permeability of the subsurface via pneumatic fracturing and sand proppant injection. The crew aimed to develop fractures between 10 and 70 feet deep to create higher permeability zones and to ensure the fractures were interconnected.

RESULTS

Cascade's experts worked from two points of fracturing and proppant injection, and were able to increase permeability such that air flow into the formation was possible at 40psi. The client was able to remove contaminants at the wells with deeper screens.

The project lasted a total of 12 days, and was completed on time and on budget. There is potential for a full-scale application in the future if site conditions warrant it.



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