



Texas Crude Oil Sites

Tank Battery Spill, West Texas

Sunset Well Service, Inc. is an environmental contractor located in the Midland/Odessa area of Texas. They use their UVF-3100D analyzer to help excavate and remediate soils contaminated by produced water and crude oil. Laboratories in Texas test TPH using the TX 1005 GC-FID Method. This method is similar to U.S. EPA Method 8015M, but reports the GRO, DRO and ORO fractions separately.

Soils from two spill sites were split and sent to a certified laboratory for confirmation analysis and the field results correlated well. For quality control, sample extracts were also sent to Sitalab's laboratory for EDRO analysis. Results were the same, ensuring the customer's results were valid. Soils are extracted in methanol; extracts have a 90 day shelf life.



UVF equipment is set up in a field trailer. Customer tests soils using Sitalab's EDRO calibration kit (product no. CAL-042) to measure hydrocarbons in the C10 to C36 range.

	UVF-3100 EDRO Results	Lab GC TPH TX 1005 Results
Tank Battery Storage Site	22 ppm 1,891 ppm 2,452 ppm 3,706 ppm	ND <33 ppm 1,860 ppm 2,180 ppm 2,350 ppm
Pipeline Spill Site	2,782 ppm 5,190 ppm	1,900 ppm 4,590 ppm

↓

Texas 1005 Reports TPH in GRO, DRO and ORO Ranges:

C6-C12 Gasoline Range Hydrocarbons	356 ppm
C12-C28 Diesel Range Hydrocarbons	3,920 ppm
C28-C35 Oil Range Hydrocarbons	+ 314 ppm
Total Petroleum Hydrocarbons (TPH)	4,590 ppm

Chromatogram shows TPH fractions. The peaks are surrogates used for quality control