



Sitelab Corporation
 Visit: sitelabcorp.com
 USA: 978-363-2299



GASOLINE RANGE ORGANIC HYDROCARBONS

Sitelab's CAL-025 product is used to detect volatile petroleum hydrocarbons in the C6 to C10 range. This test matches well to EPA Methods for GRO, BTEX, VPH or VOCs using GC/FID instrumentation. Trilogy's GRO UV Module fitted with similar optical filters as the UVF-3100, produces accurate results over a wide range of contaminants



SOIL SAMPLE

UVF-3100 UVF-TRILOGY



TEST RESULTS

CONCENTRATIONS IN PPM

Air Force Base, Jet Fuel Site
 Weathered Diesel, UST Site
 Creosote, Wood Treatment Site
 Organic Sediment, Bayou Site
 Humic Acid, Brown Coal Lignite

	254 LAMP GRO	255 LED GRO
Air Force Base, Jet Fuel Site	1730	1790
Weathered Diesel, UST Site	34	55
Creosote, Wood Treatment Site	5	9
Organic Sediment, Bayou Site	0	0
Humic Acid, Brown Coal Lignite	0	0

RESPONSE AT 100 PPM

Heat Transfer Fluid
 Premium Gasoline, 93 Octane
 Regular Gasoline, 87 Octane
 Diesel Fuel
 Old Home Heating Oil
 Jet Fuel
 Vacuum Pump Oil
 Lighter Crude Oil
 Heavier Crude Oil
 Motor Oil
 Benzo[a]Pyrene
 Naphthalene
 O-Xylene
 M-Xylene
 Benzene
 Benzene at 1 ppm

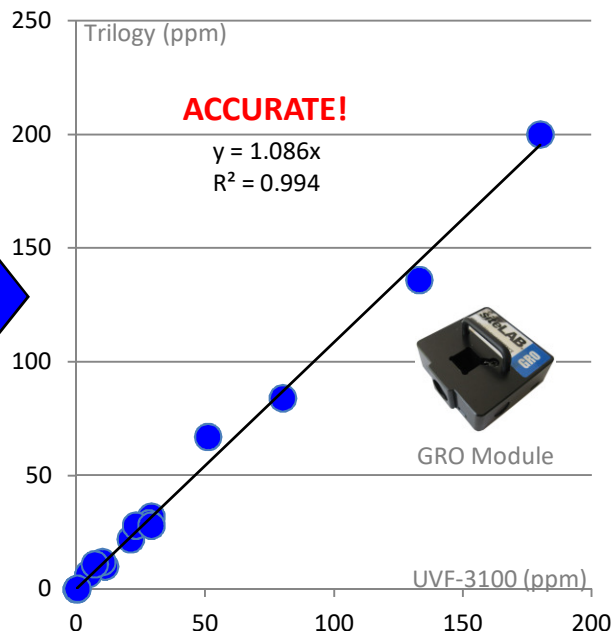
	254 LAMP GRO	255 LED GRO
Heat Transfer Fluid	180	200
Premium Gasoline, 93 Octane	51	67
Regular Gasoline, 87 Octane	29	32
Diesel Fuel	28	29
Old Home Heating Oil	23	28
Jet Fuel	21	22
Vacuum Pump Oil	11	10
Lighter Crude Oil	10	12
Heavier Crude Oil	7	11
Motor Oil	5	7
Benzo[a]Pyrene	0	0
Naphthalene	0	0
O-Xylene	133	136
M-Xylene	80	84
Benzene	29	28
Benzene at 1 ppm	0.26	0.27

PAHs
 No response

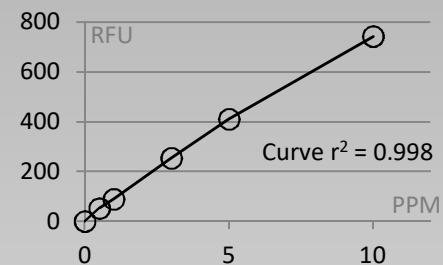
BTEX
 High response

CORRELATION vs. UVF-3100 RESULTS

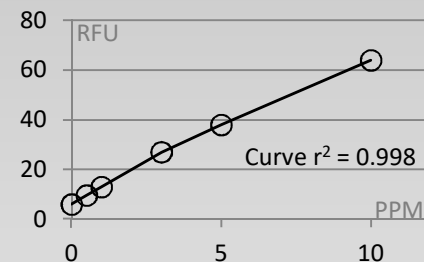
Trilogy produces similar soil results compared to the UVF-3100 and has similar sensitivity to the other hydrocarbons tested. Benzene and other BTEX compounds can be detected at 1 ppm and lower. Despite the low voltage (RFU) values exhibited, Trilogy could not be calibrated to higher concentrations and suffers the same quenching effects as the UVF-3100.



UVF-3100 GRO Calibration



Trilogly 255 nm GRO Calibration



Calibration Standard	UVF-3100 RFU	Trilogly RFU
Solvent Blank	0	6
0.5 ppm	52	9.6
1 ppm	89	13
3 ppm	254	27
5 ppm	411	38
10 ppm	744	64