



A former oil refinery in Kansas has a 100-acre size plume of oil. The NAPL is commingled with gasoline, diesel, crude oil and other petroleum products. An environmental consultant used Sitalab's UVF to field screen hundreds of soil samples for EPH C11-C22 aromatic hydrocarbons. Split samples sent to a confirmatory lab directly correlated (see graph).

Laser Induced Fluorescence (LIF) had also been used on this site. LIF is sensitive to aromatic hydrocarbons, but results are qualitative (as % response). The consultant used the UVF results to convert the LIF data to TPH concentration, and by doing so, was able to better calculate how much oil exists below the ground.

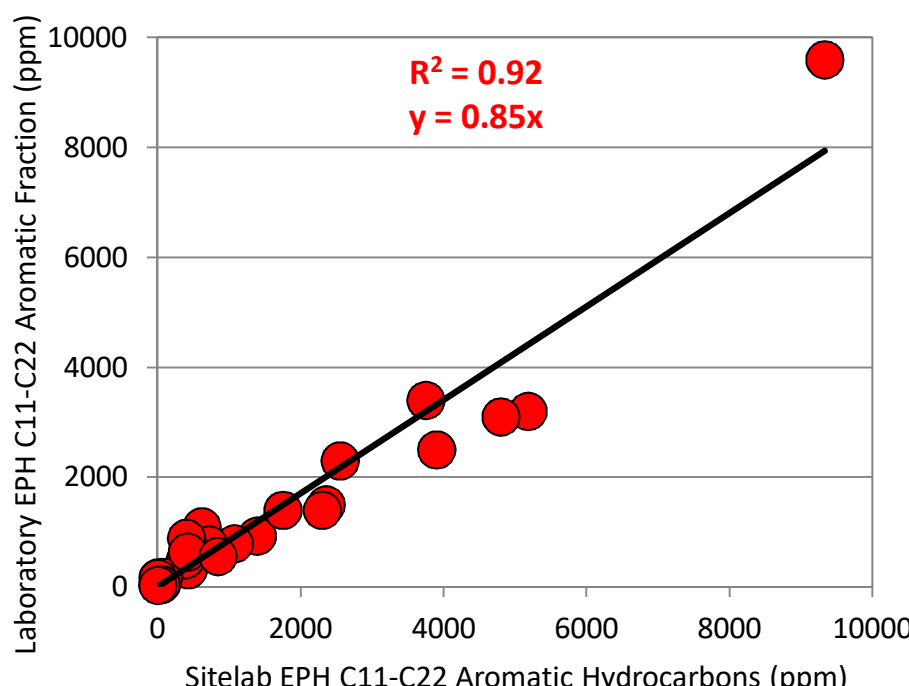


Sitalab's UVF calibration standard contains the same mixture of PAHs used by the laboratory GC methods.





LIF performed using UVOST by Dakota Technologies, Inc.

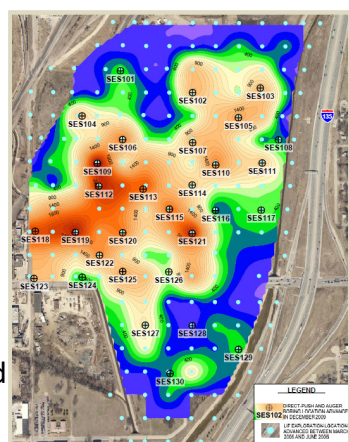
UVF-3100 Accuracy vs. Massachusetts DEP's GC-FID Method for EPH C11-C22 Aromatic Hydrocarbons




$R^2 = 0.92$
 $y = 0.85x$







Client uses UVF, LIF and lab data together to map the refinery's contamination Below the ground



Contact our customer for details
www.subenviro.com (781) 608-6119