



New Jersey DEP Laboratory Certification...



The New Jersey Department of Environmental Protection is the first state regulatory agency in the country to approve and certify the use of field analytical methods as part of their "Triad Approach," without compromising data quality and reliability. Using UVF for real-time measurement is one such technique that can result in more time and cost effective site characterization and cleanup. NJ DEP's Office of Quality Assurance (OQA) performed an on-site audit and required Sitalab to prepare a very thorough QA/QC package as part of their Environmental Laboratory Certification Program (ELCP).

See Sitalab's Laboratory Certificate...



Laboratory Certification ID #MA013, Category Code SHW12, Effective as of 7/1/2009 until 6/30/2010.

This is a first for Sitalab. By approving the use of UVF field analytical methods, people can now use Sitalab Corporation to test TPH in replacement of conventional laboratory GC or IR methods. The certification process, however, wasn't easy. It was expensive, time consuming and a lot of hard work. The DEP's Office of Quality Assurance required Sitalab to comply to the same, tough standards conventional fixed-based laboratories must adhere to.

A 4-hour audit was performed at a DEP facility located in Trenton, where OQA scientists and administrators watched how contaminated samples were tested and reported using Sitalab's UVF-3100 analyzer, including a number of quality controls performed to verify the instrumentation was operating properly and the test method was sound.

Following the audit, Sitalab was then required to prepare a very detailed Standard Operating Procedure (SOP), supported by a QA/QC package with corrective actions taken for deficiencies identified during the audit. Examples include five MDL studies performed, by testing 7 replicate soils containing low level concentrations of either fresh gasoline, home heating oil, crude oil and coal tar. OQA also required all traceability records relating to UVF instruments and use of calibration standards, including copies of Certificates of Analysis, second-source quality assurance materials and other supporting documentation.

Sitalab is grateful to have had this opportunity. The experience and knowledge gained as a result of this certification process has made us a better company, by improving the quality of our products and analytical services. With New Jersey DEP laboratory certification now complete, we are hopeful that other regulatory agencies in the future that follow similar proactive practices as New Jersey, will adopt and accept this method more easily.

“ We have successfully used this field method and it allowed us to improve our understanding of the nature and extent of contamination by giving us real-time data and more sample results than we would have been able to afford using just fixed-lab analyses. We do work in NJ currently and having this UVF method as a certified field method is an advantage for sites with petroleum hydrocarbon contamination. ”

Nancy Rothman, Ph.D, CEO & Principle Scientist, NEH Inc.
New Environmental Horizons, Inc. is located in Skillman, New Jersey: (908) 874-5686 or visit: <http://www.neh-inc.com>

Use UVF instead of Gas Chromatography to save time and money on your next project...

- ▶ Ship us your samples and we'll test them using our UVF analyzers
- ▶ Price per sample is \$50 each with quick 24-hour turnaround (includes TPH fingerprinting)
- ▶ vs. \$100 to \$200 per sample with 1 to 2 week turnaround compared to lab GC methods



Sitalab's UVF-3100 EDRO results will correlate to NJ DEP's new OQA-QAM-025 method for testing TPH

Method Detection Limit studies performed...

UVF-3100 GRO Results Soil with 20 ppm Gasoline		UVF-3100 EDRO Results Soil with 5 ppm Heating Oil	
1.	2.50 ppm	1.	4.184 ppm
2.	2.42 ppm	2.	4.192 ppm
3.	2.20 ppm	3.	4.188 ppm
4.	2.00 ppm	4.	4.160 ppm
5.	1.86 ppm	5.	4.134 ppm
6.	1.66 ppm	6.	4.202 ppm
7.	1.30 ppm	7.	4.176 ppm
Standard Deviation: 0.43 MDL = 1.34 ppm (mg/Kg)		Standard Deviation: 0.02 MDL = 0.07 ppm (mg/Kg)	

For more information about Sitalab's MDL studies, visit:
http://www.site-lab.com/NJDEP_Certification.htm