

Case Study – BOS 200® Trench Application

Site: Natural Gas Wellhead Site (Colorado)

Contaminant: BTEX (LNAPL/free product present)

Soil Type: Well-sorted sand and gravel

Injection Cost: \$13,000 (material & labor):

Size of Trenches: Approximately 5 feet by 55 feet

No. of Trenches: 5 (4 at size above, 1 added in the field - ~5 feet by 21 feet)

Depth of Trench: ~7 feet below ground surface

Goal:

A release occurred from a tank near the “levee.” The area between the levee and the river is a sand bar composed of well-sorted sand and gravel. The contamination from the spill was pushed by strong groundwater current along levee toward the river. The trenches were constructed to make a set of bio-reactor cells for groundwater to travel through so that the water entering the river will be clean. Since treatment, the groundwater entering the river appears to be clean, and contaminant levels in the upgradient monitor wells are trending down.

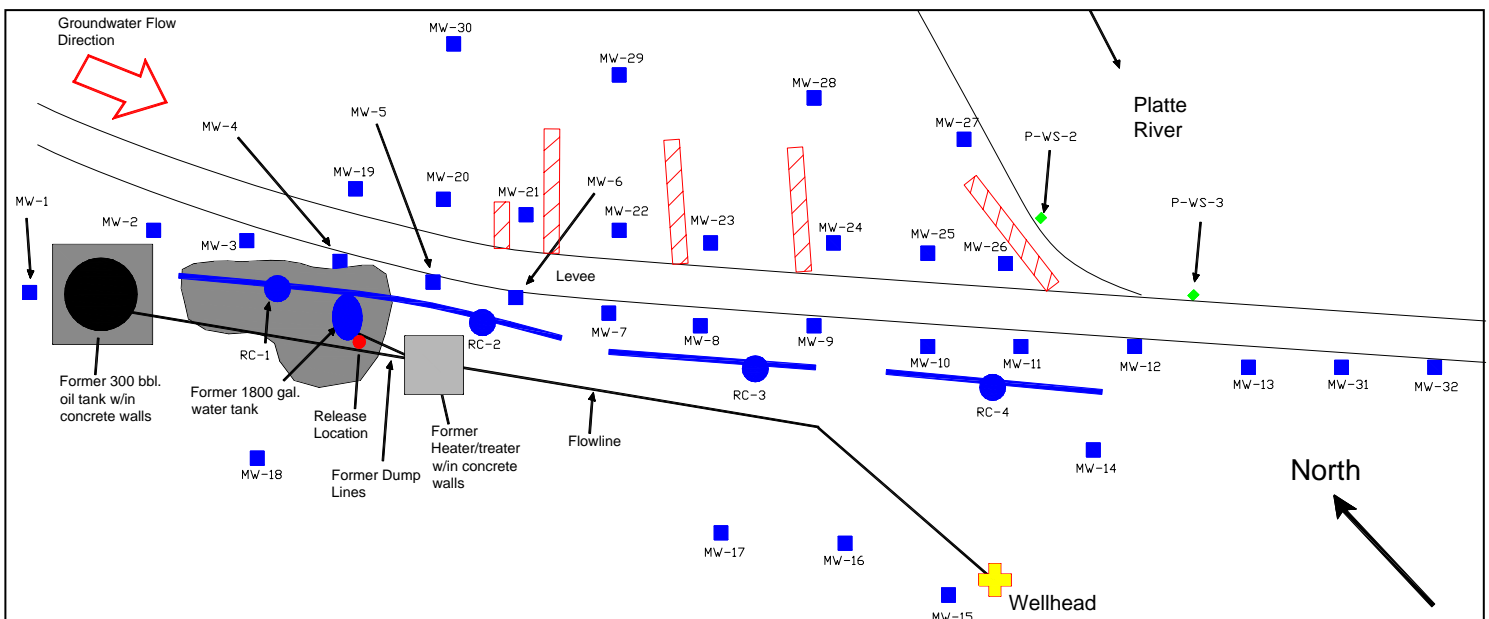


BOS 200® in Trench – DNAPL Present



Trench Application

Benzene Data for Project (ppb)		
Locations	Well Data Before	Well Data 30 Days After
MW-19	10,700	5130
MW-20	4080	1170
MW-21	1360	1130
MW-22	160	1220
MW-23	4620	2520
MW-24	40	710
MW-25	35	not sampled
MW-26	4110	740



Trench Locations & Site Plan