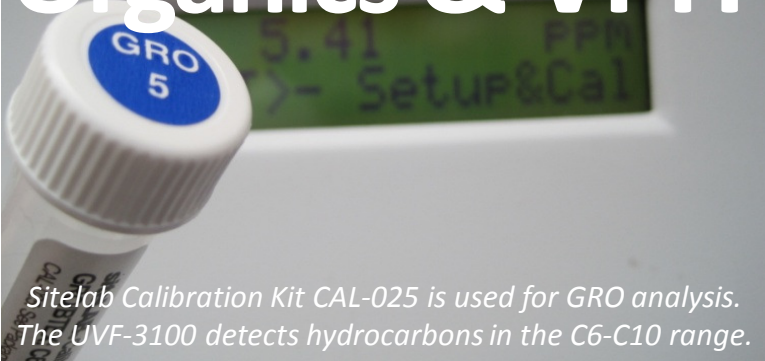


# Gasoline Range Organics & VPH

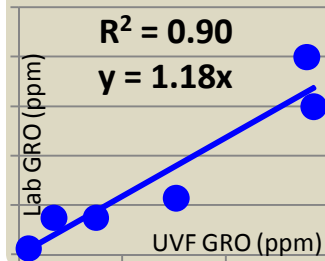


Sitelab Calibration Kit CAL-025 is used for GRO analysis. The UVF-3100 detects hydrocarbons in the C6-C10 range.

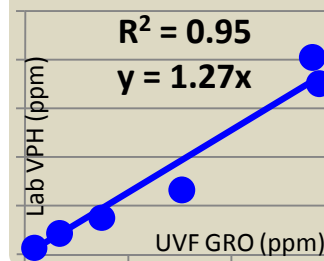
## Soils from Gasoline Station UST Site, Dracut, Massachusetts Concentrations in ppm units (mg/Kg)

UVF-3100 GRO Results	Lab GC EPA 8015-GRO	Lab GC Total VPH
176	260	292
666	1,500	886
1,481	1,500	1,526
3,037	2,300	2,665
5,704	6,000	7,025
5,570	8,000	8,103

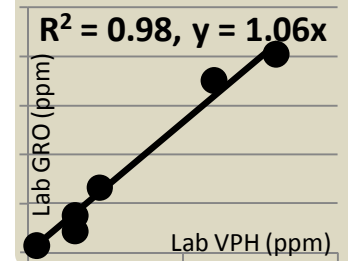
### UVF Accuracy vs. Lab GC GRO



### UVF Accuracy vs. Lab GC Total VPH



### Lab GC Methods GRO vs. Total VPH



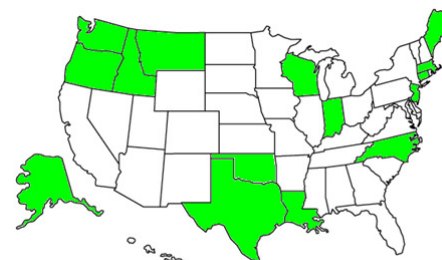
An environmental consulting firm performed a 3-way study testing samples at a former tank farm once used to store gasoline and fuel oils. They wanted to know how Sitelab compares to two different laboratory methods, GRO and VPH, which are commonly used across the US. Sitelab's GRO calibration kit and UVF-3100 optics were developed to correlate well to U.S. EPA and state regulatory test methods for gasoline range/volatile petroleum hydrocarbons.



Samples collected from six soil borings were split and sent to a certified lab. The UVF results correlated well to both laboratory methods. As expected, the two lab methods also correlated.



During this 2-day site investigation, Sitelab's mobile lab tested 113 soils. The customer used the data to delineate the extent of contamination below the ground.



A number of states require VPH and EPH methods, while most others use GRO and DRO to test TPH in soil.

EPA Method 8015-GRO reports **All** hydrocarbons in the C6 to C10 range.

Mass DEP VPH Method reports hydrocarbon fractions **SEPARATELY**:

- C5-C8 Aliphatic Hydrocarbons
- C8-C12 Aliphatic Hydrocarbons
- C9-C10 Aromatic Hydrocarbons
- + Target BTEX Compounds & MtBE