

THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S PHILIS MOBILE LABORATORIES NELAC ACCREDITATION



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PHILIS is EPA's mobile laboratory asset for on-site analysis for:

- Natural disasters, accidental releases, terrorist and other unnatural incident response actions
- Organic analysis in support of regional emergency response actions
- Superfund Program
- Mobile asset for EPA's Emergency Response Laboratory Network ("ERLN")



"Brick and mortar" lab on wheels

PHILIS Program Mission

- Provide EPA capability and large sample capacity to analyze chemical warfare agents and other contaminated organic environmental samples
- Capable of rapid deployment with setup and performing sample preparation and analysis
- Hastens recovery time, TIME = MONEY
 - Reduces turn-around for NELAC compliant data to near-real time
 - Provides reliable on-site data for facility clearance decisions
- Training platform for EPA's Laboratory Response Support Corps

Laboratory Vehicles



PAL - Analytical Laboratory



**PHILIS LU -
PHILIS Laboratory Unit**



**APL01 & APL02 -
Analytical Laboratories**



SPA - Sample Preparation

Support Vehicles



PHILIS Capabilities

- Sample analysis performance by SW-846 for organic compounds and EPA NHSRC SAM methods for Homeland Security Events
- Automated sample prep equipment, able to process a minimum of 150 samples/day
- All mobile assets connected via wireless, encrypted LIMS
- Road worthy within 2 hours of notification from warehouse locations in NJ and CO
- Set up and running within 6 hours of arrival on site
- Operations can run 4 days before restocking/refueling required

Reporting Capabilities

- Compatible with EPA's Scribe database format,
 - Through Scribe, will be compatible with BROOM and VSP software programs and tools
 - Provides full range of deliverable formats, including SEDD, WebEDR and CLP
 - Tier 1 through Tier 3 Reports
 - LIMS report format template library
 - Develop project specific format

Analytical laboratory Capabilities

Volatile Organics:	GC/MS, GC/MS SIM, GC/MS TOF
Semivolatile Organics	GC/MS, GC/MS SIM, GC/MS TOF
PAH	GC/MS, GC/MS SIM
PCB	GC/MS, GC/MS SIM, GC/ECD
Carbamates	LCMS
Explosives	LCMS
CWAs	GC/MS TOF, GC/MS, LCMS



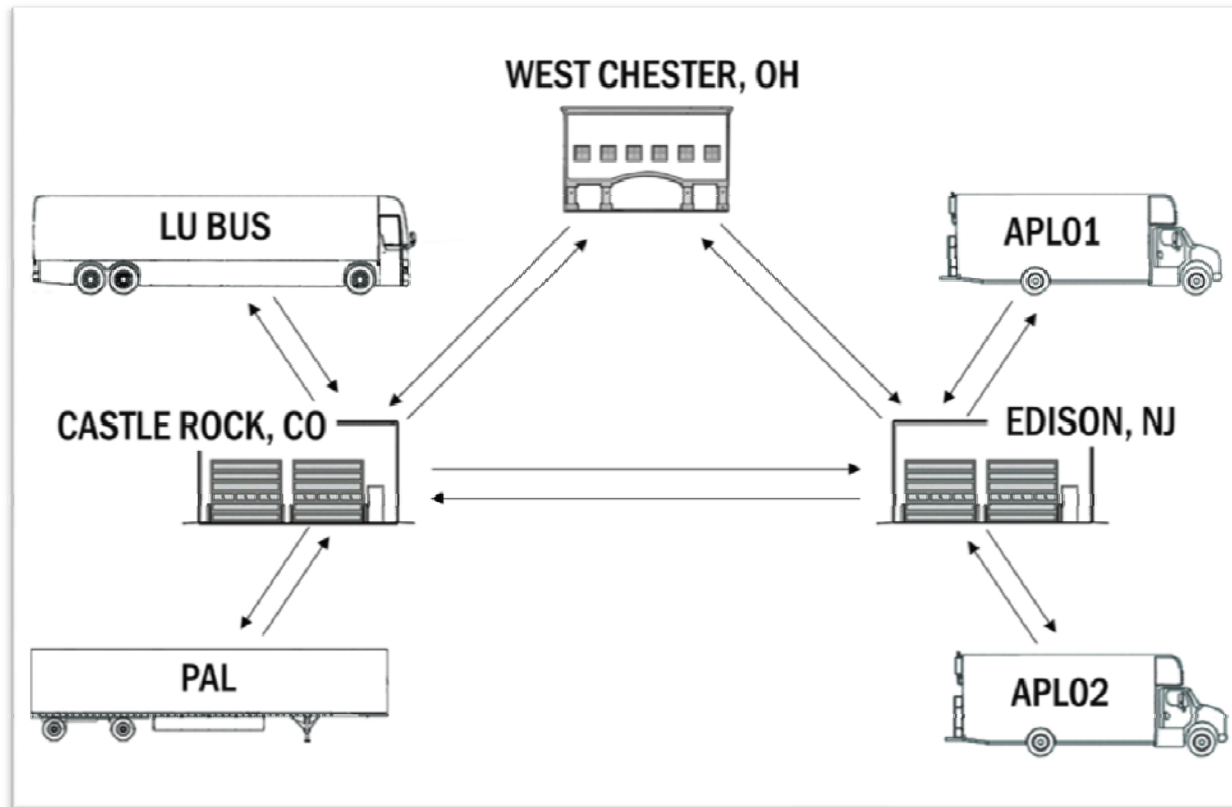
Maintaining Readiness for Emergency Response

- Readiness Assessment of Instrument
 - Check CCVs at least weekly for standby instruments maintained in calibration and ready for analysis
 - Procedures to maintain instrument operational during transport to ensure analysis upon reaching ER location
 - Regular weekly maintenance checks on equipment and operation of generators
- Monthly Inventory of materials and supplies
- Monthly Reporting to PM and EPA On-Scene Coordinators
- Tabletop, dry run and live agent exercises

NELAC Laboratory Challenges

- Bench space restricts the size of sample preparation processes
- Impact of preparation method on PQL or RL
- Use of innovative methods and disposable preparation materials
- Large volume of samples with high throughput requires automation for information and sample processing
- Application of innovative technologies using traditional SW-846 methods
- Development and certification for non-traditional preparation methods
- Control of documentation and data management at remote sites

NELAC Compliant Data Archive Migration and Offsite Backup



PHILISLab.Org

- Documents
- SOPs
- Forms
- Deliverable data reports

Welcome to the
Portable High Throughput Integrated Laboratory Identification Systems
Client Support Portal. Please login to continue.

>login

Username:

Password:



NELAC Quality Management Program Challenges

- Multiple Vehicles in different locations require multiple laboratory certifications from different states
- Multiple PT providers are utilized due to accreditation body selection requirements
- The nature of awarded accreditation restricts deployment flexibility to specific preparation vehicles
- Deployments may require vehicles from both facilities
- Uncertainty regarding which certification for reporting results

NELAC Certification

- Castle Rock, CO Operations:
Accreditation approved December 2011
 - 1 Vehicle with 2 method certifications
(VOA and SVOA analysis)
- Edison, NJ Operations:
Accreditation approved February 2012
 - 2 Vehicles
 - APL02 & SPA01 (Sample Preparation, SVOA and PCB analysis)
 - APL01 (VOA analysis)

CONTACTS

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