



Petroleum Hydrocarbon Solutions

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North Carolina Gasoline Sites



TPH FINGERPRINTING

- GRO (BTEX)
- Total PAHs
- Target PAHs
- Heavy PAHs

UVF-3100D Analyzer

TD-500D Analyzer

DEQ.NC.GOV:

“ Field-based methods for TPH analysis such as Ultraviolet Fluorescence Technology (UVF) are allowed as an alternative to EPA Method 8015C for TPH analysis if all requirements, including product (fuel) identification and calibration approved by Division of Waste Management, are met. ”

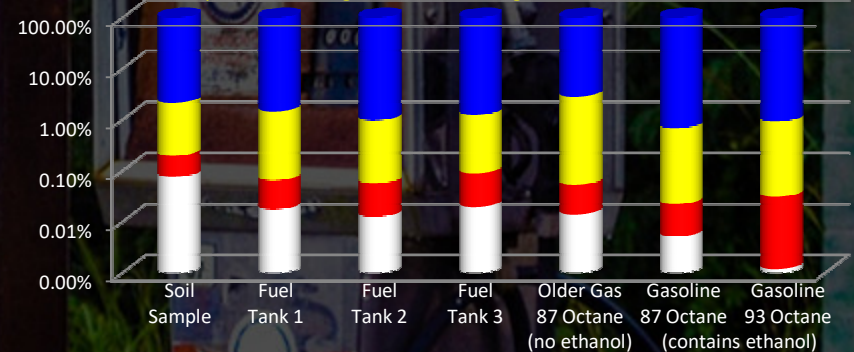
See guidelines and approved methods available at North Carolina DEQ's website, UST section.

Former Gas Station Site: High Point, NC

Results in ppm (mg/Kg)	GRO (BTEX):	Total PAHs:	Target PAHs:	Heavy PAHs:
Soil Sample	3,620	72	4.5	2.8
Fuel Tank 1	225,000	3,200	108	34
Fuel Tank 2	276,000	2,600	122	34
Fuel Tank 3	238,000	2,800	168	46

Consultant assumed the 3 tanks were filled with low, medium and high grade gasolines. The owner later confirmed the 3 tanks had been filled with the same gas before the station had closed.

Fluorescence Response Showing GRO and PAH Signatures vs. Octane in Gasoline



Gasoline & Diesel Storage Tank Site: Kernersville, NC

Results in ppm (mg/Kg)	GRO (BTEX):	Total PAHs:	Target PAHs:	Heavy PAHs:
Fuel from Pump	310,000	4,000	100	10
NAPL 1	420,000	7,500	100	36
NAPL 2	470,000	8,700	134	72

NAPL samples collected from monitoring wells away from fuel pump fluoresce similar to a slightly weathered gasoline. No diesel fuel was detected.

Fluorescence Intensity Showing GRO and PAH Concentrations vs. Fuel Standards

