



Sitelab Corporation  
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### TOTAL PETROLEUM HYDROCARBONS

Sitelab's TPH OIL product is used to detect total petroleum hydrocarbons in the C15 to C50 "oil and grease" range, a common application using the TD-500D model. Sitelab's CAL-056 and CAL-057 calibration standards are formulated to produce results that match well to EPA Method 1664, 9071B and similar methods for oil in water, oil in soil applications.



### SOIL SAMPLE TEST RESULTS

#### CONCENTRATIONS IN PPM

- Transformer, Utility Site
- Creosote, Wood Treatment Site
- Weathered Diesel, UST Site
- No. 6 Fuel Oil, Factory Site
- Air Force Base, Jet Fuel Site
- Organic Sediment, Bayou Site
- Humic Acid, Brown Coal Lignite

#### RESPONSE AT 100 PPM

- Heavy Crude Oil
- Vacuum Pump Oil
- Heat Transfer Fluid

### TD-500D UVF-TRILOGY

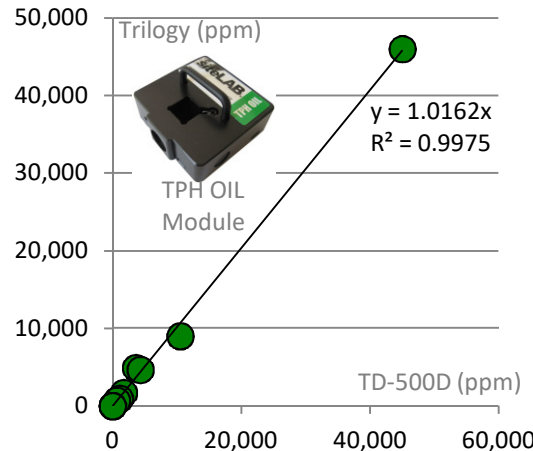


	365 LED TPH OIL	365 LED TPH OIL
Transformer, Utility Site	45,000	46,000
Creosote, Wood Treatment Site	3,600	4,900
Weathered Diesel, UST Site	4,300	4,660
No. 6 Fuel Oil, Factory Site	1,720	1,680
Air Force Base, Jet Fuel Site	20	23
Organic Sediment, Bayou Site	1,100	940
Humic Acid, Brown Coal Lignite	10,500	9,000
Heavy Crude Oil	630	680
Vacuum Pump Oil	3	3
Heat Transfer Fluid	0	0

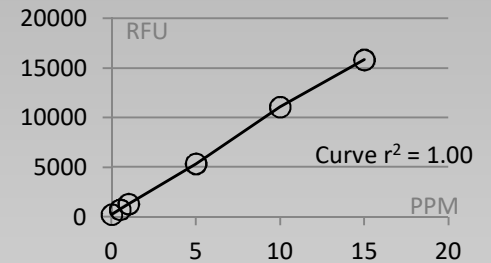


High response to natural organics

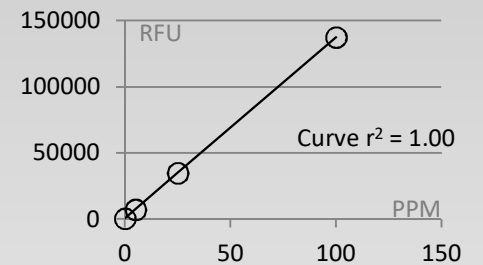
### GOOD CORRELATION EXHIBITED



### Triology TPH OIL Calibration: Low Range using CAL-057



### Triology TPH Oil Calibration: High Range using CAL-056



The TD-500D was calibrated with the same CAL-056 calibration kit. This analyzer performs a 1-point calibration curve, using the 100 ppm TPH OIL standard plus a solvent blank.

### GOT OIL? USE IT TO CALIBRATE



If the source oil is available, it can be used to calibrate and may improve correlation to the gravimetric methods. Ask Sitelab for assistance.



### GRAVIMETRIC VS. GC METHODS

U.S. EPA 9071B - Soil  
 U.S. EPA 1664 - Water

Sample weighed on a scale. Solvent is added to extract oil. Sample is heated to evaporate solvent and then weighed again. Natural organics and asphaltenes can elevate results.



Sample extracted in solvent, FID or PID detects voltage of hydrocarbons over time depending on boiling point. Less sensitive to natural organics.