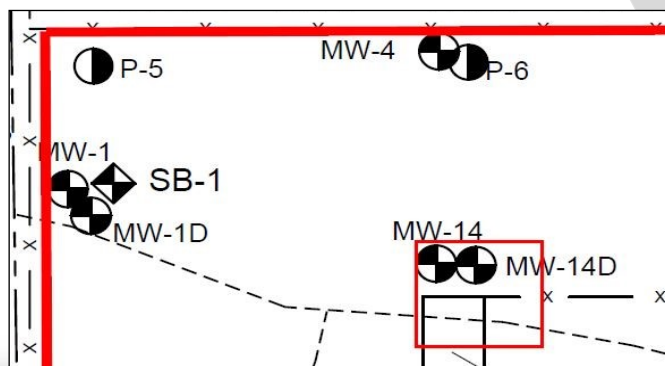


BAM Injection Chlorinated Solvents

Former Metal Shop – Indianapolis, IN

One Round of DPT Injection

Project Summary: ORIN successfully treated chlorinated solvent contaminated groundwater utilizing in-situ chemical injection. ORIN's approach was to incorporate a barrier wall to stop migration off site, as well as hot spot treatment around MW-14. Approximately forty-eight injection points were designated as BAM Ultra points, while twenty injection points were designated as ABC+ points. The majority of injection points were designated for the barrier wall while a small portion targeted monitoring wells.



Exceeds 96% Reduction

Site Conditions:

Groundwater Contaminants –

1,1-DCE: 19.5 µg/L

Cis-1,2-DCE: 2,570 µg/L

TCE: 1,631.9 µg/L

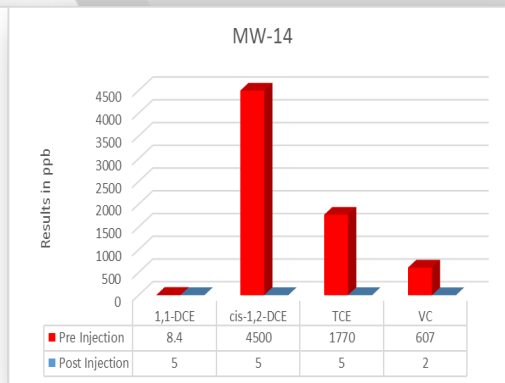
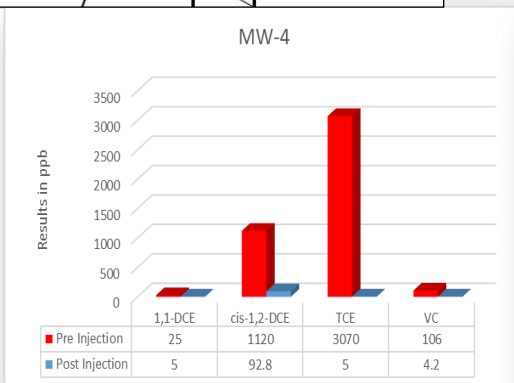
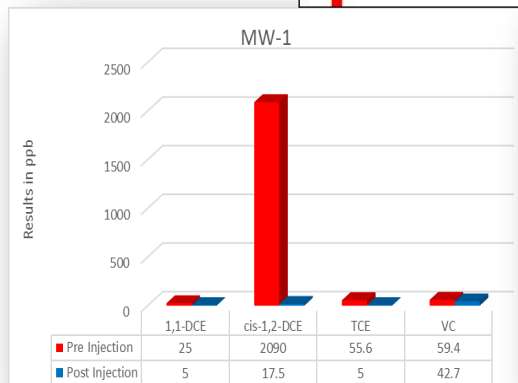
VC: 257.5 µg/L

Impacted Matrix –

Silty to Sandy Clay

Treatment Chemistry –

BAM and ABC+



Project Results: Tables above display three wells that were targeted for remediation. Samples were taken prior to injection activities to characterize contaminant concentrations. Post injection samples were taken three months following the injection event. Each of the wells displayed greater than 96% reduction in all contaminants sampled. MW-14 displayed non-detect results for all contaminants.