



Environmental engineers needed quick and accurate screening analysis on a tank farm contaminated with a subsurface plume of fuel oil. Sitalab's EDRO test was performed to delineate the vertical extent of contamination. A drill rig was used to collect samples from the surface down to twenty feet at different locations throughout the property. They needed to quantify the size of the NAPL plume in order to design a recovery system.

A total of nine soil samples were split and sent to a certified laboratory for confirmatory analysis using EPA Method 8100 by GC/FID. Results correlated well and were critical in helping the engineer calculate the total mass of product at 300,000 gallons.

EDRO CAL-042 UVF-3100 detects TPH in the C10 to C36 Range

GRO	VPH	Extended Diesel
↓	↓	↓
Range	Range	& Oil Range
↓	↓	↓
C6	C10	C36
↑	↑	↑
Total Petroleum Hydrocarbons		

Residential & Commercial Properties **FUEL TANK** Shipyard

Property Line

Soil Depth Oil in Soil in ppm (mg/Kg) vs. Lab GC

6'-8'	100	
8'-10'	4	
10'-12'	50	
13'-14'	16,400	→ 16,000
14'-16'	8,320	
16'-17'	7,250	→ 9,700
17'-18'	3,700	
18'-19'	230	
19'-20'	120	

Sitalab UVF-3100 EDRO Concentrations

Geoprobe was used to collect soil borings below the ground

SILT NAPL CLAY

Samples were homogenized in two foot intervals and tested on-site with UVF-3100. Results correlated well to the Lab GC.