Programmatic
Quality Assurance Project Plan

Community Wide Brownfields
USEPA 2023 Assessment Grant BF-02D64223

City of Memphis and Shelby County Community Redevelopment Agency
850 N Manassas
Memphis, TN 38107-2516

Prepared by:
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INTRODUCTION

This Programmatic Quality Assurance Project Plan (QAPP) was prepared by Brownfield Redevelopment Solutions, Inc. (BRS) for the City of Memphis and Shelby County Community Redevelopment Agency as part of the Brownfields Community Wide Assessment Grant(s). The proposed scope of work involves more than one site where ASTM-E1903-97(2019)-compliant Phase II Environmental Site Investigations will be performed.

The United States Environmental Protection Agency (EPA) requires that all environmental monitoring and measurement efforts participate in a centrally managed quality assurance (QA) program. The team generating data under this QA program has the responsibility to implement minimum procedures to ensure that the precision, accuracy, completeness, and representativeness of its data are known and documented.

A Programmatic QAPP may be developed when a recipient's Brownfields program involves more than one site and is designed to accommodate technical requirements common to all the sites. A site-specific QAPP addendum supplements the Programmatic QAPP and includes specific methods for sampling and analysis to address the unique technical issues of performing a site assessment at that particular site. A QAPP addendum will be submitted once vetted sites are proposed for site assessment activities.

At this time the preferred environmental laboratories that will be used include Waypoint Analytical (Waypoint), Pace Analytical National (Pace), Moody Labs (Moody), and Eurofins Environment Testing (Eurofins). All laboratories are qualified to perform laboratory services in the State of Tennessee and hold all necessary accreditations offered by the State for the project scope.

If a different laboratory is chosen to provide analytical testing services once vetted sites are proposed, the laboratory must be qualified to perform laboratory services in the State of Tennessee and hold all necessary accreditations offered by the State for the project scope. This environmental laboratory will be presented in a QAPP addendum for that vetted site.

Memphis and Shelby County CRA has established a pool of pre-qualified consultants for implementation of this grant. The pre-qualified consultants have been selected as a result of a documented competitive process which complies with local, state and federal procurement procedures. The selected firms are BRS, Inc., Terracon, Fisher Arnold, and EnSafe. For the purposes of this document these firms will be referred to as the "Consultant" and will be responsible for submitting a site-specific QAPP addendum and performing the field sampling once vetted sites are proposed for assessment activities. City of Memphis and Shelby County CRA will determine which firm will be the Consultant on a site-by-site basis. All project reporting will be completed by the Consultant.

Memphis and Shelby County CRA Brownfields Quality Assurance Project Plan

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Section 1. Memphis and Shelby County CRA Brownfields QAPP Title and Approval Page

Title: Memphis and Shelby County Community Redevelopment Agency Programmatic Quality Assurance Project Plan (QAPP)
Property/Site Location: TO BE DETERMINED
Revision Number: 0
Revision Date: November 22, 2024

Brownfields Cooperative Agreement Number(s):__ BF-02D64223

City of Memphis and Shelby County Community Redevelopment Agency
Brownfields Recipient

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Preparer's Name and Organizational Affiliation
Preparer's Address, Telephone Number, and E-mail Address

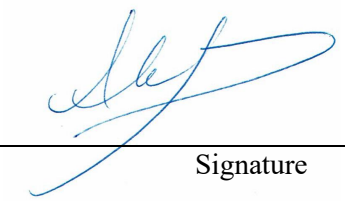
June 21, 2024
Preparation Date (Day/Month/Year)

BROWNFIELDS RECIPIENT PROGRAM MANAGER:

11/22/2024
Signature

Emma Turri, City of Memphis and Shelby County Community Redevelopment Agency, emma.turri@cramemphis.org
Printed Name/ Organization/ Date

ENVIRONMENTAL CONSULTANT QUALITY ASSURANCE OFFICER: (QAO)



Signature

Alicia Flammia, BRS, Inc. December 2, 2024
Printed Name/ Organization/ Date

EPA REGION 4 BROWNFIELDS PROJECT OFFICER:

Signature

Olga Perry, USEPA Region 4
Printed Name/ Organization/ Date

EPA REGION 4 DESIGNATED APPROVAL OFFICER:

Signature

Aditi Chakravarty, USEPA Region 4 , January 16, 2024
Printed Name/ Organization/ Date

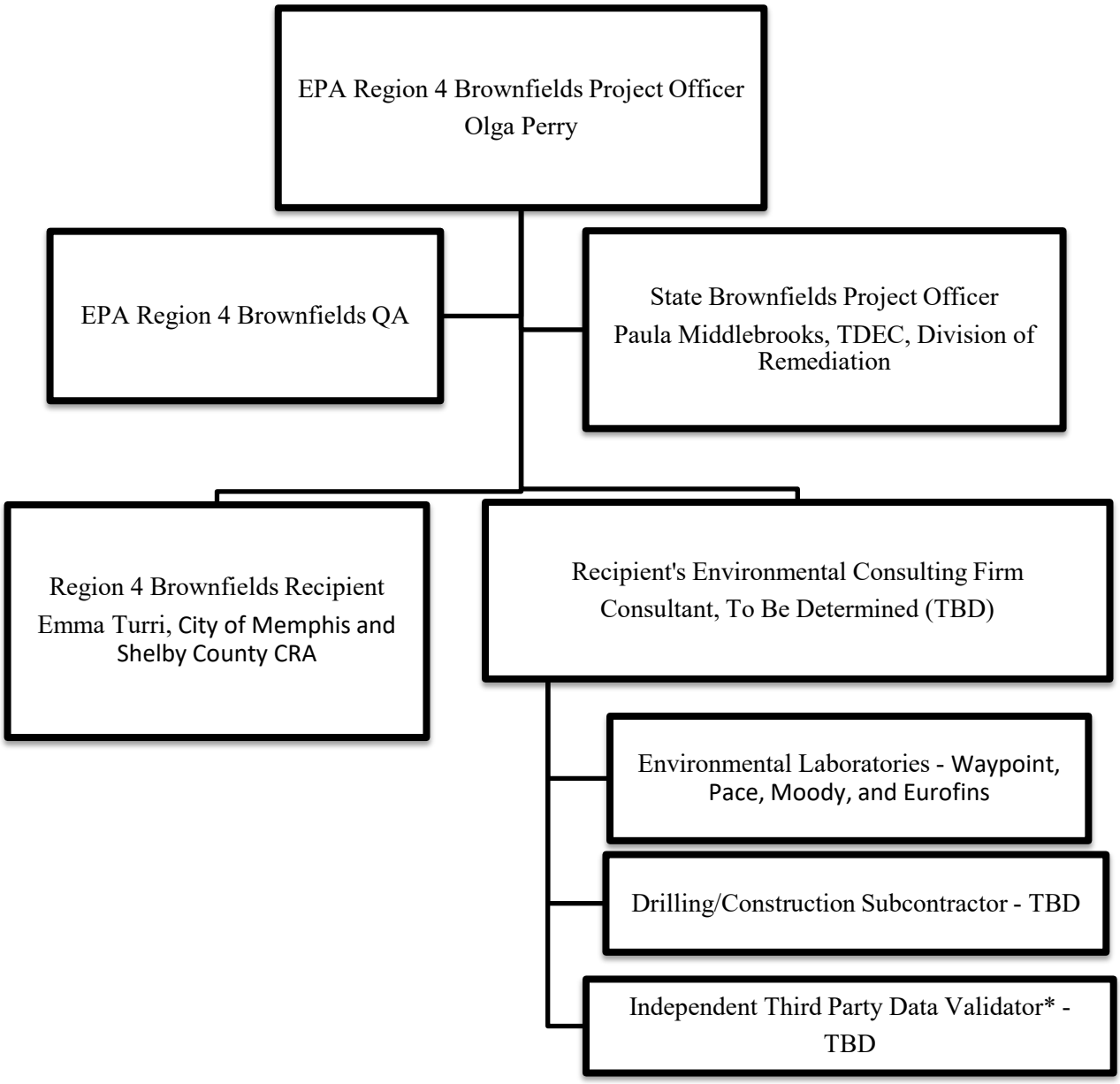
STATE BROWNFIELDS PROJECT OFFICER: Paula Middlebrooks 12.2.24

Signature

Paula Middlebrooks, TDEC Brownfields Project Coordinator
Paula.Middlebrooks@tn.gov

Printed Name/ Organization/ Date

Section 2a. Project Organizational Chart



*Data validation to be performed by third party – independent to project (can be within the Pre-Qualified Environmental Consulting firm or subcontracted to a data validation firm).

Section 2b. Personnel Responsibilities

Name	Title	Telephone Number/Email	Organizational Affiliation	Responsibilities[1]
Jennifer Taylor, P.E.	Project Engineer	856-964-6456	Brownfield Redevelopment Solutions, Inc. (BRS)	Oversight of Assessment and Remediation contractor scope for Brownfields Recipient
Alicia Flammia	Environmental Scientist	856-964-6456	Brownfield Redevelopment Solutions, Inc. (BRS)	Preparation of Programmatic QAPP for Brownfields Recipient
TBD	Project Manager	TBD	TBD	Preparation of Site Specific QAPP Addendum, Direct investigation activities, Review/approve activities, certify reports, close regulatory case
TBD	Field Technician	TBD	TBD	Collection of environmental media samples, reporting
Emma Turri	Brownfields Recipient Program Manager (RPM)	emma.turri@cramemphis.org	City of Memphis and Shelby County CRA	Community Builder: Project Manager
Paula Middlebrooks	State Brownfields Project Officer	(615) 532-0926 Paula.Middlebrooks@tn.gov	TDEC, Division of Remediation	Approve QAPP for compliance with TDEC regulations
Aditi Chakravarty	EPA Brownfields Quality Assurance Officer (QAO)		EPA Region 4	Approve QAPP for compliance with EPA Region 4 QA/QC policy
Olga Perry	EPA Brownfields Project Officer (BPO)	perry.olga@epa.gov	EPA Region 4	Ensure investigation is in compliance with QAPP and EPA regulation
TBD	Environmental Laboratory Contact	TBD	Waypoint, Pace Analytical National, Inc., Moody Labs, and Eurofins Environment Testing	Laboratory analysis of environmental media samples
TBD	Third Party Data Validator[2]	TBD	TBD	Data Quality Review

[1] Include resumes as Appendix A of the site-specific QAPP Addendum once a site has been approved for assessment.

[2] Data validation to be performed by third party – independent to project (can be within the Pre-qualified Environmental Consulting firm or subcontracted to a data validation firm).

The EPA QAO will approve this Programmatic QAPP and the Site Specific QAPP Addendum(s). The Consultant will perform all sampling, and as may be applicable will oversee collection of all environmental samples by other subcontractors. The Consultant will be responsible for oversight of investigative tasks including surveying, drilling and disposal of investigation-derived waste, and site restoration performed by others.

This QAPP will govern the operation of the project at all times. Each responsible party listed in the above shall adhere to the procedural requirements of the QAPP and ensure that subordinate personnel do likewise. It is expected that from time to time modifications will need to be made to the project. Memphis and Shelby County CRA shall be responsible for implementation of changes to the project and shall document the effective date of all changes made. Any significant changes made by the Memphis and Shelby County CRA need to be approved by the EPA Project Officer before being implemented.

The Consultant Quality Assurance Manager is responsible for determining that data are of adequate quality to support this project.

Distribution List

1. Emma Turri –Memphis CRA (Project Manager)
2. Paula Middlebrooks – TDEC (Brownfields Project Officer)
3. Olga Perry – EPA Region 4 (Project Officer)
4. Jennifer Taylor, PE – Program Manager, BRS, Inc. (Consultant Team Lead for preparation of the Programmatic QAPP)

Section 3a. Problem Definition/Project Description

PROBLEM DEFINITION

Phase I Environmental Site Assessments (ESA) will be completed for various priority sites (to be vetted and approved by Memphis and Shelby County CRA and EPA) by the Consultant on behalf of Memphis and Shelby County. As part of the Phase I assessment, it is assumed that recognized environmental conditions (RECs) related to historical use of the subject properties will be identified. The intent of the subsequent Phase II Site Investigations is to establish if RECs have impacted environmental media and, in this case, whether remedial actions may be necessary to advance redevelopment at the sites.

PROJECT DESCRIPTION

Site Location and Description

Sites will be selected from the priority sites identified by Memphis and Shelby County CRA in the urban core of Memphis, TN.

The scope of work may include assessment of prior industrial use, underground utilities, tanks and appurtenances, and asbestos and lead-based paint studies. Specific activities may include the installation of soil borings and temporary and/or permanent monitoring wells at the site, as well as soil, groundwater, soil gas and indoor air sampling. A site-specific QAPP addendum prepared by the Consultant will supplement this Programmatic QAPP and will include specific methods for sampling and analysis to address the unique technical issues of performing a site assessment at a particular, vetted site. Site assessment goals, approaches and technologies can differ significantly for each site based on variability in major site attributes such as contaminant types, depth of groundwater, site geology, overall site conditions and accessibility. The sampling locations will be selected to provide representative areal coverage of the properties, including future sub-slab areas beneath proposed structures, if any have been proposed. A Site Location Map will be provided in the site-specific QAPP Addendum as Figure 1.

As part of Phase II Site Investigation (SI) activities, the Consultant will collect environmental samples to be analyzed by one of the following laboratories: Waypoint, Pace, Moody, and/or Eurofins. For purposes of establishing this Programmatic QAPP, it is assumed that no previous environmental assessment has been conducted on the sites. It is anticipated that soil, soil gas, and/or groundwater samples may be analyzed for one or more of the following: Volatile Organic Compounds (VOCs), semi-VOCs (SVOCs), RCRA 8 metals, Polychlorinated Biphenyls, Pesticides/herbicides, TN Extractable Petroleum Hydrocarbons (EPH), lead-based paint, Per- and Polyfluoroalkyl Substances (PFAS), and asbestos. Should additional analyses not included herein be required for a site-specific Phase II, these will be included in a QAPP Addendum.

Field quality control samples will be collected as detailed in Section 10. Samples will be collected using disposable sampling equipment and placed directly into laboratory provided glassware. Samples will be stored on ice and transported to the laboratory under chain of custody. Please refer to Section 6 for Standard Operating Procedures (SOP) information.

Laboratory results will be compared to EPA's Regional Screening Levels (RSLs), the federal Maximum Contaminant Levels (MCLs) and, if applicable the Tennessee water quality standards (GWQC)[a]. Soil vapor contaminant concentrations will be compared to EPA's Vapor Intrusion Screening Levels (VISL); the state currently uses the EPA VISLs and also has a vapor mitigation guidance document[b]. The RSL tables provide comparison values for residential and commercial/industrial exposures to soil, air, and tapwater (drinking water).

PROJECT DECISION STATEMENTS

Future use of the sites where Phase II Site Investigations are planned is currently unknown. Investigative drilling and completion of soil borings and temporary and/or permanent monitoring wells with concurrent sampling of environmental media will likely be proposed in order to evaluate if contamination has come to be located on or under the property. If sampling results are found to be below the most stringent applicable EPA RSLs as determined by the targeted site reuse, then it can be concluded that the Site does not pose a risk to public health and the environment and no further action would be recommended.

However, if sampling results are found to be above the EPA RSLs or GWQC, then remedial investigations will be completed at sites to determine the nature and extent of contamination confirmed to be present during the Phase II SI. Ultimately, the full nature and extent of contamination will be evaluated and once remedial investigations are complete, an Analysis of Brownfields Cleanup Alternatives (ABCA) may also be prepared. The purpose of the ABCA is to memorialize the steps to be taken to select a recommended cleanup alternative for the site.

All environmental media analysis will be performed by a Tennessee State-certified laboratory such as Waypoint, Pace, Moody, and/or Eurofins. The accreditation certificate and annual certified parameter lists for Waypoint, Pace, Moody, and Eurofins are provided in Appendix B; if a different laboratory is chosen, then this information will be updated and provided in Appendix B of the QAPP Addendum.

[a] TDEC Rule General Water Quality Criteria and the Antidegradation Statement found in Chapter 0400-40-03, and the Use Classifications for Surface Waters found in Chapter 0400-40-04.
[b] Vapor Mitigation Guidance 01102023, https://www.tn.gov/content/dam/tn/environment/remediation/documents/vapor/rem_voap-vm-guide.pdf

Section 3b. Project Quality Objectives/Systematic Planning Process Statements

The purpose of the project is to establish if RECs have impacted environmental media at the site. Samples will be collected and evaluated in accordance with the following (at a minimum):

- TDEC Rule Hazardous Substance Remedial Action, Chapter 0400-15-01
- Vapor Mitigation Guidance for Sites Enrolled in the Brownfield Projects Voluntary Cleanup Oversight and Assistance Program, TDEC, January 2023.

Overall project objectives include:

- The field and laboratory Project Quality Objectives (PQOs) for this investigation are designed to determine the presence or absence of contamination to soil, soil vapor and groundwater.
- Upon completion of field work, samples will be submitted to a TN-certified analytical testing laboratory. Laboratory analysis will meet holding time requirements, and laboratory reporting will be scheduled for standard turn-around time (TAT).
- Analytical data generated will be reviewed by the laboratory QA/QC officer for the established criteria for performance measures that include precision, accuracy/bias, sensitivity (quantitation limit), data comparability, representativeness, and completeness.
- Soil and groundwater contaminant concentrations will be compared to EPA RSLs, the federal Maximum Contaminant Levels (MCLs) and the TN GWQC standards.
- Soil vapor contaminant concentrations will be compared to EPA's Vapor Intrusion Screening Levels (VISL); the state currently uses the EPA VISLs and also has a vapor mitigation guidance document.
- If indoor air needs to be evaluated at the site specific QAPP Addendum level, then indoor air will need to be compared to the appropriate EPA target indoor air VISL per TDEC VI Guidance.

To identify the presence of asbestos-containing building materials of concern as part of an Environmental Due Diligence assessment, TN certified asbestos building inspectors will perform a Baseline Asbestos Inspection of the subject property building. All work conducted will meet all federal, state and local regulatory requirements and can be used for the intended redevelopment purposes. Samples will be collected and evaluated in accordance with the following (at a minimum):

- TDEC Division of Air Pollution Control's Hazardous Air Contaminant Rule, Standard for Demolition and Renovation, 1200-03-11-.02(2)(d)

Who will use the data?
Data will be used by the EPA Region 4 Brownfields Cooperative Agreement Recipient ("CAR", Memphis and Shelby County CRA) and the property owner to determine if additional investigation of the subject RECs is necessary. In the case that a property enters the Voluntary Cleanup Oversight and Assistance Program (VOAP), TDEC Division of Remediation would also use the data.

What will the data be used for?
Soil and possibly groundwater data will be used to determine if additional investigation of the subject RECs are necessary, as well as to formulate an Analysis of Brownfields Cleanup Alternatives (ABCA) or a Remedial Action Workplan, as necessary.

The Asbestos Baseline Inspection and Lead Paint Survey is for property assessment purposes only and would not be suitable for demolition or renovations per EPA NESHAP. If necessary, a full pre-renovation/demolition inspection would need to be performed to satisfy those requirements.

What types of data are needed?

- Soil, soil vapor, and possibly Groundwater Data
- Building Materials
- Field screening
    - Photoionization Detector (PID)
    - Visual observations
    - Field instrument screening will be used to bias sample locations
    - Geoprobe direct push with macrocore liners
- Samples will be collected in accordance with the ASTM E1903-97(2002) for Phase II ESAs and ASTM D5730 Guide for Site Characterization for Environmental Purposes With Emphasis on Soil, Rock, the Vadose Zone and Ground Water.

How "good" do the data need to be in order to support the environmental decision?
The data will be compared to EPA RSLs, the federal Maximum Contaminant Levels (MCLs) and the TN GWQC standards if applicable; the data must be of sufficient quality to allow for this comparison. The quality of data is determined by establishing criteria for performance measures that include precision, accuracy/bias, sensitivity (quantitation limit), data comparability, representativeness, and completeness. Please refer to **Section #5d**, which will be updated if a different site-specific laboratory has been selected.

How much data are needed?
A site-specific QAPP addendum will supplement this Programmatic QAPP and will include a workplan for media sampling and analysis that will address the additional and unique technical issues of performing a site assessment at a particular site. QA samples including blind duplicates, field blanks, and trip blanks analyzed for one or more compounds will be collected in accordance with the requirements stated in the site-specific QAPP addendum. Both EPA and TDEC BPC will review the site-specific QAPP addendum.

Where, when, and how should the data be collected/generated?
Specific boring installation and sampling collection points will be based on the site-specific QAPP addendum and workplan.

The Baseline Asbestos Inspections will consist of the following items:

- Identification, damage-assessment, categorization and inventory of all suspect Asbestos Containing Materials (ACM) of the subject property buildings.
- Limited sampling of suspect ACMs to avoid damage to finishes.
- Sampling and lab analysis of suspect ACMs categorized as friable by the inspector.
- Sampling and lab analysis of suspect ACMs categorized as non-friable and significantly damaged or having a high probability of significant damage.

The Baseline Asbestos inspection sampling of friable and damaged non-friable ACM will follow the applicable asbestos sampling protocol outlined in AHERA (Asbestos Hazard Emergency Response Act), TDEC Division of Air Pollution Control's Hazardous Air Contaminant Rule requirements and Air Pollution

Control Section of Shelby County Health Department[c]. Sample collection would generally follow the protocol outlined in AHERA (Asbestos Hazard Emergency Response Act).

For surfacing materials, the inspector would apply the 3-5-7 Rule which requires that a minimum of three samples be collected for homogenous materials encompassing less than 1,000 square feet, a minimum of five samples be collected for materials encompassing between 1,000 and 5,000 square feet, and a minimum of seven samples be collected for materials encompassing greater than 5,000 square feet. A "homogenous" material is determined by the same color, texture, size, and boundary of the building.

In conjunction with the asbestos survey, a lead paint survey may be conducted by collecting one sample of each paint color or substrate. Samples will be submitted under chain of custody documentation to a National Lead Laboratory Accreditation Program (NLLAP) certified laboratory for analysis of lead using U.S. EPA Method SW846 3050B/7420-M Flame Atomic Absorption (Flame AA).

Who will collect and generate the data?
The Consultant will perform or oversee the collection of the samples. Laboratory analysis and analytical data will be provided by a Tennessee State-accredited laboratory, such as Waypoint Analytical, Pace, Analytical Environmental Services, Inc., Moody Labs, and Eurofins Environment Testing Laboratories.

Asbestos samples will be transported to Eurofins CEI in North Carolina, an accredited laboratory by the National Voluntary Lab Accreditation Program (NVLAP). The samples will be analyzed for asbestos content by polarized light microscopy according to EPA 600/R-93-116 on a 48-hour laboratory turnaround. Bulk samples will not be composited, and the laboratory will be instructed to analyze the samples on a positive stop for each homogeneous material.

How will the data be reported?
The Consultant will summarize and present the data as components of the final reports.

How will the data be archived?
Analytical data will be archived by the laboratory. The Consultant will archive deliverables in its cloud-based company server for a minimum of three years per the US EPA Brownfields Coalition Assessment Grant.

[c] https://www.shelbytnhealth.com/175/Asbestos

Section 4. Project Schedule/Timeline

The anticipated start and completion dates are provided below.

Activities	Organization	Dates (MM/DD/YY)		Deliverable	Deliverable Due Date
		Anticipated Date(s) of Initiation	Anticipated Date of Completion		
Preparation of Programmatic QAPP	BRS, Inc. for Memphis and Shelby County CRA	5/14/24	7/14/24	QAPP	7/21/24
Review of Programmatic QAPP	EPA Region 4 BPO and Brownfields QA Officer	6/21/24	7/14/24	Approved QAPP by EPA Region BPO	7/21/24
Preparation of Health and Safety Plan	Consultant	Fall 2024-2025	TBD	HASP	TBD
Preparation of Site Specific QAPP Addendums	Consultant	Fall 2024-2025	TBD	QAPP Addendums	TBD
Review of Site Specific QAPP Addendums	EPA Region 4 BPO, Brownfields QA Officer, and TDEC BPC	Fall 2024-2025	TBD	Approved QAPP by EPA Region BPO	TBD
Procurement of Equipment	Consultant	Fall 2024-2025	TBD	N/A	
Laboratory Request	Consultant	Fall 2024-2025	TBD	N/A	
Field Reconnaissance/Access	Consultant	Fall 2024-2025	TBD	N/A	
Collection of Field Samples	Consultant	2024 - 2025	TBD	Filed Notes, Boring Logs	TBD
Laboratory Package Received	Consultant	2024 - 2025	TBD	Lab Report	TBD
Validation of Laboratory Results	Consultant	2024 - 2025	TBD	Validated data Packages	TBD
Data Evaluation/ Preparation of Final Report	Consultant	2024 - 2025	TBD	Final Report	TBD

Section 5a. Sampling Methods and Locations

All site locations that will be sampled will be provided in the site-specific QAPP Addendum.

Matrix	**Sampling Location(s)**	**Depth (*units*)**	**Analytical Group**	**No. of Samples (*identify field duplicates*)**	**Sampling SOP Reference**	**Rationale for Sampling Location**
Soil	TBD	TBD	volatile and semivolatile organics, EPH, pesticides, PCBs, metals, asbestos, PAHs and PFAS	TBD	-Non-Aqueous Sample Handling -Field Documentation -Location Logging -Soil Sampling -PFAS Field Sample Collection Guidance for Waste Sites	TBD
Groundwater	TBD	TBD	volatile and semivolatile organics, pesticides, PCBs, metals, and Per- and Polyfluoroalkyl Substances (PFAS)	TBD	EPA Low-flow Sampling Guide	
Soil Vapor	TBD	TBD	Volatile organics	TBD	Field SOPs	TBD
Paint chips	TBD	TBD	Lead	TBD	-Non-Aqueous Sample Handling	Observed potential lead-based paint
Building materials	TBD	TBD	Asbestos	TBD	OSHA, NESHAP, AHERA	Observed potential ACM

The following procedures will be performed during collection of soil samples:
1. Grab samples will be transferred as soon as possible into the appropriate laboratory supplied containers.
2. Sample jars will be labeled with the following information: project name, project number, location identification, sample depth interval, date and requested analysis. This information will also be recorded in the field logbook.
3. All laboratory samples will be stored in a cooler to maintain samples at 4^{o}C.
4. Duplicate soil and groundwater samples for will be collected at a rate of 5 percent (%) per sample batch or one minimum per day, whichever is larger. Equipment blanks will be collected at a rate of 5% per sample batch or one minimum per day, whichever is smaller. All sample spiking will be performed by the laboratory.

The following procedures will be performed during collection of suspect Asbestos-Containing Material (ACM)[d]:

1. Sampling activities will be based upon the federal, state and local requirements for asbestos assessment.
2. Survey activities will be conducted in accordance with the Occupational Safety and Health Administration (OSHA) regulations, 29 CFR 1926.1101, National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61, asbestos compliance issues for demolition and renovation, 40 CFR Part 763 Asbestos Hazardous Emergency Response Act (AHERA), the Asbestos School Hazard Abatement Reauthorization Act (ASHARA) in 1994, and applicable TDEC Division of Air Pollution requirements.
3. The asbestos survey will be conducted by TN certified asbestos building inspectors.

[d] Friable Asbestos-Containing Material (ACM) is defined as any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix A, Subpart F, of 40 Code of Federal Regulations (CFR) Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. Nonfriable ACM is any material containing more than one percent (1%) asbestos as determined using the PLM method that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. The USEPA further defines two categories of nonfriable ACM:

- Category I (Cat I) - Category I nonfriable ACM is any asbestos-containing packing, gasket, resilient floor covering or asphalt roofing product which contains more than one percent (1%) asbestos as determined using PLM, and
- Category II (Cat II) - Category II nonfriable ACM is any material, excluding Category I nonfriable ACM, containing more than one percent (1%) asbestos as determined using PLM that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Regulated Asbestos-Containing Material (RACM) is (a) friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

Section 5b. Analytical Methods and Requirements

At this time the preferred environmental laboratories are Waypoint Analytical, Pace, Moody Labs, and Eurofins Environment Testing Laboratories. If a different laboratory is chosen to provide analytical testing services once vetted sites are proposed, the laboratory must be qualified to perform laboratory services in the State of Tennessee and hold all necessary accreditations offered by the State for the project scope. This environmental laboratory will be presented in a QAPP addendum for that vetted site.

The following is widely accepted as the preferred analytical methods and requirements. Laboratory Standard Operating Procedures are provided in Appendix C. Site-specific requirements will be updated in the Site-specific QAPP Addendums.

Matrix	**Analytical Group**	**Concentration Level**	**Analytical & Preparation Method/ SOP Reference**	**Sample Volume**	**Containers (*number, size, type*)**	**Preservation Requirements (*chemical, temperature, light protected)***	**Maximum Holding Time (*preparation/ analysis)***
Groundwater	VOCs	Low-Moderate	SW-846 Method 8260	120 ml	(3) 40 ml VOA vials w/Teflon lined septum	1:1 HCl to pH<2; protected from light, cool to 4°C	14 days to analysis
Soil	VOCs	Low-Moderate	SW-846 Method 8260	40 ml per 5 gram sample +4 oz per sample	(3) 40 ml glass VOA Vial. 1 additional 8-oz amber glass sample container will be filled and not preserved for percent solids determination	cool 4°, protected from light. Lab may add 15 ml methanol to 15 grams soil as required for medium level analysis	14 days to analysis
Soil Vapor	VOCs	Trace-Low	EPA Method TO15	800 mL	1-1 L Summa evacuated canister	Store at ambient temperatures	30 days
Groundwater	Semi-VOCs	Trace-Low	SW-846 8270 SIM	1 L	1-1 L amber glass with Teflon insert in caps	Unpreserved, protected from light, cool to 4℃ ±2℃	extracted within 7 days of sampling/ analyzed within 40 days following extraction
Soil	Semi-VOCs	Low-Moderate	SW-846 8270D	300 mL/8-oz	8-oz wide-mouth amber glass jars	Unpreserved, protected from light, cool to 4℃ ±2℃	extracted within 14 days of sampling/ analyzed within 40 days following extraction

Matrix	**Analytical Group**	**Concentration Level**	**Analytical & Preparation Method/ SOP Reference**	**Sample Volume**	**Containers (*number, size, type*)**	**Preservation Requirements (*chemical, temperature, light protected)***	**Maximum Holding Time (*preparation/ analysis)***
Groundwater	Pesticides	Trace-Low	SW-846 8081LL	1 L + 1 L per day	I L amber glass + 1 L amber glass sample container will be filled and not preserved for quality control requirements	Unpreserved, cool to 4℃ ±2℃	extracted within 7 days of sampling/ analyzed within 40 days following extraction
Soil	Pesticides	Low-Moderate	SW-846 8081B	300 mL/8-oz	8-oz wide-mouth amber glass jars	Unpreserved, cool to 4℃ ±2℃	extracted within 14 days of sampling/ analyzed within 40 days following extraction
Groundwater	PCBs	Low-Moderate	SW-846 8082A	250 mL + 1 L per day	300 mL amber glass + 1 L amber glass sample container will be filled and not preserved for quality control requirements	Unpreserved, cool to 4℃ ±2℃	extracted within 1 year of sampling/ analyzed within 40 days following extraction
Soil	PCBs	Low-Moderate	SW-846 8082A	300 mL/8-oz	8-oz wide-mouth amber glass jars	Unpreserved, protected from light, cool to 4℃ ±2℃	extracted within 1 year of sampling/ analyzed within 40 days following extraction
Groundwater	Metals	Low-Moderate	SW-846 6010C	250 mL	250 mL plastic or glass container	Nitric acid to pH <2, cool 4°	6 months
Soil	Metals	Low-Moderate	SW-846 6010C	300 mL/8-oz	8 oz plastic or glass soil container	Cool 4°	6 months

Matrix	**Analytical Group**	**Concentration Level**	**Analytical & Preparation Method/ SOP Reference**	**Sample Volume**	**Containers (*number, size, type*)**	**Preservation Requirements (*chemical, temperature, light protected)***	**Maximum Holding Time (*preparation/ analysis)***
Groundwater	Mercury	Low-Moderate	SW-846 7470A	250 mL	250 mL plastic or glass container	Nitric acid to pH <2, cool 4°	28 days
Soil	Mercury	Low-Moderate	SW-846 7471B	300 mL/8-oz	8 oz plastic or glass soil container	Cool 4°	28 days
Groundwater	PFAS	Trace	Method 1633	250 or 500 ml	HDPE bottles with unlined HDPE or polypropylene caps	Cool 0 - 6 °	90 days from collection, when stored at ≤ -20 ºC and protected from the light. 7 to 28 days[e] when stored at 0 - 6 ºC and protected from the light,
Building Material	Asbestos	Friable/Non-friable	Polarized Light Microscopy EPA 600-R-93-116: Method for the Determination of Asbestos in Bulk Building Materials	varies	varies	Airtight container	Not applicable

[e] Issues were observed with certain perfluorooctane sulfonamide ethanols and perfluorooctane sulfonamidoacetic acids after 7 days. These issues are more likely to elevate the observed concentrations of other PFAS compounds via the transformation of these precursors if they are present in the sample.

Section 5c. Reference Limits and Evaluation Table

At this time the preferred environmental laboratory that will be used include Waypoint Analytical, Pace, Moody Labs, and Eurofins Environment Testing Laboratories. If a different laboratory is chosen to provide analytical testing services once vetted sites are proposed, the laboratory must be qualified to perform laboratory services in the State of Tennessee and hold all necessary accreditations offered by the State for the project scope. Once a State-accredited laboratory has been selected, the reporting limit and method detection limit tables[f] will be updated in the site-specific QAPP Addendum to ensure analytical methods can achieve the required limits for comparison to the applicable standards. Tables showing the reporting limits and method detection limits compared against the EPA RSLs or GWQC for each lab are presented in Appendix C.

Abbreviations used in the tables below:

EPA RSLs – US EPA Regional Screening Levels

MCL/GWQC – Maximum Contaminant List/ Groundwater Quality Criteria

RL – Reporting Limit

MDL – Method Detection Limit

mg/L - milligrams per liter

µg/L – micrograms per liter

mg/kg – milligrams per kilogram

ppmv/ppbv – parts per million by volume/ parts per billion by volume

µg/m3 - micrograms per cubic meter

NS – No Standard

RPD - Relative Percent Difference

[f] No reference limits exist for ACM as the test method determines presence or absence of ACM only.

Section 5d. Analytical Laboratory Sensitivity and Project Criteria

The information in the following tables has been adapted from Quality Assurance Guidance for Conducting Brownfields Site Assessments, EPA 540-R-98-038, 1998. Laboratory Standard Operating Procedures are protected files and can be accessed at the following cloud-sharing links:
Eurofins - https://spaces.hightail.com/space/SjHRmHP8HZ
Moody - https://spaces.hightail.com/space/uTucnnX3BH
Pace - https://spaces.hightail.com/space/EAs7Ck2mRb
Waypoint - https://spaces.hightail.com/space/cD6je4mjjP

Matrix *Soil and Water*
Analytical Group *Volatile Organics*
Concentration Level *Low/Medium*

Analytical Method/SOP	Data Quality Indicators	Performance Criteria (related to analytical method)	QC Sample such as Duplicate, Matrix Spike, Surrogates etc.) Used To Assess Performance Criteria	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
EPA Method 8260C	Precision	Relative Percent Difference (RPD) ≤20% (analyte specific)	Laboratory Control Sample (LCS) Duplicate	(A)
	Precision	RPD ≤30% (analyte specific)	Matrix Spike (MS) Duplicate	(A), (S)
	Precision	RPD ≤30% (analyte specific)	Field Duplicates	(A), (S)
	Accuracy/Bias	Generally, 70-130%R (analyte specific)	LCS	(A)
	Accuracy/Precision	Generally, 40-140%R (analyte specific)	MS	(A), (S)
	Accuracy/Extraction Efficiency	70-130%R	Surrogates	(A)
	Accuracy/Bias (Contamination)	No Target Compounds >RL	Trip Blank, Method Blank & Field Equipment Blank	(A), (S)
	Sensitivity	Level of Detection (LOD) Verification	LOD Sample (spiked at 1 to 4 times the detection limit)	(A)

Matrix *Soil Vapor*
Analytical Group *Volatile Organics*
Concentration Level *Trace/Low*

Analytical Method/SOP	Data Quality Indicators	Performance Criteria (related to analytical method)	QC Sample such as Duplicate, Matrix Spike, Surrogates etc.) Used To Assess Performance Criteria	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)

EPA Method TO-15	Precision	RPD ≤30% (analyte specific)	Laboratory Control Sample (LCS) Duplicate	(A)
	Precision	RPD ≤30% (analyte specific)	Matrix Spike (MS) Duplicate	(A), (S)
	Accuracy/Bias	Generally, 60-140%R (analyte specific)	LCS	(A)
	Accuracy/Precision	Generally, 70-120%R (analyte specific)	MS	(A), (S)
	Accuracy/Extraction Efficiency	78-124%R	Surrogates	(A)
	Accuracy/Bias (Contamination)	No Target Compounds >RL	Method Blank & Field Equipment Blank	(A), (S)
	Sensitivity	Level of Detection (LOD) Verification	LOD Sample (spiked at 1 to 4 times the detection limit)	(A)

Matrix *Soil and Water*
Analytical Group *Semi-Volatile Organics*
Concentration Level *Low/Medium*

Analytical Method/SOP	**Data Quality Indicators**	**Performance Criteria (related to analytical method)**	**QC Sample such as Duplicate, Matrix Spike, Surrogates etc.) Used To Assess Performance Criteria**	**QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)**
EPA Method 8270D	Precision	RPD ≤50% (analyte specific)	Laboratory Control Sample (LCS) Duplicate	(A)
	Precision	RPD ≤50% (analyte specific)	Matrix Spike (MS) Duplicate	(A), (S)
	Precision	RPD ≤50% (analyte specific)	Field Duplicates	(A), (S)
	Accuracy/Bias	Generally, 40-140%R for Base Neutrals; 30-130% for Acids (analyte specific)	LCS	(A)
	Accuracy/Precision	Generally, 40-140%R for Base Neutrals; 30-130% for Acids (analyte specific)	MS	(A), (S)
	Accuracy/Extraction Efficiency	30-130%R	Surrogates	(A)
	Accuracy/Bias (Contamination)	No Target Compounds >Reporting Limit (RL)	Method Blank & Field Equipment Blank	(A), (S)

	Sensitivity	Level of Detection (LOD) Verification	LOD Sample (spiked at 1 to 4 times the detection limit)	(A)

Matrix *Soil and Water*
Analytical Group *Pesticides*
Concentration Level *Low/Medium*

Analytical Method/SOP	**Data Quality Indicators**	**Performance Criteria (related to analytical method)**	**QC Sample such as Duplicate, Matrix Spike, Surrogates etc.) Used To Assess Performance Criteria**	**QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)**
EPA Method 8081B	Precision	RPD ≤30% (analyte specific)	Laboratory Control Sample (LCS) Duplicate	(A)
	Precision	RPD ≤30% (analyte specific)	Matrix Spike (MS) Duplicate	(A), (S)
	Precision	RPD ≤30% (analyte specific)	Field Duplicates	(A), (S)
	Accuracy/Bias	Generally, 40-140%R	LCS	(A)
	Accuracy/Precision	Generally, 40-140%R	MS	(A), (S)
	Accuracy/Extraction Efficiency	30-150%R	Surrogates	(A)
	Accuracy/Bias (Contamination)	No Target Compounds >Reporting Limit (RL)	Method Blank & Field Equipment Blank	(A), (S)
	Sensitivity	Level of Detection (LOD) Verification	LOD Sample (spiked at 1 to 4 times the detection limit)	(A)

Matrix *Soil and Water*
Analytical Group *PCBs*
Concentration Level *Low/Medium*

Analytical Method/SOP	**Data Quality Indicators**	**Performance Criteria (related to analytical method)**	**QC Sample such as Duplicate, Matrix Spike, Surrogates etc.) Used To Assess Performance Criteria**	**QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)**
EPA Method 8082A	Precision	RPD ≤30% (analyte specific)	Laboratory Control Sample (LCS) Duplicate	(A)
	Precision	RPD ≤30% (analyte specific)	Matrix Spike (MS) Duplicate	(A), (S)
	Precision	RPD ≤30% (analyte specific)	Field Duplicates	(A), (S)
	Accuracy/Bias	Generally, 40-140%R	LCS	(A)

	Accuracy/Precision	Generally, 40-140%R	MS	(A), (S)
	Accuracy/Extraction Efficiency	30-150%R	Surrogates	(A)
	Accuracy/Bias (Contamination)	No Target Compounds >Reporting Limit (RL)	Method Blank & Field Equipment Blank	(A), (S)
	Sensitivity	Level of Detection (LOD) Verification	LOD Sample (spiked at 1 to 4 times the detection limit)	(A)

Matrix *Soil and Water*
Analytical Group *Metals*
Concentration Level *Low/Medium*

Analytical Method/SOP	**Data Quality Indicators**	**Performance Criteria (related to analytical method)**	**QC Sample such as Duplicate, Matrix Spike, Surrogates etc.) Used To Assess Performance Criteria**	**QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)**
EPA Method 6010C	Precision	RPD ≤20% (analyte specific)	Laboratory Control Sample (LCS) Duplicate	(A)
	Precision	RPD ≤20% (analyte specific)	Matrix Spike (MS) Duplicate	(A), (S)
	Precision	RPD ≤20% (analyte specific)	Field Duplicates	(A), (S)
	Accuracy/Bias	Generally, 80-120%R	LCS	(A)
	Accuracy/Precision	Generally, 75-125%R	MS	(A), (S)
	Accuracy/Extraction Efficiency	80-120%R	Surrogates	(A)
	Accuracy/Bias (Contamination)	No Target Compounds >Reporting Limit (RL)	Method Blank & Field Equipment Blank	(A), (S)
	Sensitivity	Level of Detection (LOD) Verification	LOD Sample (spiked at 1 to 4 times the detection limit)	(A)

Matrix *Soil and Water*
Analytical Group *Mercury*
Concentration Level *Low/Medium*

Analytical Method/SOP	**Data Quality Indicators**	**Performance Criteria (related to analytical method)**	**QC Sample such as Duplicate, Matrix Spike, Surrogates etc.) Used To Assess Performance Criteria**	**QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)**

EPA Method 7470A and 7471B	Precision	RPD ≤20% (analyte specific)	Laboratory Control Sample (LCS) Duplicate	(A)
	Precision	RPD ≤20% (analyte specific)	Matrix Spike (MS) Duplicate	(A), (S)
	Precision	RPD ≤20% (analyte specific)	Field Duplicates	(A), (S)
	Accuracy/Bias	Vendor Limits	LCS	(A)
	Accuracy/Precision	Generally, 70-130%R	MS	(A), (S)
	Accuracy/Extraction Efficiency	80-120%R	Surrogates	(A)
	Accuracy/Bias (Contamination)	No Target Compounds >Reporting Limit (RL)	Method Blank & Field Equipment Blank	(A), (S)
	Sensitivity	Level of Detection (LOD) Verification	LOD Sample (spiked at 1 to 4 times the detection limit)	(A)

Matrix *Water*				
Analytical Group *PFAS*				
Concentration Level *Trace*				
Analytical Method/SOP	**Data Quality Indicators**	**Performance Criteria (related to analytical method)**	**QC Sample such as Duplicate, Matrix Spike, Surrogates etc.) Used To Assess Performance Criteria**	**QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)**
Analysis of Per and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples by LC-MS/MS Using Method 1633	Precision	RPD ≤30% (analyte specific)	Laboratory Control Sample (LCS) Duplicate	(A)
	Precision	RPD ≤30% (analyte specific)	Matrix Spike (MS) Duplicate	(A), (S)
	Precision	RPD ≤30% (analyte specific)	Field Duplicates	(A), (S)
	Accuracy/Bias	Generally, 30-150%R	LCS	(A)
	Accuracy/Precision	Generally, 50-150%R	MS	(A), (S)
	Accuracy/Extraction Efficiency	30-150%R	Surrogates	(A)
	Accuracy/Bias (Contamination)	No Target Compounds >Reporting Limit (RL)	Method Blank & Field Field blank	(A), (S)
	Sensitivity	Level of Detection (LOD) Verification	LOD Sample (spiked at 1 to 4 times the detection limit)	(A)

Section 5e. Secondary Data Criteria and Limitations Table

Any secondary data for the project sites will be provided in the site-specific QAPP Addendum.

Section 6. Project Specific Method and Standard Operating Procedures (SOPs) Reference Table

Copies of the most widely used and available Field Sampling SOPs are provided in Appendix D. Analytical laboratory SOPs can be accessed at the following cloud-sharing links:
Eurofins - https://spaces.hightail.com/space/SjHRmHP8HZ
Moody - https://spaces.hightail.com/space/uTucnnX3BH
Pace - https://spaces.hightail.com/space/EAs7Ck2mRb
Waypoint - https://spaces.hightail.com/space/cD6je4mjjP

Copies of SOPs required for parameters not included herein will be provided in the site-specific QAPP Addendum, as may be applicable.

ANALYTICAL METHOD REFERENCE (*Include document title, method name/number, revision number, date)*
1a. Method 8260B: Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), part of Test Methods for Evaluating Solid Waste, Physical/Chemical Methods; USEPA, Revision 3, August 2006.
2a. SW846 8270D Semivolatile Compounds by Gas Chromatography/Mass Spectroscopy Revision 5 July 2014
3a. SW846 8081B Organochlorine Pesticides by Gas Chromatography Revision 2 February 2007
4a. SW846 8082A Polychlorinated Biphenyls by Gas Chromatography Revision 1 February 2007
5a. EPA Method 6010C, Inductively Coupled Plasma-Atomic Emission Spectrometry, 2007 Rev. 3
6a. EPA Method 7470A, Mercury in Liquid Waste (Manual Cold Vapor Technique), 1994, Rev. 3 and EPA Method 7471B, Mercury in Soil or Semisolid Waste (Manual Cold Vapor Technique), 1994
7a. Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS, January 2024.
8a. U.S. EPA Method TO-15, 1999, Revision 2
9a. U.S. EPA Method SW846 3050B/7420-M Flame Atomic Absorption (Flame AA)
10a. Test Method -- Method for the Determination of Asbestos in Bulk Building Materials," EPA/600/R-93/116, July 1993
ANALYTICAL LABORATORY SOPs (*Include document title, date, revision number, and originator=s name)*
PACE ANALYTICAL
Semi-volatile Organics by GCMS using Capillary Column (EPA Methods 8270C, EPA 8270D, EPA Method 625, SM 6410B), Including Provisions for Analysis in SIM Mode, Revision 5, January 2022
VOCs & GRO by EPA TO-15, TO-18 Modified, Revision 5, March 2023
PCBs by EPA 608, SW-846 8082, 8082A, SM 6431 B, Revision 3, January 2024
Pesticides by Gas Chromatography (EPA Methods 608, 8081A, 8081B, SM 6630C), Revision 4, February 2022
Semi-volatile Organics by GCMS using Capillary Column (EPA Methods 8270C, EPA 8270D, EPA Method 625, SM 6410B), Including Provision for Analysis in SIM Mode, Revision 5, January 2022
VOCs by EPA 624, 624.1, SW-846 8260B, C, D SM 6200 B, Revision 8, May 2023
Mercury by SW-846 7471A, 7471B, Revision 11, March 2024
Metals EPA 200.7, SW-846 6010B, C, D, Revision 15, April 2024

PFAS by Method 1633, Revision 4, April 2024
Chlorinated Herbicides by Gas Chromatography (Methods 8151A, 615 &1658), Revision 4, January 2022
Mercury by EPA 245.1, SW-846 7470A, Revision 8, March 2024
Mercury by SW-846 7471A, 7471B, Revision 11, March 2024
WAYPOINT
ICP Analysis of Metals By SW-846 Method 6010D (includes 6010B and 6010C), March 2023
Analysis of Water and Wastewater for Mercury Using Cold-Vapor AA by SW-846 Method 7470A, October 2023
Mercury in Solid Waste, Automated Cold-Vapor Technique By SW-846 Method 7471A and 7471B, February 2022
Organochlorine Pesticides by GC According to SW-846 Method 8081B, November 2023
Polychlorinated Biphenyls Using SW-846 Method 8082A, February 2023
Standard Operating Procedure For The Determination of Chlorinated Herbicides by method 8151A, January 2024
Volatile Organic Compounds by GC/MS According to SW-846 Method 8260B
Semi-volatile Organic Compounds by GC/MS SIM According to SW-846 Method 8270E & 8270D Modified for Polynuclear Aromatic Hydrocarbons (PAH), September 2022
Analysis of Volatile Organics in Air By Method TO-15, Revision 2, April 2024
MOODY LABS
Asbestos in Bulk Samples-PLM, Revision MLQ-0107-01, September 2021
EUROFINS
Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Water, Solids and Biosolids (Draft EPA Method 1633), Revision 4, March 2024
Mercury Preparation and Analysis (Methods: EPA 245.1, EPA 7470A, and EPA 7471B), Revision 17, June 2023
Liquid Preparation Procedures for ICP and ICP/MS (Methods: EPA 200.7, 200.8, 3005A, 3010A, SM3030C, and Filtration), Revision 23, September 2023
Soil Preparation Procedures for ICP and ICP/MS (Methods: EPA 3050B and DI Leach by ASTM D3987-85), Revision 16A, February 2024
Elements by ICP (Methods: EPA 200.7, EPA 6010C, EPA 6010D, SM2340B, Revision 22A, February 2024
Organochlorine Pesticides and Polychlorinated Biphenyls (PCBs) by GC/ECD (Methods: EPA 608.3, EPA 8081B, and EPA 8082A, Revision 24B, February 2024
Chlorinated Herbicides by GC/ECD: Preparation and Analysis (Methods: EPA 615, and EPA 8151A), Revision 21, February 2024
Semi-Volatile Compounds by GC/MS, (Methods: EPA 625.1, EPA 8270E, EPA 8270D_LL, EPA 8270E_LL), Revision 12, December 2023
Volatile Compounds by GC/MS (Methods: EPA 624.1, EPA 8260C, EPA 8260D, and SM6200B)
FIELD SAMPLING SOPs (*Include document title, date, revision number, and originator's name)*
Non-Aqueous Sample Handling, May 2020
Field Documentation, May 2020
Investigation Derived Waste Management, May 2020
Location Logging, May 2020
Soil Sampling, May 2020
Investigation Derived Waste, May 2020
NHDES Per- and Polyfluoroalkyl Substances (PFAS) Field Sample Collection Guidance for Waste Sites, September 2022

Section 7. Field Equipment Calibration, Maintenance, Testing, and Inspection

All equipment and instruments (other than analytical instrumentation) that require calibration, maintenance, testing or inspection are provided below. All equipment is maintained by the factory, which is responsible for availability and location of spare parts.

Field Equipment	Calibration Activity	Maintenance Activity	Testing/ Inspection Activity	Frequency	Acceptance Criteria		Corrective Action	SOP Reference
YSI or equivalent	Calibrate with standard solutions	Yearly factory calibration & cleaning; Replace probes as needed	Annual	Prior to day's activities; end of day's activities; anytime anomaly suspected	pH Meter	+/- 0.1 units	Clean probe, replace battery, replace membrane, replace probe	SOP per the manufacturer's manual
					Dissolved Oxygen	± 3%		
					Specific Conductivity	± 1%		
					Temperature	± 0.1 °C		
					Turbidity	± 2 NTU		
MiniRAE Lite or equivalent PID	Calibrate with ambient air and standard reference gas (span gas)	Yearly factory calibration & cleaning by MiniRae certified service shop. Replace particulate filter trap once per month of use, or sooner in dusty environments	Test and calibrate with a known concentration of isobutylene gas. Inspect outer casing of instrument to ensure that probe is correctly attached to the body of the PID and that no foreign objects are present in the probe	Every 30 days; the sensor has been replaced; anytime anomaly suspected	NA		Clean PID lamp, replace battery, calibrate if necessary	SOP per the manufacturer's manual: MiniRae Lite User's Guide, Revision D, Effective October 2011

Section 8. Analytical Laboratory Instrument and Equipment Maintenance, Testing, and Inspection

The following table provides procedures and references for analytical laboratory instrument and equipment maintenance, testing and inspection. All equipment is maintained by the laboratory, which is responsible for availability and location of spare parts.
Analytical laboratory SOPs can be accessed at the following cloud-sharing links:
Eurofins - https://spaces.hightail.com/space/SjHRmHP8HZ
Moody - https://spaces.hightail.com/space/uTucnnX3BH
Pace - https://spaces.hightail.com/space/EAs7Ck2mRb
Waypoint - https://spaces.hightail.com/space/cD6je4mjjP

Instrument/ Equipment	Maintenance Activity	Testing/Inspection Activity	Frequency	Acceptance Criteria	Corrective Action	Responsible Person	Analytical SOP Reference
GC/MS (VOCs + 30 TICS)	As per instrument manufacturer's recommendations	As per instrument manufacturer's recommendations; check connections	As per instrument manufacturer's recommendations	Acceptable recalibration; see Lab SOP in QAPP Addendum	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory GC/MS Technician	1a
GC/MS (SVOCs + 30 TICS)	As per instrument manufacturer's recommendations	As per instrument manufacturer's recommendations; check connections	As per instrument manufacturer's recommendations	Acceptable recalibration; see Lab SOP in QAPP Addendum	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory GC/MS Technician	2a
GC/ECD (PCBs)	As per instrument manufacturer's recommendations	As per instrument manufacturer's recommendations; check connections	As per instrument manufacturer's recommendations	Acceptable recalibration; see Lab SOP in QAPP Addendum	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory GC/ECD Technician	4a
GC/ECD (Pesticides)	As per instrument manufacturer's recommendations	As per instrument manufacturer's recommendations; check connections	As per instrument manufacturer's recommendations	Acceptable recalibration; see Lab SOP in QAPP Addendum	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory GC/ECD Technician	3a
ICP-SS (Metals)	As per instrument manufacturer's recommendations	As per instrument manufacturer's recommendations; check connections	As per instrument manufacturer's recommendations	Acceptable recalibration; see Lab SOP in QAPP Addendum	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory ICP-SS Technician	5a

Instrument/ Equipment	Maintenance Activity	Testing/Inspection Activity	Frequency	Acceptance Criteria	Corrective Action	Responsible Person	Analytical SOP Reference
CV (Mercury)	As per instrument manufacturer's recommendations	As per instrument manufacturer's recommendations; check connections	As per instrument manufacturer's recommendations	Acceptable recalibration; see Lab SOP in QAPP Addendum	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory Mercury Cold Vapor Technician	6a
LC/MS/MS (PFAS)	As per instrument manufacturer's recommendations	As per instrument manufacturer's recommendations; check connections	As per instrument manufacturer's recommendations	Acceptable recalibration; see Lab SOP	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory LC/MS Technician	Analysis of Per and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples by LC-MS/MS Using Method 1633
Air TO-15	As per instrument manufacturer's recommendations	As per instrument manufacturer's recommendations; check connections	As per instrument manufacturer's recommendations	Acceptable recalibration; see Lab SOP in QAPP Addendum	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory TO-15 Technician	TBD

Analytical Laboratory Instrument Calibration

The following table provides information pertaining to initial and continuing calibrations of the analytical instrumentation that will be used in the laboratory analysis.

Instrument/Equipment	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action	Responsible Person	Analytical SOP Reference
GC/MS for VOCs + 30 TICS and SVOCs + 30 TICS	Refer to Method 8260	**GC/MS Initial calibration:** Whenever major instrument maintenance or modification is performed (e.g., column replacement or repair, or if the calibration verification technical acceptance criteria have not been met. C**alibration verification:** TBD	≤20%	GC/MS: inspect the system, correct problem, re-calibrate.	Laboratory GC/MS Technician	1a
GC/ECD for PCBs and Pesticides	Refer to SW846 8270D	**GC/ECD Initial calibration:** Whenever major instrument maintenance or modification is performed (e.g., column	<20%	GC/ECD: inspect the system, correct problem, re-calibrate,	Laboratory GC/ECD Technician	4a

		replacement or repair, cleaning or replacement of ECD, etc.) or if the calibration verification technical acceptance criteria have not been met. **Continuing calibration:** At the beginning and end of each analytical batch.		re-analyze samples.		
ICP/ICP-SS Metals	Refer to EPA Method 6010C	**ICP/ICP-SS Initial calibration:** Daily, prior to the analysis of samples. **Continuing calibration:** TBD	≤10%	ICP/ICP-SS: inspect the system, correct problem, re-calibrate, re-analyze samples.	Laboratory ICP-SS Technician	5a
CV Mercury	Refer to EPA Method 7470A	**CV Initial calibration:** Daily, prior to the analysis of samples. **Continuing calibration:** TBD	≤10%	CV: inspect the system, correct problem, re-calibrate, re-analyze samples.	Laboratory Mercury Cold Vapor Technician	6a
LC/MS/MS for PFAS	Refer to Method 1633	**LC/MS/MS Initial Calibration**: At instrument set up and installation and after the performance of major maintenance, calibrate the mass scale of the MS with calibration compounds and procedures described by the manufacturer. The entire mass range must be calibrated. **Continuing calibration**: Every ten samples and at the end of the analysis sequence.	≤20%	LC/MS/MS: inspect the system, correct problem, recalibrate, re-analyze samples.	Laboratory LC/MS/MS Technician	Analysis of Per and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples by LC-MS/MS Using Method 1633
Air TO-15	Refer to USEPA Method TO-15	**Initial calibration:** Weekly, prior to the analysis of samples. **Continuing calibration:** TBD	<30%	Inspect the system, correct problem, re-calibrate, re-analyze samples.	Laboratory TO-15 Technician	TBD

Section 9a. Sample Handling System

The following table presents the field and laboratory sample handling systems.

SAMPLE COLLECTION, PACKAGING, AND SHIPMENT
Sample Collection (Personnel/Organization): Consultant Personnel
Sample Packaging (Personnel/Organization): Consultant Personnel
Coordination of Shipment (Personnel/Organization): Consultant Personnel
Type of Shipment/Carrier: Consultant or Lab currier Personnel
SAMPLE RECEIPT AND ANALYSIS
Sample Receipt (Personnel/Organization): Waypoint, Pace, Moody, and Eurofins Laboratories Personnel
Sample Custody and Storage (Personnel/Organization Waypoint, Pace, Moody, and Eurofins Laboratories Personnel
Sample Preparation (Personnel/Organization): Waypoint, Pace, Moody, and Eurofins Laboratories Personnel
Sample Determinative Analysis (Personnel/Organization): Waypoint, Pace, Moody, and Eurofins Laboratories Personnel
SAMPLE ARCHIVING
Field Sample Storage (No. of days from sample collection): Samples to be sent to Waypoint, Pace, Analytical, Moody, and Eurofins lab by Consultant Personnel the same day as the sampling. Samples to be stored on ice and continuously kept cool to 4°C±2°C until arrival at the laboratory, up to 1 day.
Sample Extract/Digestate Storage (No. of days from extraction/digestion): As per analytical methodology; See Section 6.
SAMPLE DISPOSAL
Personnel/Organization: Waypoint, Pace, Moody, and Eurofins Laboratories Personnel
Number of Days from Analysis: Until analysis and QA/QC checks are completed; as per analytical methodology; See Section 6.

Section 9b. Sample Custody Requirements

The following presents an overview of the sample custody requirements.

Sample Identification Procedures: Sampling media will be identified by a letter/number code as follows: SB-XX (sample depth). A one or two-digit number, beginning with 1 and increasing sequentially, will identify each boring location. Following the boring number, the end of the depth interval (listed numerically) from which the sample was collected will appear in parentheses.

Each sample will be labeled immediately following collection and recorded in chain-of-custody records.

Field Sample Custody/Tracking Procedures (sample collection, packaging, shipment, and delivery to laboratory: Samples submitted for laboratory analysis will be placed in laboratory provided sampling containers. The sample containers will be packaged in a laboratory provided cooler containing ice so that the samples can be kept cooled to approximately 4^0 C±2°C. Bubble wrap, or other protective material, will be placed in the cooler to protect the integrity of the sampling containers.

Chain-of-Custody Procedures: Samples will be collected by Consultant personnel. A chain-of-custody form will be initiated with the sample collection. All samples will be traced from bottle preparation, sample collection, shipment, laboratory receipt, and laboratory custody. Labels will be affixed to sample containers with a minimum of the following information: sample number, sample location, date/time, and name of sampler. Following sample collection, Consultant personnel will transport the samples directly to the Tennessee State-accredited laboratory where the samples will be transferred to laboratory custody following standard chain-of-custody procedure.

The chain-of-custody form is signed by all individuals responsible for sampling, sample transport and laboratory receipt. A copy of the fully signed chain of custody form is also kept with the project file by the project manager, the laboratory manager, and attached to the data package. The laboratory will be responsible for monitoring an internal chain-of-custody following receipt of the samples. Should it be required that the samples be shipped or delivered by a non-laboratory employed person (courier), the cooler/envelope/box will be sealed with the chain-of-custody form inside through the use of a chain-of-custody seal and tape prior to release by Consultant personnel. The chosen laboratory's chain-of-custody form will be provided in the site-specific QAPP Addendum.

Section 10. Analytical Laboratory Quality Control Summary

The following tables present field and analytical laboratory quality control measures. Analytical laboratory quality control methods will be provided in the site-specific QAPP Addendum as needed.

Matrix	Soil/Aqueous
Analytical Group	Volatiles
Concentration Level	Reported as µg/kg (ppb)/ µg/L (ppb)
Sampling SOP(s)	Appendix D
Analytical Method/SOP Reference	EPA Method 8260B
Sampler's Name	TBD
Field Sampling Organization	Consultant
Analytical Organization	Waypoint, Pace, and Eurofins Laboratories
No. of Sample Locations	TBD

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)	Measurement Performance Criteria
Method Blank	1 per ≤ 20 samples	<RL	reanalyze affected sample, qualify analytical data	Laboratory Analyst and/or QA Officer	Outside Contamination	<RL
Field Blank	1 per ≤ 20 samples	<RL	reanalyze affected sample, qualify analytical data	Laboratory Analyst and/or QA Officer	Contamination/ Cross-Contamination	<RL
Laboratory Preparation Blank	1 per ≤ 20 samples	No constituent > RL	Suspend analysis until source rectified	Laboratory GC/MS Analyst and/or QA Officer	Contamination/ Cross-Contamination	No constituent > RL
Surrogate	Added to all samples prior to extraction.	Dibromofluoromethane (70-130%) 1,2-Dichloroethane-d4 (70-130%) Toluene-d8 (70-130%) Bromofluorobenzene (70-130%)	Check calculations and/or surrogate solutions; check instrument performance, correct any problems and reanalyze the sample to confirm.	Laboratory GC/MS Analyst and/or QA Officer	Accuracy	Recoveries within normal ranges per Method criteria.

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)	Measurement Performance Criteria
Matrix Spike	1 per ≤ 20 samples	Average Recovery 70-130%* (*40-160 for the following compounds: Dichlorodifluoromethane, Chloromethane, Bromomethane, Chloroethane, Trichlorofluoromethane, Acetone, Carbon disulfide, 1,4-Dioxane, 4-Methy-2-Pentanone, 2-Hexanone, 1,2-Dibromo-3-chloropropane, Naphthalene)	Flag Outliers	Laboratory GC/MS Analyst and/or QA Officer	Accuracy/Matrix Interference	Recoveries within normal ranges per Method criteria.
Matrix Spike Duplicate	1 per ≤ 20 samples	≤30% RPD	Flag outliers	Laboratory GC/MS Analyst and/or QA Officer	Precision	≤30% RPD
Field Duplicate	1 per ≤ 20 samples	≤ 20% RPD	Flag outliers	Sampling Technician and/or QA Officer	Precision	≤ 20% RPD

Matrix	Soils/ Aqueous
Analytical Group	Semi-Volatiles
Concentration Level	Reported as mg/kg (ppm)/ µg/L (ppb)
Sampling SOP(s)	Appendix D
Analytical Method/SOP Reference	EPA Method 8270D
Sampler's Name	TBD
Field Sampling Organization	Consultant
Analytical Organization	Waypoint, Pace, and Eurofins Laboratories
No. of Sample Locations	TBD

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)	Measurement Performance Criteria
Method Blank	1 per ≤ 20 samples	<RL	reanalyze affected sample, qualify analytical data	Laboratory Analyst and/or QA Officer	Outside Contamination	<RL

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)	Measurement Performance Criteria
Field Blank	1 per ≤ 20 samples	<RL	reanalyze affected sample, qualify analytical data	Laboratory Analyst and/or QA Officer	Contamination/ Cross-Contamination	<RL
Laboratory Preparation Blank	1 per ≤ 20 samples	No constituent > RL	Suspend analysis until source rectified; re-extract and reanalyze affected samples or qualify analytical data "B" flag	Laboratory GC/MS extraction Technician/Analyst and/or QA Officer	Contamination/Cross-Contamination	No constituent > RL
Surrogate	Added to all samples prior to extraction.	2-Fluorophenol (30-130%) Phenol-d5 (30-130%) Nitrobenzene-d5 (30-130%) 2-Fluorobiphenyl (30-130%) 2,4,6-Tribromophenol (30-130%) Terphenyl-d14 (30-130%)	Check calculations and/or surrogate solutions; check instrument performance, correct any problems and reanalyze the sample to confirm.	Laboratory GC/MS Analyst and/or QA Officer	Accuracy	Recoveries within normal ranges per Method criteria.
Matrix Spike	1 per ≤ 20 samples	Average Recovery 70-130%* (*20-160% for the following compounds:Pyridine, N-Nitrosodimethylamine, Benzylaldehyde, Aniline,Pentachloroethane, Phenol, N-Decane,Benzyl alcohol, Hexachloroethane, 3&4Methylphenol, Benzoic Acid, Caprolactam, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, 4- Nitropheno, Pentachlorophenol, Benzidine)	Flag Outliers	Laboratory GC/MS extraction Technician/Analyst and/or QA Officer	Accuracy/Matrix Interference	Recoveries within normal ranges per Method criteria.
Matrix Spike Duplicate	1 per ≤ 20 samples	≤ 30% RPD	Flag outliers	Laboratory GC/MS extraction Technician/Analyst and/or QA Officer	Precision	≤30% RPD
Field Duplicate	1 per ≤ 20 samples	≤ 20% RPD	Flag outliers	Sampling Technician and/or QA Officer	Precision	≤ 20% RPD

Matrix	Soils/ Aqueous
Analytical Group	PCBs
Concentration Level	Reported as mg/kg (ppm)/ µg/L (ppb)
Sampling SOP(s)	Appendix D
Analytical Method/SOP Reference	SW-846 8082A
Sampler's Name	TBD
Field Sampling Organization	Consultant
Analytical Organization	Waypoint, Pace, and Eurofins Laboratories
No. of Sample Locations	TBD

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)	Measurement Performance Criteria
Method Blank	1 per ≤ 20 samples	<RL	reanalyze affected sample, qualify analytical data	Laboratory Analyst and/or QA Officer	Outside Contamination	<RL
Field Blank	1 per ≤ 20 samples	<RL	reanalyze affected sample, qualify analytical data	Laboratory Analyst and/or QA Officer	Contamination/ Cross-Contamination	<RL
Laboratory Preparation Blank	1 per ≤ 20 samples	No constituent > RL	Suspend analysis until source rectified; re- extract and reanalyze affected sample, or qualify analytical data "B" flag	Laboratory GC-ECD extraction Technician and/or QA Officer	Contamination/ Cross-Contamination	No constituent > RL
Surrogate	Added to all samples prior to extraction.	DCB (30% - 150%) TCMX (30% - 150%)	Check calculations and/or surrogate solutions; check instrument performance , correct any problems and re-analyze the extract.	Laboratory GC-ECD extraction Technician and/or QA Officer	Accuracy	DCB (30% - 150%) TCMX (30% - 150%)
Matrix Spike	1 per ≤ 20 samples	% RPD Aroclor 1016 ≤ 30% Aroclor 1260 ≤ 30%	Flag outliers	Laboratory GC/MS extraction Technician/A nalyst and/or QA Officer	Precision	% RPD Aroclor 1016 ≤30 % Aroclor 1260 ≤30%

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)	Measurement Performance Criteria
Matrix Spike Duplicate	1 per ≤ 20 samples	% RPD Aroclor 1016 ≤ 30% Aroclor 1260 ≤ 30%	Flag outliers	Laboratory GC-ECD extraction Technician and/or QA Officer	Precision	% RPD Aroclor 1016 ≤30 % Aroclor 1260 ≤30%
Field Duplicate	1 per ≤ 20 samples	≤ 20% RPD	Flag outliers	Sampling Technician and/or QA Officer	Precision	≤ 20% RPD

Matrix	Soils/ Aqueous
Analytical Group	Pesticides
Concentration Level	Reported as mg/kg (ppm)/ µg/L (ppb)
Sampling SOP(s)	Appendix D
Analytical Method/SOP Reference	SW-846 8081B
Sampler's Name	TBD
Field Sampling Organization	Consultant
Analytical Organization	Waypoint, Pace, and Eurofins Laboratories
No. of Sample Locations	TBD

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)	Measurement Performance Criteria
Method Blank	1 per ≤ 20 samples	<RL	reanalyze affected sample, qualify analytical data	Laboratory Analyst and/or QA Officer	Outside Contamination	<RL
Field Blank	1 per ≤ 20 samples	<RL	reanalyze affected sample, qualify analytical data	Laboratory Analyst and/or QA Officer	Contamination/ Cross-Contamination	<RL
Laboratory Preparation Blank	1 per ≤ 20 samples	No constituent > RL	Suspend analysis until source rectified; re-extract and reanalyze affected samples or qualify analytical data "B" flag	Laboratory GC extraction Technician/ Analyst and/or QA Officer	Contamination/ Cross-Contamination	No constituent > RL

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)	Measurement Performance Criteria
Surrogate	Added to all samples prior to extraction.	TCMX (30-150%) DCB (30-150%)	Check calculations and/or surrogate solutions; check instrument performance, correct any problems and re-analyze the extract.	Laboratory GC extraction Technician/ Analyst and/or QA Officer	Accuracy	TCMX (30-150%) DCB (30-150%)
Matrix Spike	1 per ≤ 20 samples	Average Recovery 30-150%	Flag Outliers	Laboratory GC extraction Technician/ Analyst and/or QA Officer	Accuracy/Matrix Interference	Average Recovery 30-150%
Matrix Spike Duplicate	1 per ≤ 20 samples	RPD ≤30%	Flag outliers	Laboratory GC extraction Technician/ Analyst and/or QA Officer	Precision	≤30% RPD
Field Duplicate	1 per ≤ 20 samples	≤ 20% RPD	Flag outliers	Sampling Technician and/or QA Officer	Precision	≤20% RPD

Matrix	Soils/ Aqueous
Analytical Group	Metals
Concentration Level	Reported as mg/kg (ppm)/ µg/L (ppb)
Sampling SOP(s)	Appendix D
Analytical Method/SOP Reference	SW-846 6010C, 6020A, 7471B
Sampler's Name	TBD
Field Sampling Organization	Consultant
Analytical Organization	Waypoint, Pace, and Eurofins Laboratories
No. of Sample Locations	TBD

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)	Measurement Performance Criteria
Method Blank	1 per ≤ 20 samples	<RL	reanalyze affected sample, qualify analytical data	Laboratory Analyst and/or QA Officer	Outside Contamination	<RL
Field Blank	1 per ≤ 20 samples	<RL	reanalyze affected sample, qualify analytical data	Laboratory Analyst and/or QA Officer	Contamination/ Cross-Contamination	<RL
Laboratory Preparation Blank	1 per ≤ 20 samples	No constituent > RL	Suspend analysis until source rectified; re-extract and reanalyze affected samples	Laboratory Metals Technician/ Analyst and/or QA Officer	Contamination/ Cross-Contamination	No constituent > RL
Matrix Spike	1 per ≤ 20 samples	100 ±25% Recovery	Flag Outliers	Laboratory Metals Technician/ Analyst and/or QA Officer	Accuracy/Matrix Interference	100 ±25% Recovery
Matrix Spike Duplicate	1 per ≤ 20 samples	≤ 20% RPD	Flag outliers	Laboratory Metals Technician/ Analyst and/or QA Officer	Precision	≤ 20% RPD
Field Duplicate	1 per ≤ 20 samples	≤ 20% RPD	Flag outliers	Sampling Technician and/or QA Officer	Precision	≤20% RPD
Laboratory Preparation Blank	1 per ≤ 20 samples	No constituent > RL	Suspend analysis until source rectified; re-extract and reanalyze affected samples	Laboratory Metals Technician/ Analyst and/or QA Officer	Contamination/ Cross-Contamination	No constituent > RL

Matrix	Aqueous
Analytical Group	PFOS/ PFAS
Concentration Level	Trace
Sampling SOP(s)	Sampling Guidance for Per- And Polyfluoroalkyl Substances (PFAS) September 2022
Analytical Method/SOP Reference	Analysis of Per and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples by LC-MS/MS Using Draft Method 1633
Sampler's Name	TBD
Field Sampling Organization	Consultant

Analytical Organization	Eurofins or Pace
No. of Sample Locations	TBD

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)	Measurement Performance Criteria
Field Blank	1 per ≤ 20 samples	<RL	reanalyze affected sample, qualify analytical data	Sampling Technician and/or QA Officer	Outside Contamination	<RL
Matrix Spike	1 per ≤ 20 samples	Average Recovery 70-130%* (*40-160 for the following compounds: Dichlorodifluoromethane, Chloromethane, Bromomethane, Chloroethane, Trichlorofluoromethane, Acetone, Carbon disulfide, 1,4-Dioxane, 4-Methy-2-Pentanone, 2-Hexanone, 1,2-Dibromo-3-chloropropane, Naphthalene)	Flag Outliers	Laboratory GC/MS Analyst and/or QA Officer	Accuracy/Matrix Interference	Average Recovery 50-130%* (*Exceptions vinyl chloride and 2- Butanone20-130%)
Matrix Spike Duplicate	1 per ≤ 20 samples	≤ 30% RPD	Flag outliers	Laboratory GC/MS Analyst and/or QA Officer	Precision	≤ 30% RPD
Field Duplicate	1 per ≤ 20 samples	≤ 20% RPD	Flag outliers	Sampling Technician and/or QA Officer	Precision	≤ 20% RPD

Section 11a. Data Management and Documentation

The following table presents project related data management and documentation criteria.

Field Sample Collection Documents and Records	Analytical Laboratory Documents and Records	Data Assessment Documents and Records	Project File
• Site and field logbooks • Applicable figures and tables for sampling location identification • Geoprobe Logs • Organic Vapor Headspace Analysis Logs • Monitoring Well Construction Logs • Chain-of-Custody (COC) forms	• Sample receipt logs • Internal and external COC forms • Equipment calibration logs • Sample preparation worksheets/logs • Sample analysis worksheets/run logs • Telephone/email logs • Corrective action documentation • Narrative • Sample Data • Calibration data (initial and continuing verification) • QC forms (surrogate, spike recovery, blank summary and drift forms).	• Data validation reports • Field inspection checklist(s) • Laboratory Audit checklist (if performed) • Review forms for electronic entry of data into database • Corrective action documentation • Data Usability Summary Report	• Project files to be stored in Consultant's electronic project directory for a period of at least five years. Files will also be stored at CRA offices.

Section 11b. Project Reports

The types of reports that will be routinely provided during the Brownfields project (e.g., status reports, final reports, etc.) are provided below.

Type of Report *	Frequency (Daily, weekly, monthly, quarterly, annually, etc.)	Projected Delivery Date(s)	Person(s) Responsible for Report Preparation (Title and Organizational Affiliation)	Report Recipient(s) (Title and Organizational Affiliation)
Status Report	Monthly	By the 10th day of the month	Consultant	EPA Region 4 BPO and CRA
Laboratory Analytical Data Package	One Time	Within 10 days of laboratory receipt of field samples	Waypoint, Pace, Moody, and Eurofins Laboratories	TBD
Data Usability Summary Report (If Required)	One Time	Within 10 days of receipt of laboratory analytical data package	Consultant	TBD
Phase II ESA Report	One Time	Within 30 days of receipt of Data Usability Summary Report (if required)	Consultant	EPA Region 4 BPO, CRA, and TDEC BPC

* Any other report related to the site investigation will be delivered within 30 days of the delivery date and will be sent to CRA, the Consultant, and the EPA Project Officer.

Section 12a. Planned Project Assessments Table

The following table identifies the type, frequency and responsible parties of planned assessment activities for the project.

Assessment Type	Frequency	Internal or External	Organization Performing Assessment	Person(s) Responsible for Performing Assessment (Title and Organizational Affiliation)	Person(s) Responsible for Responding to Assessment Findings (Title and Organizational Affiliation)	Person(s) Responsible for Identifying and Implementing Corrective Actions (Title and Organizational Affiliation)	Person(s) Responsible for Monitoring Effectiveness of Corrective Actions (Title and Organizational Affiliation)
On-Site Field Inspection	Periodically - at least once per quarter	Internal	Consultant	Project Manager, Consultant	Project Manager, Consultant	Senior Project Scientist, Consultant	Project Manager, Consultant
Inspection of Field Logs	Periodically	Internal	Consultant	Project Manager, Consultant	Project Manager, Consultant	Senior Project Scientist, Consultant	Project Manager, Consultant
Review of Laboratory Data Package	Upon receipt of data package	Internal and External	Consultant	Project Manager, Consultant	Project Manager, Consultant	Senior Project Scientist, Consultant	Project Manager, Consultant
Review of Data Usability Summary Report	Upon receipt of Data Usability Summary Report	Internal	Consultant	Project Manager, Consultant	Project Manager, Consultant	Senior Project Scientist, Consultant	Project Manager, Consultant
Review of Phase II ESA Report	Upon Completion	Internal	Consultant	Project Manager, Consultant	Project Manager, Consultant	Senior Project Scientist, Consultant	Project Manager, Consultant

Section 12b. Assessment Findings and Corrective Action Responses

The following table lists anticipated corrective actions that will be undertaken for planned project assessments identified in the table in Section 12a. This table is to be updated by the Consultant and sent to the EPA PO and CRA prior to implementation of the Phase II and/or other site investigatory work.

Assessment Type	Nature of Deficiencies Documentation	Individual(s) Notified of Findings (Name, Title, Organization)	Timeframe of Notification	Nature of Corrective Action Response Documentation	Individual(s) Receiving Corrective Action Response (Name, Title, Org.)	Timeframe for Response
Field Observations/ Deviations from Work Plan/Log Books	Field supervisor field log	Project Manager, Consultant	Within one business day	Field supervisor field log	Project Manager, Consultant	Within one business day
Laboratory Data Package	Data Usability Summary Report	Project Manager, Consultant	Within 30 days from receipt of Laboratory Data Package	Email/Telephone	Project Manager, CRA	Within one business day
Data Usability Summary Report	Written Report	Project Manager, Consultant	Within one business day	Internal Email	Project Manager, CRA	Within one business day
Phase II ESA Report	Electronic and/or handwritten	Project Manager, Consultant	Upon completion of report review	Internal Report QA/QC signoff sheet	Project Manager, Consultant	Upon completion of internal QA/QC

Section 13a. Project Data Verification Process (Step I)

The following table describes the processes that will be followed to verify document project data completeness.

Verification Input	Description	Internal/ External	Responsible for Verification (Name, Organization)
Site/Field Logbooks	Field notes will be prepared daily by the Environmental Consultant Project Manager and will be complete, appropriate, legible and pertinent. Upon completion of field work, logbooks will be placed in the project files.	I	Project Manager, Consultant
Chains of custody	COC forms will be reviewed against the samples packed in the specific cooler prior to shipment. The reviewer will initial the form. An original COC will be sent with the samples to the laboratory, while copies are retained for (1) the Sampling Trip Report and (2) the project files.	I	Project Manager, Consultant
Laboratory analytical data package	Data packages will be reviewed/verified internally by the laboratory performing the work for completeness and technical accuracy prior to submittal.	I	Waypoint, Pace, Moody, and Eurofins Laboratories
Laboratory analytical data package	Data packages will be reviewed as to content and sample information upon receipt by the Environmental Consultant Project Manager and the Third Party Data Validation Personnel.	I/E	Project Manager, Consultant
Final Sample Report	The project data results will be compiled in a sample report for the project. Entries will be reviewed/verified against hardcopy information.	I	Project Manager, Consultant

Section 13b. Project Data Validation Process (Steps IIa and IIb)

The following table describes the processes that will be followed to validate project data and includes how the data will be checked, when data validation will occur and necessary documentation, and the organization responsible for data validation.

Step IIa/IIb[1]	Validation Input	Description	Responsible for Validation (Name, Organization)
IIa	SOPs	Ensure that the sampling methods/procedures outlined in QAPP were followed, and that any deviations were noted/approved.	Consultant Project Manager
IIb	SOPs	Determine potential impacts from noted/approved deviations, in regard to PQOs.	Consultant Project Manager
IIa	Chains of custody	Examine COC forms against QAPP and laboratory contract requirements (e.g., analytical methods, sample identification, etc.).	Consultant Project Manager
IIa	Laboratory data package	Examine packages against QAPP and laboratory contract requirements, and against COC forms (e.g., holding times, sample handling, analytical methods, sample identification, data qualifiers, QC samples, etc.).	Consultant Project Manager
IIb	Laboratory data package	Determine potential impacts from noted/approved deviations, in regard to PQOs. Examples include PQLs and QC sample limits (precision/accuracy).	Consultant Project Manager
IIb	Field duplicates	Compare results of field duplicate (or replicate) analyses with RPD criteria	Consultant Project Manager

1Step IIa – Compliance with Methods, Procedures, and Contracts as identified on Table 1 in Section 13d.
1Step IIb – Comparison with Performance Criteria in QAPP as identified on Table 1 in Section 13d.

Section 13c. Project Matrix and Analytical Validation (Steps IIa and IIb)[1] Summary

The following table identifies the matrix, analytical group, and concentration level that the validator will be responsible for, as well as criteria that will be used to validate those data.

Step IIa/IIb[1]	Matrix	Analytical Group	Concentration Level	Validation Criteria	Data Validator (title and organizational affiliation)
IIa / IIb	Soil	VOCs + 30 TICS	Low/Medium	USEPA User's Guide to the Contract Laboratory Program, (EPA 540-R-08-01, November 2020) Organic and Inorganic Validation Functional Guidelines	Data Validator, TBD
IIa / IIb	Soil	SVOCs + 30 TICS	Low/Medium	USEPA User's Guide to the Contract Laboratory Program, (EPA 540-R-08-01, November 2020) Organic and Inorganic Validation Functional Guidelines	Data Validator, TBD
IIa / IIb	Soil	PCBs	Low/Medium	USEPA User's Guide to the Contract Laboratory Program, (EPA 540-R-08-01, November 2020) Organic and Inorganic Validation Functional Guidelines	Data Validator, TBD
IIa / IIb	Soil	Pesticides	Low/Medium	USEPA User's Guide to the Contract Laboratory Program(EPA 540-R-08-01, November 2020) Organic and Inorganic Validation Functional Guidelines	Data Validator, TBD
IIa / IIb	Soil	Metals	Low/Medium	USEPA User's Guide to the Contract Laboratory Program, (EPA 540-R-08-01, November 2020) Organic and Inorganic Validation Functional Guidelines	Data Validator, TBD
IIa / IIb	Aqueous	VOCs + 30 TICS	Low/Medium	USEPA User's Guide to the Contract Laboratory Program(EPA 540-R-08-01, November 2020) Organic and Inorganic Validation Functional Guidelines	Data Validator, TBD

1Step IIa – Compliance with Methods, Procedures, and Contracts as identified on Table 1 in Section 13d.
1Step IIb – Comparison with Performance Criteria in QAPP as identified on Table 1 in Section 13d.

Section 13d. Usability Assessment (Step III)

A data evaluator will be named in the QAPP Addendum that will review the data package provided by the laboratory to determine if the quality control data is within the performance criteria (precision, accuracy, etc). Generally, validation of the data package will include: data completeness; holding times and sample preservation; surrogate spike recoveries, MS/MSD recoveries; LCS recoveries; method blank and field blank contamination; gas chromatography tuning; initial and continuing calibration summaries; compound quantitation; internal standard area and retention time summary forms; and field duplicate sample precision. Results of data validation will be presented in a Data Usability Summary Report (DUSR), which will describe the rationale for the data and the presentation of any data limitations and/or rejections.

Summarize the usability assessment process and all procedures, including interim steps and any statistics, equations, and computer algorithms that will be used:

Identify analytes detected. Review causes of possible low-biased results, including low recoveries, improper preservation, improper handling, or holding time exceedance. Review causes of possible high-biased results, including high recoveries or blank contamination. Assess uncertainty measures, including variability in duplicate results, LCS/LCSD and MS/MSD.

Describe the evaluative procedures used to assess overall measurement error associated with the project:
Determine if the quality control data is within the performance criteria (precision, accuracy, etc) through validation process IIb (Validation Activities). The performance measures used for project data validation are included on the Data Validation General Flagging Conventions provided by Envirodata, or other database software package used, and provided after Table 1 and the Data Usability Evaluation worksheet below. This file provides performance measure calculations and how these criteria will be determined and reported.

Identify the personnel responsible for performing the usability assessment:
TBD

Describe the documentation that will be generated during usability assessment and how usability assessment results will be presented so that they identify trends, relationships (correlations), and anomalies:
A Data Usability Evaluation worksheet will be completed in a format determined by the environmental database used by the Consultant. An example will be provided in the QAPP Addendum.

Table 1

Data Elements for Data Review Process				
Item	Step I - Data Verification	Step IIa - Data Validation Compliance	Step IIb - Data Validation Comparison	Step III - Data Usability
Planning Documents				
Evidence of approval of QAPP	X			Use outputs from previous steps
Identification of personnel	X			
Laboratory name	X			
Methods (sampling & analytical)	X	X	X	
Performance requirements (including QC criteria)	X	X		
Project quality objectives	X		X	
Reporting forms	X	X		
Sampling plans – locations, maps grids, sample ID numbers	X	X		
Site identification	X			
SOPs (sampling & analytical)	X	X		
Staff training & certification	X			
List of project-specific analytes	X	X		
Analytical Data Package				
Case narrative	X	X	X	Use outputs from previous steps
Internal lab chain of custody	X	X		
Sample condition upon receipt, & storage records	X	X		
Sample chronology (time of receipt, extraction/digestion, analysis)	X	X		
Identification of QC samples (sampling /lab)	X	X		
Associated PE sample results	X	X	X	
Communication Logs	X	X		
Copies of lab notebook, records, prep sheets	X	X		
Corrective action reports	X	X		
Definition of laboratory qualifiers	X	X	X	
Documentation of corrective action results	X	X	X	
Documentation of individual QC results (e.g., spike, duplicate, LCS)	X	X	X	
Documentation of laboratory method deviations	X	X	X	
Electronic data deliverables	X	X		
Instrument calibration reports	X	X	X	
Laboratory name	X	X		
Laboratory sample identification no.	X	X		
QC sample raw data	X	X	X	
QC summary report	X	X	X	

Data Elements for Data Review Process				
Raw data	X	X	X	Use outputs from previous steps
Reporting forms, completed with actual results	X	X	X	
Signatures for laboratory sign-off (e.g., laboratory QA manager)	X	X		
Standards traceability records (to trace standard source form NIST, for example)	X	X	X	
Sampling Documents				
Chain of custody	X	X		Use outputs from previous steps
Communication logs	X	X		
Corrective action reports	X	X	X	
Documentation of corrective action results	X	X	X	
Documentation of deviation from methods	X	X	X	
Documentation of internal QA review	X	X	X	
Electronic data deliverables	X	X		
Identification of QC samples	X	X	X	
Meteorological data from field (e.g., wind, temperature)	X	X	X	
Sampling instrument decontamination records	X	X		
Sampling instrument calibration logs	X	X		
Sampling location and plan	X	X	X	
Sampling notes & drilling logs	X	X	X	
Sampling report (from field team leader to project manager describing sampling activities)	X	X	X	
External Reports				
External audit report	X	X	X	Use outputs from previous steps
External PT sample results	X	X		
Laboratory assessment	X	X		
Laboratory QA plan	X	X		
MDL study information	X	X	X	
NELAP accreditation	X	X		

Appendix A
Resumes -HOLD

Appendix B
Laboratory Certifications

Texas Department of State Health Services

MOODY LABS LLC DBA
MOODY LABS

is certified to perform as an

Asbestos Laboratory

PCM, PLM, TEM

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1954 and Title 12, Texas Administrative Code, Chapter 295 relating to Texas Asbestos Health Protection, as long as this license is not suspended or revoked.

License Number: 300084

Expiration Date: 05/31/2026

Jennifer Shuford, MD, MPH,
Commissioner of Health

Control Number: 96808

(Void After Expiration Date)

VOID IF ALTERED NON-TRANSFERABLE

SEE BACK

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 102056-0

Moody Labs, LLC

Farmers Branch, TX

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2023-07-01 through 2024-06-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Moody Labs, LLC
2051 Valley View Lane
Farmers Branch, TX 75234-8956
Mr. Bruce Crabb
Phone: 972-241-8460 Fax: 972-241-8461
Email: bruce.crabb@moodylabs.com
http://www.moodylabs.com

ASBESTOS FIBER ANALYSIS — NVLAP LAB CODE 102056-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	*Description*
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Is hereby granting a Louisiana Environmental Laboratory Accreditation to

Waypoint Analytical LLC
2790 Whitten Rd
Memphis, Tennessee 38133

Agency Interest No. 86553
Activity No. ACC20240001

According to the Louisiana Administrative Code, Title 33, Part I, Subpart 3, LABORATORY ACCREDITATION, the State of Louisiana formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed in the attachment.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part I, Subpart 3 requirements and agrees to adapt to any changes in the requirements. It also acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part I and the 2009 TNI Standard by which the laboratory was assessed. Please contact the Department of Environmental Quality, Louisiana Environmental Laboratory Accreditation Program (LELAP) to verify the laboratory's scope of accreditation and accreditation status.

Accreditation by the State of Louisiana is not an endorsement or a guarantee of validity of the data generated by the laboratory. Accreditation of the environmental laboratory does not imply that a product, process, system, or person is approved by LELAP. To be accredited initially and maintain accreditation, the laboratory agrees to participate in two single-blind, single-concentration PT studies, where available, per year for each field of testing for which it seeks accreditation or maintains accreditation as required in LAC 33:I.4711.

Aurelia S. Giacometto
Secretary
Louisiana Department of Environmental Quality

Issued Date: 2/14/24

Effective on Issue Date
Expiration Date: June 30, 2024
Certificate Number: 04015

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Effective Date: February 16, 2024

Waypoint Analytical LLC
AI Number: 86553
Activity No. ACC20240001
Expiration Date: June 30, 2024

2790 Whitten Rd, Memphis, Tennessee 38133

Certificate Number: 04015

Air Emissions

Analyte	Method Name	Method Code	Type	AB
NONE	NONE	NONE	NONE	NONE

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
2050 - Total Petroleum Hydrocarbons (TPH)	Texas 1006	867	NELAP	LA
6117 - Flash Point	ASTM D93	2204	NELAP	LA
1827 - Total Nitrogen	TKN + Total nitrate-nitrite	2880	NELAP	LA
1865 - Organic nitrogen	TKN minus AMMONIA	2881	NELAP	LA
100667 - Chromium(III)	EPA 200.7 minus SM 3500 Cr B (calc.)	3824	NELAP	LA
100667 - Chromium(III)	EPA 6010B minus SM 3500 Cr B (calc.)	3825	NELAP	LA
100667 - Chromium(III)	EPA 200.8 minus SM 3500 Cr B-2011	9404	NELAP	LA
100667 - Chromium(III)	EPA 6010C minus SM 3500 Cr B-2011	9410	NELAP	LA
100667 - Chromium(III)	EPA 6010D minus SM 3500 Cr B-2011	9412	NELAP	LA
100667 - Chromium(III)	EPA 6020B minus SM 3500 Cr B-2011	9414	NELAP	LA
1923 - Reactive Cyanide	EPA 7.3.3.2	10001204	NELAP	LA
1925 - Reactive sulfide	EPA 7.3.4.2	10001408	NELAP	LA
1970 - Residue-volatile	EPA 160.4	10010409	NELAP	LA
1000 - Aluminum	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1005 - Antimony	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1010 - Arsenic	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1015 - Barium	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1020 - Beryllium	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1025 - Boron	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1030 - Cadmium	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1035 - Calcium	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1040 - Chromium	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1050 - Cobalt	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1055 - Copper	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1750 - Hardness	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1070 - Iron	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1075 - Lead	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1085 - Magnesium	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1090 - Manganese	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1100 - Molybdenum	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1105 - Nickel	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1125 - Potassium	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1140 - Selenium	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1990 - Silica as SiO2	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1995 - Silica-dissolved	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1150 - Silver	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1155 - Sodium	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1160 - Strontium	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1165 - Thallium	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1175 - Tin	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1180 - Titanium	EPA 200.7, Rev.4.4	10013806	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
1910 - Total Phosphorus	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1755 - Total hardness as CaCO3	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1185 - Vanadium	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1190 - Zinc	EPA 200.7, Rev.4.4	10013806	NELAP	LA
1000 - Aluminum	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1005 - Antimony	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1010 - Arsenic	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1015 - Barium	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1020 - Beryllium	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1025 - Boron	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1030 - Cadmium	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1035 - Calcium	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1040 - Chromium	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1050 - Cobalt	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1055 - Copper	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1760 - Hardness (calc.)	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1070 - Iron	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1075 - Lead	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1085 - Magnesium	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1090 - Manganese	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1100 - Molybdenum	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1105 - Nickel	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1125 - Potassium	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1140 - Selenium	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1150 - Silver	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1155 - Sodium	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1160 - Strontium	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1165 - Thallium	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1175 - Tin	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1180 - Titanium	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1910 - Total Phosphorus	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1185 - Vanadium	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1190 - Zinc	EPA 200.8, Rev.5.4	10014605	NELAP	LA
1095 - Mercury	EPA 245.1	10036609	NELAP	LA
1540 - Bromide	EPA 300.0	10053006	NELAP	LA
1575 - Chloride	EPA 300.0	10053006	NELAP	LA
1730 - Fluoride	EPA 300.0	10053006	NELAP	LA
1810 - Nitrate as N	EPA 300.0	10053006	NELAP	LA
1820 - Nitrate-Nitrite	EPA 300.0	10053006	NELAP	LA
1835 - Nitrite	EPA 300.0	10053006	NELAP	LA
2000 - Sulfate	EPA 300.0	10053006	NELAP	LA
1910 - Total Phosphorus	EPA 365.4	10071202	NELAP	LA
1905 - Total Phenolics	EPA 420.1	10079206	NELAP	LA
4570 - 1,2-Dibromo-3-chloropropane (DBCP)	EPA 504.1, Rev.1.1	10082801	NELAP	LA
4585 - 1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 504.1, Rev.1.1	10082801	NELAP	LA
6275 - Hexachlorobenzene	EPA 612	10104800	NELAP	LA
8655 - 2,4,5-T	EPA 615	10105609	NELAP	LA
8545 - 2,4-D	EPA 615	10105609	NELAP	LA
8560 - 2,4-DB	EPA 615	10105609	NELAP	LA
8555 - Dalapon	EPA 615	10105609	NELAP	LA
8595 - Dicamba	EPA 615	10105609	NELAP	LA
8605 - Dichloroprop (Dichlorprop)	EPA 615	10105609	NELAP	LA
8620 - Dinoseb (2-sec-butyl-4,6-	EPA 615	10105609	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
dinitrophenol, DNBP)				
7775 - MCPA	EPA 615	10105609	NELAP	LA
7780 - MCPP	EPA 615	10105609	NELAP	LA
8645 - Picloram	EPA 615	10105609	NELAP	LA
8650 - Silvex (2,4,5-TP)	EPA 615	10105609	NELAP	LA
1860 - Oil & Grease	EPA 1664A (HEM)	10127807	NELAP	LA
2050 - Total Petroleum Hydrocarbons (TPH)	EPA 1664A (HEM)	10127807	NELAP	LA
4815 - Formaldehyde	EPA 1667A	10128800	NELAP	LA
1401 - Acid Digestion of waters for Total Recoverable or Dissolved Metals	EPA 3005A	10133207	NELAP	LA
1400 - Acid Digestion of Sediments, Sludges, and soils	EPA 3050B	10135601	NELAP	LA
1444 - Separatory Funnel Liquid-liquid extraction	EPA 3510C	10138202	NELAP	LA
1428 - Microwave Extraction	EPA 3546	10141205	NELAP	LA
1468 - Ultrasonic Extraction	EPA 3550C	10142004	NELAP	LA
1470 - Waste Dilution	EPA 3580A	10143007	NELAP	LA
1406 - Purge and trap for aqueous phase samples	EPA 5030A	10153205	NELAP	LA
1406 - Purge and trap for aqueous phase samples	EPA 5030B	10153409	NELAP	LA
1450 - Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples	EPA 5035	10154004	NELAP	LA
1000 - Aluminum	EPA 6010B	10155609	NELAP	LA
1005 - Antimony	EPA 6010B	10155609	NELAP	LA
1010 - Arsenic	EPA 6010B	10155609	NELAP	LA
1015 - Barium	EPA 6010B	10155609	NELAP	LA
1020 - Beryllium	EPA 6010B	10155609	NELAP	LA
1025 - Boron	EPA 6010B	10155609	NELAP	LA
1030 - Cadmium	EPA 6010B	10155609	NELAP	LA
1035 - Calcium	EPA 6010B	10155609	NELAP	LA
1040 - Chromium	EPA 6010B	10155609	NELAP	LA
1050 - Cobalt	EPA 6010B	10155609	NELAP	LA
1055 - Copper	EPA 6010B	10155609	NELAP	LA
1070 - Iron	EPA 6010B	10155609	NELAP	LA
1075 - Lead	EPA 6010B	10155609	NELAP	LA
1085 - Magnesium	EPA 6010B	10155609	NELAP	LA
1090 - Manganese	EPA 6010B	10155609	NELAP	LA
1100 - Molybdenum	EPA 6010B	10155609	NELAP	LA
1105 - Nickel	EPA 6010B	10155609	NELAP	LA
1125 - Potassium	EPA 6010B	10155609	NELAP	LA
1140 - Selenium	EPA 6010B	10155609	NELAP	LA
1990 - Silica as SiO2	EPA 6010B	10155609	NELAP	LA
1150 - Silver	EPA 6010B	10155609	NELAP	LA
1155 - Sodium	EPA 6010B	10155609	NELAP	LA
1160 - Strontium	EPA 6010B	10155609	NELAP	LA
1165 - Thallium	EPA 6010B	10155609	NELAP	LA
1175 - Tin	EPA 6010B	10155609	NELAP	LA
1180 - Titanium	EPA 6010B	10155609	NELAP	LA
1910 - Total Phosphorus	EPA 6010B	10155609	NELAP	LA
1185 - Vanadium	EPA 6010B	10155609	NELAP	LA
1190 - Zinc	EPA 6010B	10155609	NELAP	LA
1000 - Aluminum	EPA 6010C	10155803	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
1005 - Antimony	EPA 6010C	10155803	NELAP	LA
1010 - Arsenic	EPA 6010C	10155803	NELAP	LA
1015 - Barium	EPA 6010C	10155803	NELAP	LA
1020 - Beryllium	EPA 6010C	10155803	NELAP	LA
1025 - Boron	EPA 6010C	10155803	NELAP	LA
1030 - Cadmium	EPA 6010C	10155803	NELAP	LA
1035 - Calcium	EPA 6010C	10155803	NELAP	LA
1040 - Chromium	EPA 6010C	10155803	NELAP	LA
1050 - Cobalt	EPA 6010C	10155803	NELAP	LA
1055 - Copper	EPA 6010C	10155803	NELAP	LA
1070 - Iron	EPA 6010C	10155803	NELAP	LA
1075 - Lead	EPA 6010C	10155803	NELAP	LA
1085 - Magnesium	EPA 6010C	10155803	NELAP	LA
1090 - Manganese	EPA 6010C	10155803	NELAP	LA
1100 - Molybdenum	EPA 6010C	10155803	NELAP	LA
1105 - Nickel	EPA 6010C	10155803	NELAP	LA
1125 - Potassium	EPA 6010C	10155803	NELAP	LA
1140 - Selenium	EPA 6010C	10155803	NELAP	LA
1990 - Silica as SiO2	EPA 6010C	10155803	NELAP	LA
1150 - Silver	EPA 6010C	10155803	NELAP	LA
1155 - Sodium	EPA 6010C	10155803	NELAP	LA
1160 - Strontium	EPA 6010C	10155803	NELAP	LA
1165 - Thallium	EPA 6010C	10155803	NELAP	LA
1175 - Tin	EPA 6010C	10155803	NELAP	LA
1180 - Titanium	EPA 6010C	10155803	NELAP	LA
1910 - Total Phosphorus	EPA 6010C	10155803	NELAP	LA
1185 - Vanadium	EPA 6010C	10155803	NELAP	LA
1190 - Zinc	EPA 6010C	10155803	NELAP	LA
1000 - Aluminum	EPA 6010D	10155916	NELAP	LA
1005 - Antimony	EPA 6010D	10155916	NELAP	LA
1010 - Arsenic	EPA 6010D	10155916	NELAP	LA
1015 - Barium	EPA 6010D	10155916	NELAP	LA
1020 - Beryllium	EPA 6010D	10155916	NELAP	LA
1025 - Boron	EPA 6010D	10155916	NELAP	LA
1030 - Cadmium	EPA 6010D	10155916	NELAP	LA
1035 - Calcium	EPA 6010D	10155916	NELAP	LA
1040 - Chromium	EPA 6010D	10155916	NELAP	LA
1050 - Cobalt	EPA 6010D	10155916	NELAP	LA
1055 - Copper	EPA 6010D	10155916	NELAP	LA
1070 - Iron	EPA 6010D	10155916	NELAP	LA
1075 - Lead	EPA 6010D	10155916	NELAP	LA
1085 - Magnesium	EPA 6010D	10155916	NELAP	LA
1090 - Manganese	EPA 6010D	10155916	NELAP	LA
1100 - Molybdenum	EPA 6010D	10155916	NELAP	LA
1105 - Nickel	EPA 6010D	10155916	NELAP	LA
1909 - Phosphorus	EPA 6010D	10155916	NELAP	LA
1125 - Potassium	EPA 6010D	10155916	NELAP	LA
1140 - Selenium	EPA 6010D	10155916	NELAP	LA
1990 - Silica as SiO2	EPA 6010D	10155916	NELAP	LA
1150 - Silver	EPA 6010D	10155916	NELAP	LA
1155 - Sodium	EPA 6010D	10155916	NELAP	LA
1160 - Strontium	EPA 6010D	10155916	NELAP	LA
1165 - Thallium	EPA 6010D	10155916	NELAP	LA
1175 - Tin	EPA 6010D	10155916	NELAP	LA
1180 - Titanium	EPA 6010D	10155916	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
1185 - Vanadium	EPA 6010D	10155916	NELAP	LA
1190 - Zinc	EPA 6010D	10155916	NELAP	LA
1000 - Aluminum	EPA 6020	10156000	NELAP	LA
1005 - Antimony	EPA 6020	10156000	NELAP	LA
1010 - Arsenic	EPA 6020	10156000	NELAP	LA
1015 - Barium	EPA 6020	10156000	NELAP	LA
1020 - Beryllium	EPA 6020	10156000	NELAP	LA
1025 - Boron	EPA 6020	10156000	NELAP	LA
1030 - Cadmium	EPA 6020	10156000	NELAP	LA
1035 - Calcium	EPA 6020	10156000	NELAP	LA
1040 - Chromium	EPA 6020	10156000	NELAP	LA
1050 - Cobalt	EPA 6020	10156000	NELAP	LA
1055 - Copper	EPA 6020	10156000	NELAP	LA
1070 - Iron	EPA 6020	10156000	NELAP	LA
1075 - Lead	EPA 6020	10156000	NELAP	LA
1085 - Magnesium	EPA 6020	10156000	NELAP	LA
1090 - Manganese	EPA 6020	10156000	NELAP	LA
1100 - Molybdenum	EPA 6020	10156000	NELAP	LA
1105 - Nickel	EPA 6020	10156000	NELAP	LA
1125 - Potassium	EPA 6020	10156000	NELAP	LA
1140 - Selenium	EPA 6020	10156000	NELAP	LA
1150 - Silver	EPA 6020	10156000	NELAP	LA
1155 - Sodium	EPA 6020	10156000	NELAP	LA
1160 - Strontium	EPA 6020	10156000	NELAP	LA
1165 - Thallium	EPA 6020	10156000	NELAP	LA
1175 - Tin	EPA 6020	10156000	NELAP	LA
1180 - Titanium	EPA 6020	10156000	NELAP	LA
1185 - Vanadium	EPA 6020	10156000	NELAP	LA
1190 - Zinc	EPA 6020	10156000	NELAP	LA
1910 - Total Phosphorus	EPA 6020	10156204	NELAP	LA
1000 - Aluminum	EPA 6020A, Rev.1	10156419	NELAP	LA
1005 - Antimony	EPA 6020A, Rev.1	10156419	NELAP	LA
1010 - Arsenic	EPA 6020A, Rev.1	10156419	NELAP	LA
1015 - Barium	EPA 6020A, Rev.1	10156419	NELAP	LA
1020 - Beryllium	EPA 6020A, Rev.1	10156419	NELAP	LA
1025 - Boron	EPA 6020A, Rev.1	10156419	NELAP	LA
1030 - Cadmium	EPA 6020A, Rev.1	10156419	NELAP	LA
1035 - Calcium	EPA 6020A, Rev.1	10156419	NELAP	LA
1040 - Chromium	EPA 6020A, Rev.1	10156419	NELAP	LA
1050 - Cobalt	EPA 6020A, Rev.1	10156419	NELAP	LA
1055 - Copper	EPA 6020A, Rev.1	10156419	NELAP	LA
1070 - Iron	EPA 6020A, Rev.1	10156419	NELAP	LA
1075 - Lead	EPA 6020A, Rev.1	10156419	NELAP	LA
1085 - Magnesium	EPA 6020A, Rev.1	10156419	NELAP	LA
1090 - Manganese	EPA 6020A, Rev.1	10156419	NELAP	LA
1100 - Molybdenum	EPA 6020A, Rev.1	10156419	NELAP	LA
1105 - Nickel	EPA 6020A, Rev.1	10156419	NELAP	LA
1909 - Phosphorus	EPA 6020A, Rev.1	10156419	NELAP	LA
1125 - Potassium	EPA 6020A, Rev.1	10156419	NELAP	LA
1140 - Selenium	EPA 6020A, Rev.1	10156419	NELAP	LA
1150 - Silver	EPA 6020A, Rev.1	10156419	NELAP	LA
1155 - Sodium	EPA 6020A, Rev.1	10156419	NELAP	LA
1160 - Strontium	EPA 6020A, Rev.1	10156419	NELAP	LA
1165 - Thallium	EPA 6020A, Rev.1	10156419	NELAP	LA
1175 - Tin	EPA 6020A, Rev.1	10156419	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
1180 - Titanium	EPA 6020A, Rev.1	10156419	NELAP	LA
1185 - Vanadium	EPA 6020A, Rev.1	10156419	NELAP	LA
1190 - Zinc	EPA 6020A, Rev.1	10156419	NELAP	LA
1000 - Aluminum	EPA 6020B	10156420	NELAP	LA
1005 - Antimony	EPA 6020B	10156420	NELAP	LA
1010 - Arsenic	EPA 6020B	10156420	NELAP	LA
1015 - Barium	EPA 6020B	10156420	NELAP	LA
1020 - Beryllium	EPA 6020B	10156420	NELAP	LA
1025 - Boron	EPA 6020B	10156420	NELAP	LA
1030 - Cadmium	EPA 6020B	10156420	NELAP	LA
1035 - Calcium	EPA 6020B	10156420	NELAP	LA
1040 - Chromium	EPA 6020B	10156420	NELAP	LA
1050 - Cobalt	EPA 6020B	10156420	NELAP	LA
1055 - Copper	EPA 6020B	10156420	NELAP	LA
1070 - Iron	EPA 6020B	10156420	NELAP	LA
1075 - Lead	EPA 6020B	10156420	NELAP	LA
1085 - Magnesium	EPA 6020B	10156420	NELAP	LA
1090 - Manganese	EPA 6020B	10156420	NELAP	LA
1100 - Molybdenum	EPA 6020B	10156420	NELAP	LA
1105 - Nickel	EPA 6020B	10156420	NELAP	LA
1125 - Potassium	EPA 6020B	10156420	NELAP	LA
1140 - Selenium	EPA 6020B	10156420	NELAP	LA
1150 - Silver	EPA 6020B	10156420	NELAP	LA
1155 - Sodium	EPA 6020B	10156420	NELAP	LA
1160 - Strontium	EPA 6020B	10156420	NELAP	LA
1165 - Thallium	EPA 6020B	10156420	NELAP	LA
1175 - Tin	EPA 6020B	10156420	NELAP	LA
1180 - Titanium	EPA 6020B	10156420	NELAP	LA
1910 - Total Phosphorus	EPA 6020B	10156420	NELAP	LA
1185 - Vanadium	EPA 6020B	10156420	NELAP	LA
1190 - Zinc	EPA 6020B	10156420	NELAP	LA
1080 - Lithium	EPA 7000B	10157707	NELAP	LA
1095 - Mercury	EPA 7470A	10165807	NELAP	LA
4570 - 1,2-Dibromo-3-chloropropane (DBCP)	EPA 8011	10173009	NELAP	LA
4585 - 1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8011	10173009	NELAP	LA
4580 - Dibromochloropropane	EPA 8011	10173009	NELAP	LA
9408 - Gasoline range organics (GRO)	EPA 8015B	10173601	NELAP	LA
9408 - Gasoline range organics (GRO)	EPA 8015C	10173805	NELAP	LA
9369 - Diesel range organics (DRO)	EPA 8015C, Rev.3	10173816	NELAP	LA
4720 - Diethylene glycol	EPA 8015C, Rev.3	10173816	NELAP	LA
4785 - Ethylene glycol	EPA 8015C, Rev.3	10173816	NELAP	LA
6657 - Propylene Glycol	EPA 8015C, Rev.3	10173816	NELAP	LA
9646 - Triethylene Glycol	EPA 8015C, Rev.3	10173816	NELAP	LA
7355 - 4,4'-DDD	EPA 8081B, Rev.2	10178811	NELAP	LA
7360 - 4,4'-DDE	EPA 8081B, Rev.2	10178811	NELAP	LA
7365 - 4,4'-DDT	EPA 8081B, Rev.2	10178811	NELAP	LA
7025 - Aldrin	EPA 8081B, Rev.2	10178811	NELAP	LA
7250 - Chlordane (tech.)	EPA 8081B, Rev.2	10178811	NELAP	LA
7470 - Dieldrin	EPA 8081B, Rev.2	10178811	NELAP	LA
7510 - Endosulfan I	EPA 8081B, Rev.2	10178811	NELAP	LA
7515 - Endosulfan II	EPA 8081B, Rev.2	10178811	NELAP	LA
7520 - Endosulfan sulfate	EPA 8081B, Rev.2	10178811	NELAP	LA
7540 - Endrin	EPA 8081B, Rev.2	10178811	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
7530 - Endrin aldehyde	EPA 8081B, Rev.2	10178811	NELAP	LA
7535 - Endrin ketone	EPA 8081B, Rev.2	10178811	NELAP	LA
7685 - Heptachlor	EPA 8081B, Rev.2	10178811	NELAP	LA
7690 - Heptachlor epoxide	EPA 8081B, Rev.2	10178811	NELAP	LA
7810 - Methoxychlor	EPA 8081B, Rev.2	10178811	NELAP	LA
8250 - Toxaphene (Chlorinated camphene)	EPA 8081B, Rev.2	10178811	NELAP	LA
7110 - alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081B, Rev.2	10178811	NELAP	LA
7240 - alpha-Chlordane	EPA 8081B, Rev.2	10178811	NELAP	LA
7115 - beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081B, Rev.2	10178811	NELAP	LA
7105 - delta-BHC	EPA 8081B, Rev.2	10178811	NELAP	LA
7120 - gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081B, Rev.2	10178811	NELAP	LA
7245 - gamma-Chlordane	EPA 8081B, Rev.2	10178811	NELAP	LA
8880 - Aroclor-1016 (PCB-1016)	EPA 8082A	10179201	NELAP	LA
8885 - Aroclor-1221 (PCB-1221)	EPA 8082A	10179201	NELAP	LA
8890 - Aroclor-1232 (PCB-1232)	EPA 8082A	10179201	NELAP	LA
8895 - Aroclor-1242 (PCB-1242)	EPA 8082A	10179201	NELAP	LA
8900 - Aroclor-1248 (PCB-1248)	EPA 8082A	10179201	NELAP	LA
8905 - Aroclor-1254 (PCB-1254)	EPA 8082A	10179201	NELAP	LA
8910 - Aroclor-1260 (PCB-1260)	EPA 8082A	10179201	NELAP	LA
8655 - 2,4,5-T	EPA 8151A	10183207	NELAP	LA
8545 - 2,4-D	EPA 8151A	10183207	NELAP	LA
8560 - 2,4-DB	EPA 8151A	10183207	NELAP	LA
8555 - Dalapon	EPA 8151A	10183207	NELAP	LA
8595 - Dicamba	EPA 8151A	10183207	NELAP	LA
8605 - Dichloroprop (Dichlorprop)	EPA 8151A	10183207	NELAP	LA
8620 - Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8151A	10183207	NELAP	LA
7775 - MCPA	EPA 8151A	10183207	NELAP	LA
7780 - MCPP	EPA 8151A	10183207	NELAP	LA
6605 - Pentachlorophenol	EPA 8151A	10183207	NELAP	LA
8645 - Picloram	EPA 8151A	10183207	NELAP	LA
8650 - Silvex (2,4,5-TP)	EPA 8151A	10183207	NELAP	LA
5105 - 1,1,1,2-Tetrachloroethane	EPA 8260B	10184802	NELAP	LA
5160 - 1,1,1-Trichloroethane	EPA 8260B	10184802	NELAP	LA
5110 - 1,1,2,2-Tetrachloroethane	EPA 8260B	10184802	NELAP	LA
5165 - 1,1,2-Trichloroethane	EPA 8260B	10184802	NELAP	LA
4630 - 1,1-Dichloroethane	EPA 8260B	10184802	NELAP	LA
4640 - 1,1-Dichloroethylene	EPA 8260B	10184802	NELAP	LA
4670 - 1,1-Dichloropropene	EPA 8260B	10184802	NELAP	LA
5150 - 1,2,3-Trichlorobenzene	EPA 8260B	10184802	NELAP	LA
5180 - 1,2,3-Trichloropropane	EPA 8260B	10184802	NELAP	LA
5155 - 1,2,4-Trichlorobenzene	EPA 8260B	10184802	NELAP	LA
5210 - 1,2,4-Trimethylbenzene	EPA 8260B	10184802	NELAP	LA
4570 - 1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260B	10184802	NELAP	LA
4585 - 1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260B	10184802	NELAP	LA
4610 - 1,2-Dichlorobenzene	EPA 8260B	10184802	NELAP	LA
4635 - 1,2-Dichloroethane (Ethylene dichloride)	EPA 8260B	10184802	NELAP	LA
4655 - 1,2-Dichloropropane	EPA 8260B	10184802	NELAP	LA
5215 - 1,3,5-Trimethylbenzene	EPA 8260B	10184802	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
4615 - 1,3-Dichlorobenzene	EPA 8260B	10184802	NELAP	LA
4660 - 1,3-Dichloropropane	EPA 8260B	10184802	NELAP	LA
4620 - 1,4-Dichlorobenzene	EPA 8260B	10184802	NELAP	LA
4665 - 2,2-Dichloropropane	EPA 8260B	10184802	NELAP	LA
4410 - 2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260B	10184802	NELAP	LA
4500 - 2-Chloroethyl vinyl ether	EPA 8260B	10184802	NELAP	LA
4535 - 2-Chlorotoluene	EPA 8260B	10184802	NELAP	LA
4860 - 2-Hexanone	EPA 8260B	10184802	NELAP	LA
4540 - 4-Chlorotoluene	EPA 8260B	10184802	NELAP	LA
4910 - 4-Isopropyltoluene (p-Cymene)	EPA 8260B	10184802	NELAP	LA
4995 - 4-Methyl-2-pentanone (MIBK)	EPA 8260B	10184802	NELAP	LA
4315 - Acetone	EPA 8260B	10184802	NELAP	LA
4320 - Acetonitrile	EPA 8260B	10184802	NELAP	LA
4325 - Acrolein (Propenal)	EPA 8260B	10184802	NELAP	LA
4330 - Acrylamide	EPA 8260B	10184802	NELAP	LA
4340 - Acrylonitrile	EPA 8260B	10184802	NELAP	LA
4375 - Benzene	EPA 8260B	10184802	NELAP	LA
4385 - Bromobenzene	EPA 8260B	10184802	NELAP	LA
4390 - Bromochloromethane	EPA 8260B	10184802	NELAP	LA
4395 - Bromodichloromethane	EPA 8260B	10184802	NELAP	LA
4400 - Bromoform	EPA 8260B	10184802	NELAP	LA
4450 - Carbon disulfide	EPA 8260B	10184802	NELAP	LA
4455 - Carbon tetrachloride	EPA 8260B	10184802	NELAP	LA
4475 - Chlorobenzene	EPA 8260B	10184802	NELAP	LA
4575 - Chlorodibromomethane (dibromochloromethane)	EPA 8260B	10184802	NELAP	LA
4485 - Chloroethane (Ethyl chloride)	EPA 8260B	10184802	NELAP	LA
4505 - Chloroform	EPA 8260B	10184802	NELAP	LA
9375 - Di-isopropylether (DIPE) (Isopropyl ether)	EPA 8260B	10184802	NELAP	LA
4595 - Dibromomethane (Methylene bromide)	EPA 8260B	10184802	NELAP	LA
4625 - Dichlorodifluoromethane (Freon-12)	EPA 8260B	10184802	NELAP	LA
4750 - Ethanol	EPA 8260B	10184802	NELAP	LA
4770 - Ethyl-t-butyl ether (ETBE) (2-Ethoxy-2-methylpropane)	EPA 8260B	10184802	NELAP	LA
4765 - Ethylbenzene	EPA 8260B	10184802	NELAP	LA
4835 - Hexachlorobutadiene	EPA 8260B	10184802	NELAP	LA
4840 - Hexachloroethane	EPA 8260B	10184802	NELAP	LA
4900 - Isopropylbenzene (Cumene)	EPA 8260B	10184802	NELAP	LA
4950 - Methyl bromide (Bromomethane)	EPA 8260B	10184802	NELAP	LA
4960 - Methyl chloride (Chloromethane)	EPA 8260B	10184802	NELAP	LA
5000 - Methyl tert-butyl ether (MTBE)	EPA 8260B	10184802	NELAP	LA
4975 - Methylene chloride (Dichloromethane)	EPA 8260B	10184802	NELAP	LA
5005 - Naphthalene	EPA 8260B	10184802	NELAP	LA
5015 - Nitrobenzene	EPA 8260B	10184802	NELAP	LA
5100 - Styrene	EPA 8260B	10184802	NELAP	LA
4370 - T-amylmethylether (TAME)	EPA 8260B	10184802	NELAP	LA
5115 - Tetrachloroethylene (Perchloroethylene)	EPA 8260B	10184802	NELAP	LA
5140 - Toluene	EPA 8260B	10184802	NELAP	LA
4027 - Total BTEX	EPA 8260B	10184802	NELAP	LA
5170 - Trichloroethene (Trichloroethylene)	EPA 8260B	10184802	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
5175 - Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260B	10184802	NELAP	LA
5225 - Vinyl acetate	EPA 8260B	10184802	NELAP	LA
5235 - Vinyl chloride	EPA 8260B	10184802	NELAP	LA
5260 - Xylene (total)	EPA 8260B	10184802	NELAP	LA
4645 - cis-1,2-Dichloroethylene	EPA 8260B	10184802	NELAP	LA
4680 - cis-1,3-Dichloropropene	EPA 8260B	10184802	NELAP	LA
5245 - m-Xylene	EPA 8260B	10184802	NELAP	LA
4435 - n-Butylbenzene	EPA 8260B	10184802	NELAP	LA
5090 - n-Propylbenzene	EPA 8260B	10184802	NELAP	LA
5250 - o-Xylene	EPA 8260B	10184802	NELAP	LA
5255 - p-Xylene	EPA 8260B	10184802	NELAP	LA
4440 - sec-Butylbenzene	EPA 8260B	10184802	NELAP	LA
4420 - tert-Butyl alcohol	EPA 8260B	10184802	NELAP	LA
4445 - tert-Butylbenzene	EPA 8260B	10184802	NELAP	LA
4700 - trans-1,2-Dichloroethylene	EPA 8260B	10184802	NELAP	LA
4685 - trans-1,3-Dichloropropylene	EPA 8260B	10184802	NELAP	LA
6715 - 1,2,4,5-Tetrachlorobenzene	EPA 8270D	10186002	NELAP	LA
5155 - 1,2,4-Trichlorobenzene	EPA 8270D	10186002	NELAP	LA
4610 - 1,2-Dichlorobenzene	EPA 8270D	10186002	NELAP	LA
6155 - 1,2-Dinitrobenzene	EPA 8270D	10186002	NELAP	LA
6220 - 1,2-Diphenylhydrazine	EPA 8270D	10186002	NELAP	LA
4615 - 1,3-Dichlorobenzene	EPA 8270D	10186002	NELAP	LA
4620 - 1,4-Dichlorobenzene	EPA 8270D	10186002	NELAP	LA
6420 - 1,4-Naphthoquinone	EPA 8270D	10186002	NELAP	LA
5790 - 1-Chloronaphthalene	EPA 8270D	10186002	NELAP	LA
6380 - 1-Methylnaphthalene	EPA 8270D	10186002	NELAP	LA
6735 - 2,3,4,6-Tetrachlorophenol	EPA 8270D	10186002	NELAP	LA
6835 - 2,4,5-Trichlorophenol	EPA 8270D	10186002	NELAP	LA
6840 - 2,4,6-Trichlorophenol	EPA 8270D	10186002	NELAP	LA
6000 - 2,4-Dichlorophenol	EPA 8270D	10186002	NELAP	LA
6130 - 2,4-Dimethylphenol	EPA 8270D	10186002	NELAP	LA
6175 - 2,4-Dinitrophenol	EPA 8270D	10186002	NELAP	LA
6185 - 2,4-Dinitrotoluene (2,4-DNT)	EPA 8270D	10186002	NELAP	LA
6005 - 2,6-Dichlorophenol	EPA 8270D	10186002	NELAP	LA
6190 - 2,6-Dinitrotoluene (2,6-DNT)	EPA 8270D	10186002	NELAP	LA
5795 - 2-Chloronaphthalene	EPA 8270D	10186002	NELAP	LA
5800 - 2-Chlorophenol	EPA 8270D	10186002	NELAP	LA
6360 - 2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270D	10186002	NELAP	LA
6385 - 2-Methylnaphthalene	EPA 8270D	10186002	NELAP	LA
6400 - 2-Methylphenol (o-Cresol)	EPA 8270D	10186002	NELAP	LA
6460 - 2-Nitroaniline	EPA 8270D	10186002	NELAP	LA
6490 - 2-Nitrophenol	EPA 8270D	10186002	NELAP	LA
5945 - 3,3'-Dichlorobenzidine	EPA 8270D	10186002	NELAP	LA
6120 - 3,3'-Dimethylbenzidine	EPA 8270D	10186002	NELAP	LA
6405 - 3-Methylphenol (m-Cresol)	EPA 8270D	10186002	NELAP	LA
6465 - 3-Nitroaniline	EPA 8270D	10186002	NELAP	LA
5660 - 4-Bromophenyl phenyl ether	EPA 8270D	10186002	NELAP	LA
5700 - 4-Chloro-3-methylphenol	EPA 8270D	10186002	NELAP	LA
5745 - 4-Chloroaniline	EPA 8270D	10186002	NELAP	LA
5825 - 4-Chlorophenyl phenylether	EPA 8270D	10186002	NELAP	LA
6410 - 4-Methylphenol (p-Cresol)	EPA 8270D	10186002	NELAP	LA
6470 - 4-Nitroaniline	EPA 8270D	10186002	NELAP	LA
6500 - 4-Nitrophenol	EPA 8270D	10186002	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
5500 - Acenaphthene	EPA 8270D	10186002	NELAP	LA
5505 - Acenaphthylene	EPA 8270D	10186002	NELAP	LA
5510 - Acetophenone	EPA 8270D	10186002	NELAP	LA
5545 - Aniline	EPA 8270D	10186002	NELAP	LA
5555 - Anthracene	EPA 8270D	10186002	NELAP	LA
5560 - Aramite	EPA 8270D	10186002	NELAP	LA
5595 - Benzidine	EPA 8270D	10186002	NELAP	LA
5575 - Benzo(a)anthracene	EPA 8270D	10186002	NELAP	LA
5580 - Benzo(a)pyrene	EPA 8270D	10186002	NELAP	LA
5585 - Benzo(b)fluoranthene	EPA 8270D	10186002	NELAP	LA
5590 - Benzo(g,h,i)perylene	EPA 8270D	10186002	NELAP	LA
5600 - Benzo(k)fluoranthene	EPA 8270D	10186002	NELAP	LA
5610 - Benzoic acid	EPA 8270D	10186002	NELAP	LA
5630 - Benzyl alcohol	EPA 8270D	10186002	NELAP	LA
5780 - Bis(2-Chloroisopropyl) ether (2,2-oxybis(1-chloropropane))	EPA 8270D	10186002	NELAP	LA
5670 - Butyl benzyl phthalate	EPA 8270D	10186002	NELAP	LA
5680 - Carbazole	EPA 8270D	10186002	NELAP	LA
7260 - Chlorobenzilate	EPA 8270D	10186002	NELAP	LA
5855 - Chrysene	EPA 8270D	10186002	NELAP	LA
6065 - Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270D	10186002	NELAP	LA
5925 - Di-n-butyl phthalate	EPA 8270D	10186002	NELAP	LA
6200 - Di-n-octyl phthalate	EPA 8270D	10186002	NELAP	LA
5895 - Dibenzo(a,h)anthracene	EPA 8270D	10186002	NELAP	LA
5905 - Dibenzofuran	EPA 8270D	10186002	NELAP	LA
6070 - Diethyl phthalate	EPA 8270D	10186002	NELAP	LA
6135 - Dimethyl phthalate	EPA 8270D	10186002	NELAP	LA
6205 - Diphenylamine	EPA 8270D	10186002	NELAP	LA
7550 - EPN	EPA 8270D	10186002	NELAP	LA
6260 - Ethyl methanesulfonate	EPA 8270D	10186002	NELAP	LA
7580 - Famphur	EPA 8270D	10186002	NELAP	LA
6265 - Fluoranthene	EPA 8270D	10186002	NELAP	LA
6270 - Fluorene	EPA 8270D	10186002	NELAP	LA
6275 - Hexachlorobenzene	EPA 8270D	10186002	NELAP	LA
4835 - Hexachlorobutadiene	EPA 8270D	10186002	NELAP	LA
6285 - Hexachlorocyclopentadiene	EPA 8270D	10186002	NELAP	LA
4840 - Hexachloroethane	EPA 8270D	10186002	NELAP	LA
6315 - Indeno(1,2,3-cd)pyrene	EPA 8270D	10186002	NELAP	LA
6320 - Isophorone	EPA 8270D	10186002	NELAP	LA
7740 - Kepone	EPA 8270D	10186002	NELAP	LA
6375 - Methyl methanesulfonate	EPA 8270D	10186002	NELAP	LA
7905 - Naled	EPA 8270D	10186002	NELAP	LA
5005 - Naphthalene	EPA 8270D	10186002	NELAP	LA
5015 - Nitrobenzene	EPA 8270D	10186002	NELAP	LA
6590 - Pentachlorobenzene	EPA 8270D	10186002	NELAP	LA
6600 - Pentachloronitrobenzene	EPA 8270D	10186002	NELAP	LA
6605 - Pentachlorophenol	EPA 8270D	10186002	NELAP	LA
6610 - Phenacetin	EPA 8270D	10186002	NELAP	LA
6615 - Phenanthrene	EPA 8270D	10186002	NELAP	LA
6620 - Phenobarbital	EPA 8270D	10186002	NELAP	LA
6625 - Phenol	EPA 8270D	10186002	NELAP	LA
7985 - Phorate	EPA 8270D	10186002	NELAP	LA
6665 - Pyrene	EPA 8270D	10186002	NELAP	LA
5095 - Pyridine	EPA 8270D	10186002	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
6680 - Resorcinol	EPA 8270D	10186002	NELAP	LA
5862 - Total Cresols	EPA 8270D	10186002	NELAP	LA
8295 - Trifluralin (Treflan)	EPA 8270D	10186002	NELAP	LA
5760 - bis(2-Chloroethoxy)methane	EPA 8270D	10186002	NELAP	LA
5765 - bis(2-Chloroethyl) ether	EPA 8270D	10186002	NELAP	LA
5025 - n-Nitroso-di-n-butylamine	EPA 8270D	10186002	NELAP	LA
6545 - n-Nitrosodi-n-propylamine	EPA 8270D	10186002	NELAP	LA
6525 - n-Nitrosodiethylamine	EPA 8270D	10186002	NELAP	LA
6530 - n-Nitrosodimethylamine	EPA 8270D	10186002	NELAP	LA
6535 - n-Nitrosodiphenylamine	EPA 8270D	10186002	NELAP	LA
4300 - Acetaldehyde	EPA 8315A	10188008	NELAP	LA
4815 - Formaldehyde	EPA 8315A	10188008	NELAP	LA
1923 - Reactive Cyanide	EPA 9014	10193803	NELAP	LA
1540 - Bromide	EPA 9056A	10199607	NELAP	LA
1575 - Chloride	EPA 9056A	10199607	NELAP	LA
1730 - Fluoride	EPA 9056A	10199607	NELAP	LA
1805 - Nitrate	EPA 9056A	10199607	NELAP	LA
1810 - Nitrate as N	EPA 9056A	10199607	NELAP	LA
1820 - Nitrate-Nitrite	EPA 9056A	10199607	NELAP	LA
1840 - Nitrite as N	EPA 9056A	10199607	NELAP	LA
2000 - Sulfate	EPA 9056A	10199607	NELAP	LA
1825 - Total Nitrate+Nitrite	EPA 9056A	10199607	NELAP	LA
3460 - LC50 Survival	EPA 2000.0 - Fathead Minnow, 48-hr Acute, nonrenewal, 20% DMW 25°C	10213419	NELAP	LA
3470 - IC25 (ON) Growth	EPA 1000.0 - Fathead minnow, 7-day Chronic, daily renewal, 20% DMW 25°C	10214003	NELAP	LA
3475 - NOEC (ON) Growth	EPA 1000.0 - Fathead minnow, 7-day Chronic, daily renewal, 20% DMW 25°C	10214003	NELAP	LA
3465 - NOEC Survival	EPA 1000.0 - Fathead minnow, 7-day Chronic, daily renewal, 20% DMW 25°C	10214003	NELAP	LA
3460 - LC50 Survival	EPA 2002 Ceriodaphnia dubia Acute 20% DMW 25°C	10214901	NELAP	LA
3480 - IC25 Reproduction	EPA 1002.0 - Ceriodaphnia dubia, 7-day Chronic, daily renewal, 20% DMW 25°C	10215200	NELAP	LA
3485 - NOEC Reproduction	EPA 1002.0 - Ceriodaphnia dubia, 7-day Chronic, daily renewal, 20% DMW 25°C	10215200	NELAP	LA
3465 - NOEC Survival	EPA 1002.0 - Ceriodaphnia dubia, 7-day Chronic, daily renewal, 20% DMW 25°C	10215200	NELAP	LA
3460 - LC50 Survival	EPA 2021 Daphnia pulex Acute	10215608	NELAP	LA
6380 - 1-Methylnaphthalene	EPA 8270D SIM	10242509	NELAP	LA
6385 - 2-Methylnaphthalene	EPA 8270D SIM	10242509	NELAP	LA
5500 - Acenaphthene	EPA 8270D SIM	10242509	NELAP	LA
5505 - Acenaphthylene	EPA 8270D SIM	10242509	NELAP	LA
5555 - Anthracene	EPA 8270D SIM	10242509	NELAP	LA
5575 - Benzo(a)anthracene	EPA 8270D SIM	10242509	NELAP	LA
5580 - Benzo(a)pyrene	EPA 8270D SIM	10242509	NELAP	LA
5585 - Benzo(b)fluoranthene	EPA 8270D SIM	10242509	NELAP	LA
5590 - Benzo(g,h,i)perylene	EPA 8270D SIM	10242509	NELAP	LA
5600 - Benzo(k)fluoranthene	EPA 8270D SIM	10242509	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
5855 - Chrysene	EPA 8270D SIM	10242509	NELAP	LA
5895 - Dibenzo(a,h)anthracene	EPA 8270D SIM	10242509	NELAP	LA
6265 - Fluoranthene	EPA 8270D SIM	10242509	NELAP	LA
6270 - Fluorene	EPA 8270D SIM	10242509	NELAP	LA
6315 - Indeno(1,2,3-cd)pyrene	EPA 8270D SIM	10242509	NELAP	LA
5005 - Naphthalene	EPA 8270D SIM	10242509	NELAP	LA
6615 - Phenanthrene	EPA 8270D SIM	10242509	NELAP	LA
6665 - Pyrene	EPA 8270D SIM	10242509	NELAP	LA
6715 - 1,2,4,5-Tetrachlorobenzene	EPA 8270E	10242543	NELAP	LA
5155 - 1,2,4-Trichlorobenzene	EPA 8270E	10242543	NELAP	LA
4610 - 1,2-Dichlorobenzene	EPA 8270E	10242543	NELAP	LA
6155 - 1,2-Dinitrobenzene	EPA 8270E	10242543	NELAP	LA
6220 - 1,2-Diphenylhydrazine	EPA 8270E	10242543	NELAP	LA
4615 - 1,3-Dichlorobenzene	EPA 8270E	10242543	NELAP	LA
4620 - 1,4-Dichlorobenzene	EPA 8270E	10242543	NELAP	LA
6420 - 1,4-Naphthoquinone	EPA 8270E	10242543	NELAP	LA
5790 - 1-Chloronaphthalene	EPA 8270E	10242543	NELAP	LA
6380 - 1-Methylnaphthalene	EPA 8270E	10242543	NELAP	LA
4659 - 2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether (bis(2-chloroisopropyl)ether)	EPA 8270E	10242543	NELAP	LA
6735 - 2,3,4,6-Tetrachlorophenol	EPA 8270E	10242543	NELAP	LA
6835 - 2,4,5-Trichlorophenol	EPA 8270E	10242543	NELAP	LA
6840 - 2,4,6-Trichlorophenol	EPA 8270E	10242543	NELAP	LA
6000 - 2,4-Dichlorophenol	EPA 8270E	10242543	NELAP	LA
6130 - 2,4-Dimethylphenol	EPA 8270E	10242543	NELAP	LA
6175 - 2,4-Dinitrophenol	EPA 8270E	10242543	NELAP	LA
6185 - 2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	10242543	NELAP	LA
6005 - 2,6-Dichlorophenol	EPA 8270E	10242543	NELAP	LA
6190 - 2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	10242543	NELAP	LA
5795 - 2-Chloronaphthalene	EPA 8270E	10242543	NELAP	LA
5800 - 2-Chlorophenol	EPA 8270E	10242543	NELAP	LA
6360 - 2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	10242543	NELAP	LA
6385 - 2-Methylnaphthalene	EPA 8270E	10242543	NELAP	LA
6400 - 2-Methylphenol (o-Cresol)	EPA 8270E	10242543	NELAP	LA
6460 - 2-Nitroaniline	EPA 8270E	10242543	NELAP	LA
6490 - 2-Nitrophenol	EPA 8270E	10242543	NELAP	LA
6412 - 3+4 Methylphenol	EPA 8270E	10242543	NELAP	LA
5945 - 3,3'-Dichlorobenzidine	EPA 8270E	10242543	NELAP	LA
6120 - 3,3'-Dimethylbenzidine	EPA 8270E	10242543	NELAP	LA
6405 - 3-Methylphenol (m-Cresol)	EPA 8270E	10242543	NELAP	LA
6465 - 3-Nitroaniline	EPA 8270E	10242543	NELAP	LA
5660 - 4-Bromophenyl phenyl ether	EPA 8270E	10242543	NELAP	LA
5700 - 4-Chloro-3-methylphenol	EPA 8270E	10242543	NELAP	LA
5745 - 4-Chloroaniline	EPA 8270E	10242543	NELAP	LA
5825 - 4-Chlorophenyl phenylether	EPA 8270E	10242543	NELAP	LA
6410 - 4-Methylphenol (p-Cresol)	EPA 8270E	10242543	NELAP	LA
6470 - 4-Nitroaniline	EPA 8270E	10242543	NELAP	LA
6500 - 4-Nitrophenol	EPA 8270E	10242543	NELAP	LA
5500 - Acenaphthene	EPA 8270E	10242543	NELAP	LA
5505 - Acenaphthylene	EPA 8270E	10242543	NELAP	LA
5510 - Acetophenone	EPA 8270E	10242543	NELAP	LA
5545 - Aniline	EPA 8270E	10242543	NELAP	LA
5555 - Anthracene	EPA 8270E	10242543	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
5560 - Aramite	EPA 8270E	10242543	NELAP	LA
5595 - Benzidine	EPA 8270E	10242543	NELAP	LA
5575 - Benzo(a)anthracene	EPA 8270E	10242543	NELAP	LA
5580 - Benzo(a)pyrene	EPA 8270E	10242543	NELAP	LA
5585 - Benzo(b)fluoranthene	EPA 8270E	10242543	NELAP	LA
5590 - Benzo(g,h,i)perylene	EPA 8270E	10242543	NELAP	LA
5600 - Benzo(k)fluoranthene	EPA 8270E	10242543	NELAP	LA
5610 - Benzoic acid	EPA 8270E	10242543	NELAP	LA
5630 - Benzyl alcohol	EPA 8270E	10242543	NELAP	LA
5780 - Bis(2-Chloroisopropyl) ether (2,2-oxybis(1-chloropropane))	EPA 8270E	10242543	NELAP	LA
5670 - Butyl benzyl phthalate	EPA 8270E	10242543	NELAP	LA
5680 - Carbazole	EPA 8270E	10242543	NELAP	LA
7260 - Chlorobenzilate	EPA 8270E	10242543	NELAP	LA
5855 - Chrysene	EPA 8270E	10242543	NELAP	LA
6065 - Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	10242543	NELAP	LA
5925 - Di-n-butyl phthalate	EPA 8270E	10242543	NELAP	LA
6200 - Di-n-octyl phthalate	EPA 8270E	10242543	NELAP	LA
5895 - Dibenzo(a,h)anthracene	EPA 8270E	10242543	NELAP	LA
5905 - Dibenzofuran	EPA 8270E	10242543	NELAP	LA
6070 - Diethyl phthalate	EPA 8270E	10242543	NELAP	LA
6135 - Dimethyl phthalate	EPA 8270E	10242543	NELAP	LA
6205 - Diphenylamine	EPA 8270E	10242543	NELAP	LA
7550 - EPN	EPA 8270E	10242543	NELAP	LA
6260 - Ethyl methanesulfonate	EPA 8270E	10242543	NELAP	LA
7580 - Famphur	EPA 8270E	10242543	NELAP	LA
6265 - Fluoranthene	EPA 8270E	10242543	NELAP	LA
6270 - Fluorene	EPA 8270E	10242543	NELAP	LA
6275 - Hexachlorobenzene	EPA 8270E	10242543	NELAP	LA
4835 - Hexachlorobutadiene	EPA 8270E	10242543	NELAP	LA
6285 - Hexachlorocyclopentadiene	EPA 8270E	10242543	NELAP	LA
4840 - Hexachloroethane	EPA 8270E	10242543	NELAP	LA
6315 - Indeno(1,2,3-cd)pyrene	EPA 8270E	10242543	NELAP	LA
6320 - Isophorone	EPA 8270E	10242543	NELAP	LA
7740 - Kepone	EPA 8270E	10242543	NELAP	LA
6375 - Methyl methanesulfonate	EPA 8270E	10242543	NELAP	LA
7905 - Naled	EPA 8270E	10242543	NELAP	LA
5005 - Naphthalene	EPA 8270E	10242543	NELAP	LA
5015 - Nitrobenzene	EPA 8270E	10242543	NELAP	LA
6590 - Pentachlorobenzene	EPA 8270E	10242543	NELAP	LA
6600 - Pentachloronitrobenzene	EPA 8270E	10242543	NELAP	LA
6605 - Pentachlorophenol	EPA 8270E	10242543	NELAP	LA
6610 - Phenacetin	EPA 8270E	10242543	NELAP	LA
6615 - Phenanthrene	EPA 8270E	10242543	NELAP	LA
6620 - Phenobarbital	EPA 8270E	10242543	NELAP	LA
6625 - Phenol	EPA 8270E	10242543	NELAP	LA
7985 - Phorate	EPA 8270E	10242543	NELAP	LA
6665 - Pyrene	EPA 8270E	10242543	NELAP	LA
5095 - Pyridine	EPA 8270E	10242543	NELAP	LA
6680 - Resorcinol	EPA 8270E	10242543	NELAP	LA
5862 - Total Cresols	EPA 8270E	10242543	NELAP	LA
8295 - Trifluralin (Treflan)	EPA 8270E	10242543	NELAP	LA
5760 - bis(2-Chloroethoxy)methane	EPA 8270E	10242543	NELAP	LA
5765 - bis(2-Chloroethyl) ether	EPA 8270E	10242543	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
5025 - n-Nitroso-di-n-butylamine	EPA 8270E	10242543	NELAP	LA
6545 - n-Nitrosodi-n-propylamine	EPA 8270E	10242543	NELAP	LA
6525 - n-Nitrosodiethylamine	EPA 8270E	10242543	NELAP	LA
6530 - n-Nitrosodimethylamine	EPA 8270E	10242543	NELAP	LA
6535 - n-Nitrosodiphenylamine	EPA 8270E	10242543	NELAP	LA
6385 - 2-Methylnaphthalene	EPA 8270E SIM	10242565	NELAP	LA
5500 - Acenaphthene	EPA 8270E SIM	10242565	NELAP	LA
5505 - Acenaphthylene	EPA 8270E SIM	10242565	NELAP	LA
5555 - Anthracene	EPA 8270E SIM	10242565	NELAP	LA
5575 - Benzo(a)anthracene	EPA 8270E SIM	10242565	NELAP	LA
5580 - Benzo(a)pyrene	EPA 8270E SIM	10242565	NELAP	LA
5585 - Benzo(b)fluoranthene	EPA 8270E SIM	10242565	NELAP	LA
5590 - Benzo(g,h,i)perylene	EPA 8270E SIM	10242565	NELAP	LA
5600 - Benzo(k)fluoranthene	EPA 8270E SIM	10242565	NELAP	LA
5855 - Chrysene	EPA 8270E SIM	10242565	NELAP	LA
5895 - Dibenzo(a,h)anthracene	EPA 8270E SIM	10242565	NELAP	LA
6265 - Fluoranthene	EPA 8270E SIM	10242565	NELAP	LA
6270 - Fluorene	EPA 8270E SIM	10242565	NELAP	LA
6315 - Indeno(1,2,3-cd)pyrene	EPA 8270E SIM	10242565	NELAP	LA
5005 - Naphthalene	EPA 8270E SIM	10242565	NELAP	LA
6615 - Phenanthrene	EPA 8270E SIM	10242565	NELAP	LA
6665 - Pyrene	EPA 8270E SIM	10242565	NELAP	LA
1860 - Oil & Grease	EPA 1664B (SGT-HEM)	10260628	NELAP	LA
2050 - Total Petroleum Hydrocarbons (TPH)	EPA 1664B (SGT-HEM)	10260628	NELAP	LA
1860 - Oil & Grease	EPA 1664A (SGT-HEM)	10261606	NELAP	LA
1860 - Oil & Grease	EPA 1664B	10261617	NELAP	LA
2050 - Total Petroleum Hydrocarbons (TPH)	EPA 1664B	10261617	NELAP	LA
1429 - Microextraction of Organics in Water	EPA 3511	10279808	NELAP	LA
1429 - Microextraction of Organics in Water	EPA 3511	10279819	NELAP	LA
7355 - 4,4'-DDD	EPA 608.3	10296614	NELAP	LA
7360 - 4,4'-DDE	EPA 608.3	10296614	NELAP	LA
7365 - 4,4'-DDT	EPA 608.3	10296614	NELAP	LA
7005 - Alachlor	EPA 608.3	10296614	NELAP	LA
7025 - Aldrin	EPA 608.3	10296614	NELAP	LA
8880 - Aroclor-1016 (PCB-1016)	EPA 608.3	10296614	NELAP	LA
8885 - Aroclor-1221 (PCB-1221)	EPA 608.3	10296614	NELAP	LA
8890 - Aroclor-1232 (PCB-1232)	EPA 608.3	10296614	NELAP	LA
8895 - Aroclor-1242 (PCB-1242)	EPA 608.3	10296614	NELAP	LA
8900 - Aroclor-1248 (PCB-1248)	EPA 608.3	10296614	NELAP	LA
8905 - Aroclor-1254 (PCB-1254)	EPA 608.3	10296614	NELAP	LA
8910 - Aroclor-1260 (PCB-1260)	EPA 608.3	10296614	NELAP	LA
7160 - Butachlor	EPA 608.3	10296614	NELAP	LA
7250 - Chlordane (tech.)	EPA 608.3	10296614	NELAP	LA
7260 - Chlorobenzilate	EPA 608.3	10296614	NELAP	LA
7265 - Chloroneb	EPA 608.3	10296614	NELAP	LA
7310 - Chlorothalonil (Daconil)	EPA 608.3	10296614	NELAP	LA
7300 - Chlorpyrifos	EPA 608.3	10296614	NELAP	LA
8550 - Dacthal (DCPA)	EPA 608.3	10296614	NELAP	LA
7470 - Dieldrin	EPA 608.3	10296614	NELAP	LA
7510 - Endosulfan I	EPA 608.3	10296614	NELAP	LA
7515 - Endosulfan II	EPA 608.3	10296614	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
7520 - Endosulfan sulfate	EPA 608.3	10296614	NELAP	LA
7540 - Endrin	EPA 608.3	10296614	NELAP	LA
7530 - Endrin aldehyde	EPA 608.3	10296614	NELAP	LA
7535 - Endrin ketone	EPA 608.3	10296614	NELAP	LA
7685 - Heptachlor	EPA 608.3	10296614	NELAP	LA
7690 - Heptachlor epoxide	EPA 608.3	10296614	NELAP	LA
6275 - Hexachlorobenzene	EPA 608.3	10296614	NELAP	LA
7725 - Isodrin	EPA 608.3	10296614	NELAP	LA
7740 - Kepone	EPA 608.3	10296614	NELAP	LA
7810 - Methoxychlor	EPA 608.3	10296614	NELAP	LA
7870 - Mirex	EPA 608.3	10296614	NELAP	LA
7975 - Permethrin (total)	EPA 608.3	10296614	NELAP	LA
8045 - Propachlor (Ramrod)	EPA 608.3	10296614	NELAP	LA
8125 - Simazine	EPA 608.3	10296614	NELAP	LA
8250 - Toxaphene (Chlorinated camphene)	EPA 608.3	10296614	NELAP	LA
7110 - alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 608.3	10296614	NELAP	LA
7240 - alpha-Chlordane	EPA 608.3	10296614	NELAP	LA
7115 - beta-BHC (beta-Hexachlorocyclohexane)	EPA 608.3	10296614	NELAP	LA
7105 - delta-BHC	EPA 608.3	10296614	NELAP	LA
7120 - gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 608.3	10296614	NELAP	LA
7245 - gamma-Chlordane	EPA 608.3	10296614	NELAP	LA
5105 - 1,1,1,2-Tetrachloroethane	EPA 624.1	10298121	NELAP	LA
5160 - 1,1,1-Trichloroethane	EPA 624.1	10298121	NELAP	LA
5110 - 1,1,2,2-Tetrachloroethane	EPA 624.1	10298121	NELAP	LA
5165 - 1,1,2-Trichloroethane	EPA 624.1	10298121	NELAP	LA
4630 - 1,1-Dichloroethane	EPA 624.1	10298121	NELAP	LA
4640 - 1,1-Dichloroethylene	EPA 624.1	10298121	NELAP	LA
4610 - 1,2-Dichlorobenzene	EPA 624.1	10298121	NELAP	LA
4635 - 1,2-Dichloroethane (Ethylene dichloride)	EPA 624.1	10298121	NELAP	LA
4655 - 1,2-Dichloropropane	EPA 624.1	10298121	NELAP	LA
4615 - 1,3-Dichlorobenzene	EPA 624.1	10298121	NELAP	LA
4620 - 1,4-Dichlorobenzene	EPA 624.1	10298121	NELAP	LA
4500 - 2-Chloroethyl vinyl ether	EPA 624.1	10298121	NELAP	LA
4320 - Acetonitrile	EPA 624.1	10298121	NELAP	LA
4325 - Acrolein (Propenal)	EPA 624.1	10298121	NELAP	LA
4340 - Acrylonitrile	EPA 624.1	10298121	NELAP	LA
4375 - Benzene	EPA 624.1	10298121	NELAP	LA
4395 - Bromodichloromethane	EPA 624.1	10298121	NELAP	LA
4400 - Bromoform	EPA 624.1	10298121	NELAP	LA
4455 - Carbon tetrachloride	EPA 624.1	10298121	NELAP	LA
4475 - Chlorobenzene	EPA 624.1	10298121	NELAP	LA
4575 - Chlorodibromomethane (dibromochloromethane)	EPA 624.1	10298121	NELAP	LA
4485 - Chloroethane (Ethyl chloride)	EPA 624.1	10298121	NELAP	LA
4505 - Chloroform	EPA 624.1	10298121	NELAP	LA
4765 - Ethylbenzene	EPA 624.1	10298121	NELAP	LA
4950 - Methyl bromide (Bromomethane)	EPA 624.1	10298121	NELAP	LA
4960 - Methyl chloride (Chloromethane)	EPA 624.1	10298121	NELAP	LA
5000 - Methyl tert-butyl ether (MTBE)	EPA 624.1	10298121	NELAP	LA
4975 - Methylene chloride (Dichloromethane)	EPA 624.1	10298121	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
5005 - Naphthalene	EPA 624.1	10298121	NELAP	LA
5115 - Tetrachloroethylene (Perchloroethylene)	EPA 624.1	10298121	NELAP	LA
5140 - Toluene	EPA 624.1	10298121	NELAP	LA
4027 - Total BTEX	EPA 624.1	10298121	NELAP	LA
5170 - Trichloroethene (Trichloroethylene)	EPA 624.1	10298121	NELAP	LA
5175 - Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 624.1	10298121	NELAP	LA
5235 - Vinyl chloride	EPA 624.1	10298121	NELAP	LA
5260 - Xylene (total)	EPA 624.1	10298121	NELAP	LA
4645 - cis-1,2-Dichloroethylene	EPA 624.1	10298121	NELAP	LA
4680 - cis-1,3-Dichloropropene	EPA 624.1	10298121	NELAP	LA
4700 - trans-1,2-Dichloroethylene	EPA 624.1	10298121	NELAP	LA
4685 - trans-1,3-Dichloropropylene	EPA 624.1	10298121	NELAP	LA
5155 - 1,2,4-Trichlorobenzene	EPA 625.1	10300024	NELAP	LA
4610 - 1,2-Dichlorobenzene	EPA 625.1	10300024	NELAP	LA
4615 - 1,3-Dichlorobenzene	EPA 625.1	10300024	NELAP	LA
4620 - 1,4-Dichlorobenzene	EPA 625.1	10300024	NELAP	LA
4659 - 2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether (bis(2-chloroisopropyl)ether)	EPA 625.1	10300024	NELAP	LA
6735 - 2,3,4,6-Tetrachlorophenol	EPA 625.1	10300024	NELAP	LA
6835 - 2,4,5-Trichlorophenol	EPA 625.1	10300024	NELAP	LA
6840 - 2,4,6-Trichlorophenol	EPA 625.1	10300024	NELAP	LA
6000 - 2,4-Dichlorophenol	EPA 625.1	10300024	NELAP	LA
6130 - 2,4-Dimethylphenol	EPA 625.1	10300024	NELAP	LA
6175 - 2,4-Dinitrophenol	EPA 625.1	10300024	NELAP	LA
6185 - 2,4-Dinitrotoluene (2,4-DNT)	EPA 625.1	10300024	NELAP	LA
6005 - 2,6-Dichlorophenol	EPA 625.1	10300024	NELAP	LA
6190 - 2,6-Dinitrotoluene (2,6-DNT)	EPA 625.1	10300024	NELAP	LA
5795 - 2-Chloronaphthalene	EPA 625.1	10300024	NELAP	LA
5800 - 2-Chlorophenol	EPA 625.1	10300024	NELAP	LA
6360 - 2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 625.1	10300024	NELAP	LA
6400 - 2-Methylphenol (o-Cresol)	EPA 625.1	10300024	NELAP	LA
6490 - 2-Nitrophenol	EPA 625.1	10300024	NELAP	LA
5945 - 3,3'-Dichlorobenzidine	EPA 625.1	10300024	NELAP	LA
6405 - 3-Methylphenol (m-Cresol)	EPA 625.1	10300024	NELAP	LA
5660 - 4-Bromophenyl phenyl ether	EPA 625.1	10300024	NELAP	LA
5700 - 4-Chloro-3-methylphenol	EPA 625.1	10300024	NELAP	LA
5825 - 4-Chlorophenyl phenylether	EPA 625.1	10300024	NELAP	LA
6410 - 4-Methylphenol (p-Cresol)	EPA 625.1	10300024	NELAP	LA
6500 - 4-Nitrophenol	EPA 625.1	10300024	NELAP	LA
5500 - Acenaphthene	EPA 625.1	10300024	NELAP	LA
5505 - Acenaphthylene	EPA 625.1	10300024	NELAP	LA
5555 - Anthracene	EPA 625.1	10300024	NELAP	LA
5595 - Benzidine	EPA 625.1	10300024	NELAP	LA
5575 - Benzo(a)anthracene	EPA 625.1	10300024	NELAP	LA
5580 - Benzo(a)pyrene	EPA 625.1	10300024	NELAP	LA
5585 - Benzo(b)fluoranthene	EPA 625.1	10300024	NELAP	LA
5590 - Benzo(g,h,i)perylene	EPA 625.1	10300024	NELAP	LA
5600 - Benzo(k)fluoranthene	EPA 625.1	10300024	NELAP	LA
5670 - Butyl benzyl phthalate	EPA 625.1	10300024	NELAP	LA
5680 - Carbazole	EPA 625.1	10300024	NELAP	LA
5855 - Chrysene	EPA 625.1	10300024	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
6065 - Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 625.1	10300024	NELAP	LA
5925 - Di-n-butyl phthalate	EPA 625.1	10300024	NELAP	LA
6200 - Di-n-octyl phthalate	EPA 625.1	10300024	NELAP	LA
5895 - Dibenzo(a,h)anthracene	EPA 625.1	10300024	NELAP	LA
6070 - Diethyl phthalate	EPA 625.1	10300024	NELAP	LA
6135 - Dimethyl phthalate	EPA 625.1	10300024	NELAP	LA
6265 - Fluoranthene	EPA 625.1	10300024	NELAP	LA
6270 - Fluorene	EPA 625.1	10300024	NELAP	LA
6275 - Hexachlorobenzene	EPA 625.1	10300024	NELAP	LA
4835 - Hexachlorobutadiene	EPA 625.1	10300024	NELAP	LA
6285 - Hexachlorocyclopentadiene	EPA 625.1	10300024	NELAP	LA
4840 - Hexachloroethane	EPA 625.1	10300024	NELAP	LA
6315 - Indeno(1,2,3-cd)pyrene	EPA 625.1	10300024	NELAP	LA
6320 - Isophorone	EPA 625.1	10300024	NELAP	LA
5005 - Naphthalene	EPA 625.1	10300024	NELAP	LA
5015 - Nitrobenzene	EPA 625.1	10300024	NELAP	LA
6605 - Pentachlorophenol	EPA 625.1	10300024	NELAP	LA
6615 - Phenanthrene	EPA 625.1	10300024	NELAP	LA
6625 - Phenol	EPA 625.1	10300024	NELAP	LA
6665 - Pyrene	EPA 625.1	10300024	NELAP	LA
5862 - Total Cresols	EPA 625.1	10300024	NELAP	LA
5760 - bis(2-Chloroethoxy)methane	EPA 625.1	10300024	NELAP	LA
5765 - bis(2-Chloroethyl) ether	EPA 625.1	10300024	NELAP	LA
5875 - n-Decane	EPA 625.1	10300024	NELAP	LA
6545 - n-Nitrosodi-n-propylamine	EPA 625.1	10300024	NELAP	LA
6530 - n-Nitrosodimethylamine	EPA 625.1	10300024	NELAP	LA
6535 - n-Nitrosodiphenylamine	EPA 625.1	10300024	NELAP	LA
6580 - n-Octadecane	EPA 625.1	10300024	NELAP	LA
5105 - 1,1,1,2-Tetrachloroethane	EPA 8260D	10307127	NELAP	LA
5160 - 1,1,1-Trichloroethane	EPA 8260D	10307127	NELAP	LA
5110 - 1,1,2,2-Tetrachloroethane	EPA 8260D	10307127	NELAP	LA
5165 - 1,1,2-Trichloroethane	EPA 8260D	10307127	NELAP	LA
4630 - 1,1-Dichloroethane	EPA 8260D	10307127	NELAP	LA
4640 - 1,1-Dichloroethylene	EPA 8260D	10307127	NELAP	LA
4670 - 1,1-Dichloropropene	EPA 8260D	10307127	NELAP	LA
5150 - 1,2,3-Trichlorobenzene	EPA 8260D	10307127	NELAP	LA
5180 - 1,2,3-Trichloropropane	EPA 8260D	10307127	NELAP	LA
5155 - 1,2,4-Trichlorobenzene	EPA 8260D	10307127	NELAP	LA
5210 - 1,2,4-Trimethylbenzene	EPA 8260D	10307127	NELAP	LA
4570 - 1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	10307127	NELAP	LA
4585 - 1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	10307127	NELAP	LA
4610 - 1,2-Dichlorobenzene	EPA 8260D	10307127	NELAP	LA
4635 - 1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	10307127	NELAP	LA
4655 - 1,2-Dichloropropane	EPA 8260D	10307127	NELAP	LA
5215 - 1,3,5-Trimethylbenzene	EPA 8260D	10307127	NELAP	LA
4615 - 1,3-Dichlorobenzene	EPA 8260D	10307127	NELAP	LA
4660 - 1,3-Dichloropropane	EPA 8260D	10307127	NELAP	LA
4620 - 1,4-Dichlorobenzene	EPA 8260D	10307127	NELAP	LA
4665 - 2,2-Dichloropropane	EPA 8260D	10307127	NELAP	LA
4410 - 2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	10307127	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
4500 - 2-Chloroethyl vinyl ether	EPA 8260D	10307127	NELAP	LA
4535 - 2-Chlorotoluene	EPA 8260D	10307127	NELAP	LA
4860 - 2-Hexanone	EPA 8260D	10307127	NELAP	LA
4540 - 4-Chlorotoluene	EPA 8260D	10307127	NELAP	LA
4910 - 4-Isopropyltoluene (p-Cymene)	EPA 8260D	10307127	NELAP	LA
4995 - 4-Methyl-2-pentanone (MIBK)	EPA 8260D	10307127	NELAP	LA
4315 - Acetone	EPA 8260D	10307127	NELAP	LA
4320 - Acetonitrile	EPA 8260D	10307127	NELAP	LA
4325 - Acrolein (Propenal)	EPA 8260D	10307127	NELAP	LA
4330 - Acrylamide	EPA 8260D	10307127	NELAP	LA
4340 - Acrylonitrile	EPA 8260D	10307127	NELAP	LA
4375 - Benzene	EPA 8260D	10307127	NELAP	LA
4385 - Bromobenzene	EPA 8260D	10307127	NELAP	LA
4390 - Bromochloromethane	EPA 8260D	10307127	NELAP	LA
4395 - Bromodichloromethane	EPA 8260D	10307127	NELAP	LA
4400 - Bromoform	EPA 8260D	10307127	NELAP	LA
4450 - Carbon disulfide	EPA 8260D	10307127	NELAP	LA
4455 - Carbon tetrachloride	EPA 8260D	10307127	NELAP	LA
4475 - Chlorobenzene	EPA 8260D	10307127	NELAP	LA
4575 - Chlorodibromomethane (dibromochloromethane)	EPA 8260D	10307127	NELAP	LA
4485 - Chloroethane (Ethyl chloride)	EPA 8260D	10307127	NELAP	LA
4505 - Chloroform	EPA 8260D	10307127	NELAP	LA
9375 - Di-isopropylether (DIPE) (Isopropyl ether)	EPA 8260D	10307127	NELAP	LA
4595 - Dibromomethane (Methylene bromide)	EPA 8260D	10307127	NELAP	LA
4625 - Dichlorodifluoromethane (Freon-12)	EPA 8260D	10307127	NELAP	LA
4750 - Ethanol	EPA 8260D	10307127	NELAP	LA
4770 - Ethyl-t-butyl ether (ETBE) (2-Ethoxy-2-methylpropane)	EPA 8260D	10307127	NELAP	LA
4765 - Ethylbenzene	EPA 8260D	10307127	NELAP	LA
4835 - Hexachlorobutadiene	EPA 8260D	10307127	NELAP	LA
4840 - Hexachloroethane	EPA 8260D	10307127	NELAP	LA
4900 - Isopropylbenzene (Cumene)	EPA 8260D	10307127	NELAP	LA
4950 - Methyl bromide (Bromomethane)	EPA 8260D	10307127	NELAP	LA
4960 - Methyl chloride (Chloromethane)	EPA 8260D	10307127	NELAP	LA
5000 - Methyl tert-butyl ether (MTBE)	EPA 8260D	10307127	NELAP	LA
4975 - Methylene chloride (Dichloromethane)	EPA 8260D	10307127	NELAP	LA
5005 - Naphthalene	EPA 8260D	10307127	NELAP	LA
5015 - Nitrobenzene	EPA 8260D	10307127	NELAP	LA
5100 - Styrene	EPA 8260D	10307127	NELAP	LA
4370 - T-amylmethylether (TAME)	EPA 8260D	10307127	NELAP	LA
5115 - Tetrachloroethylene (Perchloroethylene)	EPA 8260D	10307127	NELAP	LA
5140 - Toluene	EPA 8260D	10307127	NELAP	LA
4027 - Total BTEX	EPA 8260D	10307127	NELAP	LA
5170 - Trichloroethene (Trichloroethylene)	EPA 8260D	10307127	NELAP	LA
5175 - Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	10307127	NELAP	LA
5225 - Vinyl acetate	EPA 8260D	10307127	NELAP	LA
5235 - Vinyl chloride	EPA 8260D	10307127	NELAP	LA
5260 - Xylene (total)	EPA 8260D	10307127	NELAP	LA
4645 - cis-1,2-Dichloroethylene	EPA 8260D	10307127	NELAP	LA

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Analyte	Method Name	Method Code	Type	AB
4680 - cis-1,3-Dichloropropene	EPA 8260D	10307127	NELAP	LA
5240 - m+p-xylene	EPA 8260D	10307127	NELAP	LA
5245 - m-Xylene	EPA 8260D	10307127	NELAP	LA
4435 - n-Butylbenzene	EPA 8260D	10307127	NELAP	LA
5090 - n-Propylbenzene	EPA 8260D	10307127	NELAP	LA
5250 - o-Xylene	EPA 8260D	10307127	NELAP	LA
5255 - p-Xylene	EPA 8260D	10307127	NELAP	LA
4440 - sec-Butylbenzene	EPA 8260D	10307127	NELAP	LA
4420 - tert-Butyl alcohol	EPA 8260D	10307127	NELAP	LA
4445 - tert-Butylbenzene	EPA 8260D	10307127	NELAP	LA
4700 - trans-1,2-Dichloroethylene	EPA 8260D	10307127	NELAP	LA
4685 - trans-1,3-Dichloropropylene	EPA 8260D	10307127	NELAP	LA
1725 - Total, Fixed, and Volatile Residue	SM 2540 G, 18th ED	20005203	NELAP	LA
1950 - Residue-total	SM 2540 G-2011, Rev.22nd	20005270	NELAP	LA
1725 - Total, Fixed, and Volatile Residue	SM 2540 G-2011, Rev.22nd	20005270	NELAP	LA
1820 - Nitrate-Nitrite	SM 4500-$NO3^-$ I-2016	20018585	NELAP	LA
2525 - Escherichia coli	SM 9223 B-2004	20037687	NELAP	LA
2500 - Total coliforms	SM 9223 B-2004	20037687	NELAP	LA
2525 - Escherichia coli	SM 9223 B-2016	20037701	NELAP	LA
2500 - Total coliforms	SM 9223 B-2016	20037701	NELAP	LA
1605 - Color	SM 2120 B-2011	20039310	NELAP	LA
1500 - Acidity, as CaCO3	SM 2310 B-2011	20044615	NELAP	LA
1505 - Alkalinity as CaCO3	SM 2320 B-2011	20045618	NELAP	LA
1760 - Hardness (calc.)	SM 2340 B-2011	20046611	NELAP	LA
2055 - Turbidity	SM 2130 B-2011	20048220	NELAP	LA
1610 - Conductivity	SM 2510 B-2011	20048617	NELAP	LA
1950 - Residue-total	SM 2540 B-2011	20049416	NELAP	LA
1950 - Residue-total	SM 2540 B-2015	20049438	NELAP	LA
1955 - Residue-filterable (TDS)	SM 2540 C-2011	20050413	NELAP	LA
1955 - Residue-filterable (TDS)	SM 2540 C-2015	20050435	NELAP	LA
1960 - Residue-nonfilterable (TSS)	SM 2540 D-2011	20051212	NELAP	LA
1960 - Residue-nonfilterable (TSS)	SM 2540 D-2015	20051223	NELAP	LA
1970 - Residue-volatile	SM 2540 E-2011	20051596	NELAP	LA
1970 - Residue-volatile	SM 2540 E-2015	20051610	NELAP	LA
1965 - Residue-settleable	SM 2540 F-2011	20052215	NELAP	LA
1965 - Residue-settleable	SM 2540 F-2015	20052226	NELAP	LA
2030 - Temperature, deg. C	SM 2550 B-2000	20053218	NELAP	LA
2030 - Temperature, deg. C	SM 2550 B-2010	20053229	NELAP	LA
1635 - Cyanide	SM 4500-CN^- C-2011	20065663	NELAP	LA
1635 - Cyanide	SM 4500-CN^- C-2016	20065672	NELAP	LA
1045 - Chromium VI	SM 3500-Cr B-2011	20066266	NELAP	LA
1940 - Total residual chlorine	SM 4500-Cl G-2011	20081623	NELAP	LA
1635 - Cyanide	SM 4500-CN^- E-2011	20096428	NELAP	LA
1635 - Cyanide	SM 4500-CN^- E-2016	20096439	NELAP	LA
1510 - Amenable cyanide	SM 4500-CN^- G-2011	20097227	NELAP	LA
1635 - Cyanide	SM 4500-CN^- G-2011	20097227	NELAP	LA
1510 - Amenable cyanide	SM 4500-CN^- G-2016	20097238	NELAP	LA
1900 - pH	SM 4500-H+ B-2011	20105220	NELAP	LA
1515 - Ammonia as N	SM 4500-NH3 B-2011	20106018	NELAP	LA
1795 - Kjeldahl nitrogen - total	SM 4500-NH3 C-2011	20108412	NELAP	LA
3751 - Ammonia	SM 4500-NH3 D-2011	20109415	NELAP	LA
1515 - Ammonia as N	SM 4500-NH3 D-2011	20109415	NELAP	LA
1820 - Nitrate-Nitrite	SM 4500 NO3 F-2011, Rev.22nd	20116410	NELAP	LA
1820 - Nitrate-Nitrite	SM 4500-$NO3^-$ F-2016	20117684	NELAP	LA
1795 - Kjeldahl nitrogen - total	SM 4500-Norg B-2011	20119215	NELAP	LA

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Analyte	Method Name	Method Code	Type	AB
1795 - Kjeldahl nitrogen - total	SM 4500-Norg D-2011	20120289	NELAP	LA
1880 - Oxygen, dissolved	SM 4500-O G-2011	20121668	NELAP	LA
1880 - Oxygen, dissolved	SM 4500-O G-2016	20121679	NELAP	LA
1910 - Total Phosphorus	SM 4500-P B 5-2011	20123368	NELAP	LA
1870 - Orthophosphate as P	SM 4500-P E-2011	20124225	NELAP	LA
1910 - Total Phosphorus	SM 4500-P E-2011	20124225	NELAP	LA
2005 - Sulfide	SM 4500-$S2^-$ F-2011	20126663	NELAP	LA
2015 - Sulfite-SO3	SM 4500-$SO3^-$ B-2011	20130636	NELAP	LA
1530 - Biochemical oxygen demand	SM 5210 B-2016	20135039	NELAP	LA
1555 - Carbonaceous BOD, CBOD	SM 5210 B-2016	20135039	NELAP	LA
1530 - Biochemical oxygen demand	SM 5210 B-2011	20135266	NELAP	LA
1555 - Carbonaceous BOD, CBOD	SM 5210 B-2011	20135266	NELAP	LA
1565 - Chemical oxygen demand	SM 5220 D-2011	20136816	NELAP	LA
2040 - Total Organic Carbon	SM 5310 C-2011	20138823	NELAP	LA
2040 - Total Organic Carbon	SM 5310 C-2014	20138834	NELAP	LA
2025 - Surfactants - MBAS	SM 5540 C-2011	20145066	NELAP	LA
5105 - 1,1,1,2-Tetrachloroethane	SM 6200 B-2011	20147017	NELAP	LA
5160 - 1,1,1-Trichloroethane	SM 6200 B-2011	20147017	NELAP	LA
5110 - 1,1,2,2-Tetrachloroethane	SM 6200 B-2011	20147017	NELAP	LA
5165 - 1,1,2-Trichloroethane	SM 6200 B-2011	20147017	NELAP	LA
4630 - 1,1-Dichloroethane	SM 6200 B-2011	20147017	NELAP	LA
4640 - 1,1-Dichloroethylene	SM 6200 B-2011	20147017	NELAP	LA
4670 - 1,1-Dichloropropene	SM 6200 B-2011	20147017	NELAP	LA
5150 - 1,2,3-Trichlorobenzene	SM 6200 B-2011	20147017	NELAP	LA
5180 - 1,2,3-Trichloropropane	SM 6200 B-2011	20147017	NELAP	LA
5155 - 1,2,4-Trichlorobenzene	SM 6200 B-2011	20147017	NELAP	LA
5210 - 1,2,4-Trimethylbenzene	SM 6200 B-2011	20147017	NELAP	LA
4585 - 1,2-Dibromoethane (EDB, Ethylene dibromide)	SM 6200 B-2011	20147017	NELAP	LA
4610 - 1,2-Dichlorobenzene	SM 6200 B-2011	20147017	NELAP	LA
4635 - 1,2-Dichloroethane (Ethylene dichloride)	SM 6200 B-2011	20147017	NELAP	LA
4655 - 1,2-Dichloropropane	SM 6200 B-2011	20147017	NELAP	LA
5215 - 1,3,5-Trimethylbenzene	SM 6200 B-2011	20147017	NELAP	LA
4615 - 1,3-Dichlorobenzene	SM 6200 B-2011	20147017	NELAP	LA
4660 - 1,3-Dichloropropane	SM 6200 B-2011	20147017	NELAP	LA
4620 - 1,4-Dichlorobenzene	SM 6200 B-2011	20147017	NELAP	LA
4665 - 2,2-Dichloropropane	SM 6200 B-2011	20147017	NELAP	LA
4410 - 2-Butanone (Methyl ethyl ketone, MEK)	SM 6200 B-2011	20147017	NELAP	LA
4535 - 2-Chlorotoluene	SM 6200 B-2011	20147017	NELAP	LA
4860 - 2-Hexanone	SM 6200 B-2011	20147017	NELAP	LA
4540 - 4-Chlorotoluene	SM 6200 B-2011	20147017	NELAP	LA
4910 - 4-Isopropyltoluene (p-Cymene)	SM 6200 B-2011	20147017	NELAP	LA
4995 - 4-Methyl-2-pentanone (MIBK)	SM 6200 B-2011	20147017	NELAP	LA
4315 - Acetone	SM 6200 B-2011	20147017	NELAP	LA
4375 - Benzene	SM 6200 B-2011	20147017	NELAP	LA
4385 - Bromobenzene	SM 6200 B-2011	20147017	NELAP	LA
4390 - Bromochloromethane	SM 6200 B-2011	20147017	NELAP	LA
4395 - Bromodichloromethane	SM 6200 B-2011	20147017	NELAP	LA
4400 - Bromoform	SM 6200 B-2011	20147017	NELAP	LA
4455 - Carbon tetrachloride	SM 6200 B-2011	20147017	NELAP	LA
4475 - Chlorobenzene	SM 6200 B-2011	20147017	NELAP	LA
4575 - Chlorodibromomethane (dibromochloromethane)	SM 6200 B-2011	20147017	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
4485 - Chloroethane (Ethyl chloride)	SM 6200 B-2011	20147017	NELAP	LA
4505 - Chloroform	SM 6200 B-2011	20147017	NELAP	LA
9375 - Di-isopropylether (DIPE) (Isopropyl ether)	SM 6200 B-2011	20147017	NELAP	LA
4625 - Dichlorodifluoromethane (Freon-12)	SM 6200 B-2011	20147017	NELAP	LA
4750 - Ethanol	SM 6200 B-2011	20147017	NELAP	LA
4770 - Ethyl-t-butyl ether (ETBE) (2-Ethoxy-2-methylpropane)	SM 6200 B-2011	20147017	NELAP	LA
4765 - Ethylbenzene	SM 6200 B-2011	20147017	NELAP	LA
4900 - Isopropylbenzene (Cumene)	SM 6200 B-2011	20147017	NELAP	LA
4950 - Methyl bromide (Bromomethane)	SM 6200 B-2011	20147017	NELAP	LA
4960 - Methyl chloride (Chloromethane)	SM 6200 B-2011	20147017	NELAP	LA
5000 - Methyl tert-butyl ether (MTBE)	SM 6200 B-2011	20147017	NELAP	LA
4975 - Methylene chloride (Dichloromethane)	SM 6200 B-2011	20147017	NELAP	LA
5005 - Naphthalene	SM 6200 B-2011	20147017	NELAP	LA
5100 - Styrene	SM 6200 B-2011	20147017	NELAP	LA
4370 - T-amylmethylether (TAME)	SM 6200 B-2011	20147017	NELAP	LA
5115 - Tetrachloroethylene (Perchloroethylene)	SM 6200 B-2011	20147017	NELAP	LA
5140 - Toluene	SM 6200 B-2011	20147017	NELAP	LA
4027 - Total BTEX	SM 6200 B-2011	20147017	NELAP	LA
5170 - Trichloroethene (Trichloroethylene)	SM 6200 B-2011	20147017	NELAP	LA
5175 - Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	SM 6200 B-2011	20147017	NELAP	LA
5225 - Vinyl acetate	SM 6200 B-2011	20147017	NELAP	LA
5235 - Vinyl chloride	SM 6200 B-2011	20147017	NELAP	LA
5260 - Xylene (total)	SM 6200 B-2011	20147017	NELAP	LA
4645 - cis-1,2-Dichloroethylene	SM 6200 B-2011	20147017	NELAP	LA
4680 - cis-1,3-Dichloropropene	SM 6200 B-2011	20147017	NELAP	LA
5240 - m+p-xylene	SM 6200 B-2011	20147017	NELAP	LA
4435 - n-Butylbenzene	SM 6200 B-2011	20147017	NELAP	LA
5090 - n-Propylbenzene	SM 6200 B-2011	20147017	NELAP	LA
5250 - o-Xylene	SM 6200 B-2011	20147017	NELAP	LA
4440 - sec-Butylbenzene	SM 6200 B-2011	20147017	NELAP	LA
4420 - tert-Butyl alcohol	SM 6200 B-2011	20147017	NELAP	LA
4445 - tert-Butylbenzene	SM 6200 B-2011	20147017	NELAP	LA
4700 - trans-1,2-Dichloroethylene	SM 6200 B-2011	20147017	NELAP	LA
4685 - trans-1,3-Dichloropropylene	SM 6200 B-2011	20147017	NELAP	LA
8655 - 2,4,5-T	SM 6640 B-2006	20155026	NELAP	LA
8545 - 2,4-D	SM 6640 B-2006	20155026	NELAP	LA
8650 - Silvex (2,4,5-TP)	SM 6640 B-2006	20155026	NELAP	LA
6117 - Flash Point	ASTM D93-80	30005744	NELAP	LA
2530 - Fecal coliforms	IDEXX Colilert-18	60002688	NELAP	LA
6218 - EPH Aliphatic C19-C36	MA DEP EPH, Rev.1.1	90017202	NELAP	LA
6222 - EPH Aliphatic C9-C18	MA DEP EPH, Rev.1.1	90017202	NELAP	LA
6234 - EPH Aromatic C11-C22 Unadjusted	MA DEP EPH, Rev.1.1	90017202	NELAP	LA
100278 - Extractable Petroleum Hydrocarbons (EPH)	MA DEP EPH, Rev.1.1	90017202	NELAP	LA
5312 - VPH Aliphatic C6-C8	MA DEP VPH, Rev.1.1	90017406	NELAP	LA
5313 - VPH Aliphatic C8-C10	MA DEP VPH, Rev.1.1	90017406	NELAP	LA
5310 - VPH Aromatic >C8-C10	MA DEP VPH, Rev.1.1	90017406	NELAP	LA
5312 - VPH Aliphatic C6-C8	MA DEP VPH, Rev.2.1	90017451	NELAP	LA
5313 - VPH Aliphatic C8-C10	MA DEP VPH, Rev.2.1	90017451	NELAP	LA
5310 - VPH Aromatic >C8-C10	MA DEP VPH, Rev.2.1	90017451	NELAP	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
2051 - Total Petroleum Hydrocarbons (>C12-C28)	TNRCC 1005, Rev.3	90019208	NELAP	LA
2052 - Total Petroleum Hydrocarbons (>C28-C35)	TNRCC 1005, Rev.3	90019208	NELAP	LA
9302 - Total Petroleum Hydrocarbons (C6-C12)	TNRCC 1005, Rev.3	90019208	NELAP	LA
9308 - Total Petroleum Hydrocarbons (C6-C35)	TNRCC 1005, Rev.3	90019208	NELAP	LA
2050 - Total Petroleum Hydrocarbons (TPH)	TNRCC 1005, Rev.3	90019208	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
2050 - Total Petroleum Hydrocarbons (TPH)	Texas 1006	867	NELAP	LA
6117 - Flash Point	ASTM D93	2204	NELAP	LA
1827 - Total Nitrogen	TKN + Total nitrate-nitrite	2880	NELAP	LA
1865 - Organic nitrogen	TKN minus AMMONIA	2881	NELAP	LA
100667 - Chromium(III)	EPA 6010C minus EPA 7196A (calc.)	9411	NELAP	LA
100667 - Chromium(III)	EPA 6010D minus EPA 7196A (calc.)	9413	NELAP	LA
100667 - Chromium(III)	EPA 6020B minus EPA 7196A (calc.)	9415	NELAP	LA
1923 - Reactive Cyanide	EPA 7.3.3.2	10001204	NELAP	LA
1925 - Reactive sulfide	EPA 7.3.4.2	10001408	NELAP	LA
1910 - Total Phosphorus	EPA 365.4	10071202	NELAP	LA
1466 - Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311	10118806	NELAP	LA
1460 - Synthetic Precipitation Leaching Procedure	EPA 1312	10119003	NELAP	LA
1401 - Acid Digestion of waters for Total Recoverable or Dissolved Metals	EPA 3005A	10133207	NELAP	LA
1400 - Acid Digestion of Sediments, Sludges, and soils	EPA 3050B	10135601	NELAP	LA
1402 - Alkaline Digestion for Hexavalent Chromium	EPA 3060A	10136604	NELAP	LA
1444 - Separatory Funnel Liquid-liquid extraction	EPA 3510C	10138202	NELAP	LA
1452 - Soxhlet Extraction	EPA 3540C	10140202	NELAP	LA
1428 - Microwave Extraction	EPA 3546	10141205	NELAP	LA
1468 - Ultrasonic Extraction	EPA 3550B	10141807	NELAP	LA
1468 - Ultrasonic Extraction	EPA 3550C	10142004	NELAP	LA
1470 - Waste Dilution	EPA 3580A	10143007	NELAP	LA
2020 - Sulfuric acid/permanganate clean-up	EPA 3665A	10148808	NELAP	LA
5238 - Volatile Organic Compounds in Soils and Other Solid Matrices Using Equilibrium Headspace Analysis	EPA 5021	10152804	NELAP	LA
1406 - Purge and trap for aqueous phase samples	EPA 5030A	10153205	NELAP	LA
1406 - Purge and trap for aqueous phase samples	EPA 5030B	10153409	NELAP	LA
1450 - Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples	EPA 5035	10154004	NELAP	LA
1408 - Bomb Preparation Method for Solid	EPA 5050	10155007	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
Waste				
1000 - Aluminum	EPA 6010B	10155609	NELAP	LA
1005 - Antimony	EPA 6010B	10155609	NELAP	LA
1010 - Arsenic	EPA 6010B	10155609	NELAP	LA
1015 - Barium	EPA 6010B	10155609	NELAP	LA
1020 - Beryllium	EPA 6010B	10155609	NELAP	LA
1025 - Boron	EPA 6010B	10155609	NELAP	LA
1030 - Cadmium	EPA 6010B	10155609	NELAP	LA
1035 - Calcium	EPA 6010B	10155609	NELAP	LA
1040 - Chromium	EPA 6010B	10155609	NELAP	LA
1050 - Cobalt	EPA 6010B	10155609	NELAP	LA
1055 - Copper	EPA 6010B	10155609	NELAP	LA
1070 - Iron	EPA 6010B	10155609	NELAP	LA
1075 - Lead	EPA 6010B	10155609	NELAP	LA
1085 - Magnesium	EPA 6010B	10155609	NELAP	LA
1090 - Manganese	EPA 6010B	10155609	NELAP	LA
1100 - Molybdenum	EPA 6010B	10155609	NELAP	LA
1105 - Nickel	EPA 6010B	10155609	NELAP	LA
1125 - Potassium	EPA 6010B	10155609	NELAP	LA
1140 - Selenium	EPA 6010B	10155609	NELAP	LA
1990 - Silica as SiO2	EPA 6010B	10155609	NELAP	LA
1150 - Silver	EPA 6010B	10155609	NELAP	LA
1155 - Sodium	EPA 6010B	10155609	NELAP	LA
1160 - Strontium	EPA 6010B	10155609	NELAP	LA
1165 - Thallium	EPA 6010B	10155609	NELAP	LA
1175 - Tin	EPA 6010B	10155609	NELAP	LA
1180 - Titanium	EPA 6010B	10155609	NELAP	LA
1910 - Total Phosphorus	EPA 6010B	10155609	NELAP	LA
1185 - Vanadium	EPA 6010B	10155609	NELAP	LA
1190 - Zinc	EPA 6010B	10155609	NELAP	LA
1000 - Aluminum	EPA 6010C	10155803	NELAP	LA
1005 - Antimony	EPA 6010C	10155803	NELAP	LA
1010 - Arsenic	EPA 6010C	10155803	NELAP	LA
1015 - Barium	EPA 6010C	10155803	NELAP	LA
1020 - Beryllium	EPA 6010C	10155803	NELAP	LA
1025 - Boron	EPA 6010C	10155803	NELAP	LA
1030 - Cadmium	EPA 6010C	10155803	NELAP	LA
1035 - Calcium	EPA 6010C	10155803	NELAP	LA
1040 - Chromium	EPA 6010C	10155803	NELAP	LA
1050 - Cobalt	EPA 6010C	10155803	NELAP	LA
1055 - Copper	EPA 6010C	10155803	NELAP	LA
1070 - Iron	EPA 6010C	10155803	NELAP	LA
1075 - Lead	EPA 6010C	10155803	NELAP	LA
1085 - Magnesium	EPA 6010C	10155803	NELAP	LA
1090 - Manganese	EPA 6010C	10155803	NELAP	LA
1100 - Molybdenum	EPA 6010C	10155803	NELAP	LA
1105 - Nickel	EPA 6010C	10155803	NELAP	LA
1125 - Potassium	EPA 6010C	10155803	NELAP	LA
1140 - Selenium	EPA 6010C	10155803	NELAP	LA
1990 - Silica as SiO2	EPA 6010C	10155803	NELAP	LA
1150 - Silver	EPA 6010C	10155803	NELAP	LA
1155 - Sodium	EPA 6010C	10155803	NELAP	LA
1160 - Strontium	EPA 6010C	10155803	NELAP	LA
1165 - Thallium	EPA 6010C	10155803	NELAP	LA
1175 - Tin	EPA 6010C	10155803	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
1180 - Titanium	EPA 6010C	10155803	NELAP	LA
1910 - Total Phosphorus	EPA 6010C	10155803	NELAP	LA
1185 - Vanadium	EPA 6010C	10155803	NELAP	LA
1190 - Zinc	EPA 6010C	10155803	NELAP	LA
1000 - Aluminum	EPA 6010D	10155916	NELAP	LA
1005 - Antimony	EPA 6010D	10155916	NELAP	LA
1010 - Arsenic	EPA 6010D	10155916	NELAP	LA
1015 - Barium	EPA 6010D	10155916	NELAP	LA
1020 - Beryllium	EPA 6010D	10155916	NELAP	LA
1025 - Boron	EPA 6010D	10155916	NELAP	LA
1030 - Cadmium	EPA 6010D	10155916	NELAP	LA
1035 - Calcium	EPA 6010D	10155916	NELAP	LA
1040 - Chromium	EPA 6010D	10155916	NELAP	LA
1050 - Cobalt	EPA 6010D	10155916	NELAP	LA
1055 - Copper	EPA 6010D	10155916	NELAP	LA
1070 - Iron	EPA 6010D	10155916	NELAP	LA
1075 - Lead	EPA 6010D	10155916	NELAP	LA
1085 - Magnesium	EPA 6010D	10155916	NELAP	LA
1090 - Manganese	EPA 6010D	10155916	NELAP	LA
1100 - Molybdenum	EPA 6010D	10155916	NELAP	LA
1105 - Nickel	EPA 6010D	10155916	NELAP	LA
1125 - Potassium	EPA 6010D	10155916	NELAP	LA
1140 - Selenium	EPA 6010D	10155916	NELAP	LA
1990 - Silica as SiO2	EPA 6010D	10155916	NELAP	LA
1150 - Silver	EPA 6010D	10155916	NELAP	LA
1155 - Sodium	EPA 6010D	10155916	NELAP	LA
1160 - Strontium	EPA 6010D	10155916	NELAP	LA
1165 - Thallium	EPA 6010D	10155916	NELAP	LA
1175 - Tin	EPA 6010D	10155916	NELAP	LA
1180 - Titanium	EPA 6010D	10155916	NELAP	LA
1910 - Total Phosphorus	EPA 6010D	10155916	NELAP	LA
1185 - Vanadium	EPA 6010D	10155916	NELAP	LA
1190 - Zinc	EPA 6010D	10155916	NELAP	LA
1000 - Aluminum	EPA 6020	10156000	NELAP	LA
1005 - Antimony	EPA 6020	10156000	NELAP	LA
1010 - Arsenic	EPA 6020	10156000	NELAP	LA
1015 - Barium	EPA 6020	10156000	NELAP	LA
1020 - Beryllium	EPA 6020	10156000	NELAP	LA
1025 - Boron	EPA 6020	10156000	NELAP	LA
1030 - Cadmium	EPA 6020	10156000	NELAP	LA
1035 - Calcium	EPA 6020	10156000	NELAP	LA
1040 - Chromium	EPA 6020	10156000	NELAP	LA
1050 - Cobalt	EPA 6020	10156000	NELAP	LA
1055 - Copper	EPA 6020	10156000	NELAP	LA
1070 - Iron	EPA 6020	10156000	NELAP	LA
1075 - Lead	EPA 6020	10156000	NELAP	LA
1085 - Magnesium	EPA 6020	10156000	NELAP	LA
1090 - Manganese	EPA 6020	10156000	NELAP	LA
1100 - Molybdenum	EPA 6020	10156000	NELAP	LA
1105 - Nickel	EPA 6020	10156000	NELAP	LA
1125 - Potassium	EPA 6020	10156000	NELAP	LA
1140 - Selenium	EPA 6020	10156000	NELAP	LA
1150 - Silver	EPA 6020	10156000	NELAP	LA
1155 - Sodium	EPA 6020	10156000	NELAP	LA
1160 - Strontium	EPA 6020	10156000	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
1165 - Thallium	EPA 6020	10156000	NELAP	LA
1175 - Tin	EPA 6020	10156000	NELAP	LA
1180 - Titanium	EPA 6020	10156000	NELAP	LA
1910 - Total Phosphorus	EPA 6020	10156000	NELAP	LA
1185 - Vanadium	EPA 6020	10156000	NELAP	LA
1190 - Zinc	EPA 6020	10156000	NELAP	LA
1000 - Aluminum	EPA 6020A	10156408	NELAP	LA
1005 - Antimony	EPA 6020A	10156408	NELAP	LA
1010 - Arsenic	EPA 6020A	10156408	NELAP	LA
1015 - Barium	EPA 6020A	10156408	NELAP	LA
1020 - Beryllium	EPA 6020A	10156408	NELAP	LA
1025 - Boron	EPA 6020A	10156408	NELAP	LA
1030 - Cadmium	EPA 6020A	10156408	NELAP	LA
1035 - Calcium	EPA 6020A	10156408	NELAP	LA
1040 - Chromium	EPA 6020A	10156408	NELAP	LA
1050 - Cobalt	EPA 6020A	10156408	NELAP	LA
1055 - Copper	EPA 6020A	10156408	NELAP	LA
1070 - Iron	EPA 6020A	10156408	NELAP	LA
1075 - Lead	EPA 6020A	10156408	NELAP	LA
1085 - Magnesium	EPA 6020A	10156408	NELAP	LA
1090 - Manganese	EPA 6020A	10156408	NELAP	LA
1100 - Molybdenum	EPA 6020A	10156408	NELAP	LA
1105 - Nickel	EPA 6020A	10156408	NELAP	LA
1125 - Potassium	EPA 6020A	10156408	NELAP	LA
1140 - Selenium	EPA 6020A	10156408	NELAP	LA
1150 - Silver	EPA 6020A	10156408	NELAP	LA
1155 - Sodium	EPA 6020A	10156408	NELAP	LA
1160 - Strontium	EPA 6020A	10156408	NELAP	LA
1165 - Thallium	EPA 6020A	10156408	NELAP	LA
1175 - Tin	EPA 6020A	10156408	NELAP	LA
1180 - Titanium	EPA 6020A	10156408	NELAP	LA
1910 - Total Phosphorus	EPA 6020A	10156408	NELAP	LA
1185 - Vanadium	EPA 6020A	10156408	NELAP	LA
1190 - Zinc	EPA 6020A	10156408	NELAP	LA
1000 - Aluminum	EPA 6020B	10156420	NELAP	LA
1005 - Antimony	EPA 6020B	10156420	NELAP	LA
1010 - Arsenic	EPA 6020B	10156420	NELAP	LA
1015 - Barium	EPA 6020B	10156420	NELAP	LA
1020 - Beryllium	EPA 6020B	10156420	NELAP	LA
1025 - Boron	EPA 6020B	10156420	NELAP	LA
1030 - Cadmium	EPA 6020B	10156420	NELAP	LA
1035 - Calcium	EPA 6020B	10156420	NELAP	LA
1040 - Chromium	EPA 6020B	10156420	NELAP	LA
1050 - Cobalt	EPA 6020B	10156420	NELAP	LA
1055 - Copper	EPA 6020B	10156420	NELAP	LA
1070 - Iron	EPA 6020B	10156420	NELAP	LA
1075 - Lead	EPA 6020B	10156420	NELAP	LA
1085 - Magnesium	EPA 6020B	10156420	NELAP	LA
1090 - Manganese	EPA 6020B	10156420	NELAP	LA
1100 - Molybdenum	EPA 6020B	10156420	NELAP	LA
1105 - Nickel	EPA 6020B	10156420	NELAP	LA
1125 - Potassium	EPA 6020B	10156420	NELAP	LA
1140 - Selenium	EPA 6020B	10156420	NELAP	LA
1150 - Silver	EPA 6020B	10156420	NELAP	LA
1155 - Sodium	EPA 6020B	10156420	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
1160 - Strontium	EPA 6020B	10156420	NELAP	LA
1165 - Thallium	EPA 6020B	10156420	NELAP	LA
1175 - Tin	EPA 6020B	10156420	NELAP	LA
1180 - Titanium	EPA 6020B	10156420	NELAP	LA
1910 - Total Phosphorus	EPA 6020B	10156420	NELAP	LA
1185 - Vanadium	EPA 6020B	10156420	NELAP	LA
1190 - Zinc	EPA 6020B	10156420	NELAP	LA
1080 - Lithium	EPA 7000B	10157707	NELAP	LA
1045 - Chromium VI	EPA 7196A	10162400	NELAP	LA
1095 - Mercury	EPA 7470A	10165807	NELAP	LA
1095 - Mercury	EPA 7471A	10166208	NELAP	LA
1095 - Mercury	EPA 7471B, Rev.2	10166457	NELAP	LA
9408 - Gasoline range organics (GRO)	EPA 8015B	10173601	NELAP	LA
9369 - Diesel range organics (DRO)	EPA 8015C	10173805	NELAP	LA
9408 - Gasoline range organics (GRO)	EPA 8015C	10173805	NELAP	LA
4720 - Diethylene glycol	EPA 8015C, Rev.3	10173816	NELAP	LA
4785 - Ethylene glycol	EPA 8015C, Rev.3	10173816	NELAP	LA
6657 - Propylene Glycol	EPA 8015C, Rev.3	10173816	NELAP	LA
9646 - Triethylene Glycol	EPA 8015C, Rev.3	10173816	NELAP	LA
7355 - 4,4'-DDD	EPA 8081B, Rev.2	10178811	NELAP	LA
7360 - 4,4'-DDE	EPA 8081B, Rev.2	10178811	NELAP	LA
7365 - 4,4'-DDT	EPA 8081B, Rev.2	10178811	NELAP	LA
7025 - Aldrin	EPA 8081B, Rev.2	10178811	NELAP	LA
7250 - Chlordane (tech.)	EPA 8081B, Rev.2	10178811	NELAP	LA
7260 - Chlorobenzilate	EPA 8081B, Rev.2	10178811	NELAP	LA
7470 - Dieldrin	EPA 8081B, Rev.2	10178811	NELAP	LA
7510 - Endosulfan I	EPA 8081B, Rev.2	10178811	NELAP	LA
7515 - Endosulfan II	EPA 8081B, Rev.2	10178811	NELAP	LA
7520 - Endosulfan sulfate	EPA 8081B, Rev.2	10178811	NELAP	LA
7540 - Endrin	EPA 8081B, Rev.2	10178811	NELAP	LA
7530 - Endrin aldehyde	EPA 8081B, Rev.2	10178811	NELAP	LA
7535 - Endrin ketone	EPA 8081B, Rev.2	10178811	NELAP	LA
7685 - Heptachlor	EPA 8081B, Rev.2	10178811	NELAP	LA
7690 - Heptachlor epoxide	EPA 8081B, Rev.2	10178811	NELAP	LA
6275 - Hexachlorobenzene	EPA 8081B, Rev.2	10178811	NELAP	LA
6285 - Hexachlorocyclopentadiene	EPA 8081B, Rev.2	10178811	NELAP	LA
7725 - Isodrin	EPA 8081B, Rev.2	10178811	NELAP	LA
7810 - Methoxychlor	EPA 8081B, Rev.2	10178811	NELAP	LA
7870 - Mirex	EPA 8081B, Rev.2	10178811	NELAP	LA
8250 - Toxaphene (Chlorinated camphene)	EPA 8081B, Rev.2	10178811	NELAP	LA
7110 - alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081B, Rev.2	10178811	NELAP	LA
7240 - alpha-Chlordane	EPA 8081B, Rev.2	10178811	NELAP	LA
7115 - beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081B, Rev.2	10178811	NELAP	LA
7105 - delta-BHC	EPA 8081B, Rev.2	10178811	NELAP	LA
7120 - gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081B, Rev.2	10178811	NELAP	LA
7245 - gamma-Chlordane	EPA 8081B, Rev.2	10178811	NELAP	LA
7910 - trans-Nonachlor	EPA 8081B, Rev.2	10178811	NELAP	LA
8880 - Aroclor-1016 (PCB-1016)	EPA 8082	10179007	NELAP	LA
8885 - Aroclor-1221 (PCB-1221)	EPA 8082	10179007	NELAP	LA
8890 - Aroclor-1232 (PCB-1232)	EPA 8082	10179007	NELAP	LA
8895 - Aroclor-1242 (PCB-1242)	EPA 8082	10179007	NELAP	LA
8900 - Aroclor-1248 (PCB-1248)	EPA 8082	10179007	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
8905 - Aroclor-1254 (PCB-1254)	EPA 8082	10179007	NELAP	LA
8910 - Aroclor-1260 (PCB-1260)	EPA 8082	10179007	NELAP	LA
8880 - Aroclor-1016 (PCB-1016)	EPA 8082A	10179201	NELAP	LA
100281 - Aroclor-1016 (PCB-1016) in Oil	EPA 8082A	10179201	NELAP	LA
8885 - Aroclor-1221 (PCB-1221)	EPA 8082A	10179201	NELAP	LA
100282 - Aroclor-1221 (PCB-1221) in Oil	EPA 8082A	10179201	NELAP	LA
8890 - Aroclor-1232 (PCB-1232)	EPA 8082A	10179201	NELAP	LA
100283 - Aroclor-1232 (PCB-1232) in Oil	EPA 8082A	10179201	NELAP	LA
8895 - Aroclor-1242 (PCB-1242)	EPA 8082A	10179201	NELAP	LA
100284 - Aroclor-1242 (PCB-1242) in Oil	EPA 8082A	10179201	NELAP	LA
8900 - Aroclor-1248 (PCB-1248)	EPA 8082A	10179201	NELAP	LA
100285 - Aroclor-1248 (PCB-1248) in Oil	EPA 8082A	10179201	NELAP	LA
8905 - Aroclor-1254 (PCB-1254)	EPA 8082A	10179201	NELAP	LA
100286 - Aroclor-1254 (PCB-1254) in Oil	EPA 8082A	10179201	NELAP	LA
8910 - Aroclor-1260 (PCB-1260)	EPA 8082A	10179201	NELAP	LA
100287 - Aroclor-1260 (PCB-1260) in Oil	EPA 8082A	10179201	NELAP	LA
8655 - 2,4,5-T	EPA 8151A	10183207	NELAP	LA
8545 - 2,4-D	EPA 8151A	10183207	NELAP	LA
8560 - 2,4-DB	EPA 8151A	10183207	NELAP	LA
8505 - Acifluorfen	EPA 8151A	10183207	NELAP	LA
8530 - Bentazon	EPA 8151A	10183207	NELAP	LA
8555 - Dalapon	EPA 8151A	10183207	NELAP	LA
8595 - Dicamba	EPA 8151A	10183207	NELAP	LA
8605 - Dichloroprop (Dichlorprop)	EPA 8151A	10183207	NELAP	LA
8620 - Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8151A	10183207	NELAP	LA
7775 - MCPA	EPA 8151A	10183207	NELAP	LA
7780 - MCPP	EPA 8151A	10183207	NELAP	LA
6605 - Pentachlorophenol	EPA 8151A	10183207	NELAP	LA
8645 - Picloram	EPA 8151A	10183207	NELAP	LA
8650 - Silvex (2,4,5-TP)	EPA 8151A	10183207	NELAP	LA
5105 - 1,1,1,2-Tetrachloroethane	EPA 8260B	10184802	NELAP	LA
5160 - 1,1,1-Trichloroethane	EPA 8260B	10184802	NELAP	LA
5110 - 1,1,2,2-Tetrachloroethane	EPA 8260B	10184802	NELAP	LA
5185 - 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260B	10184802	NELAP	LA
5195 - 1,1,1-Trichloro-2,2,2-trifluoroethane (Freon 113a)	EPA 8260B	10184802	NELAP	LA
5165 - 1,1,2-Trichloroethane	EPA 8260B	10184802	NELAP	LA
4630 - 1,1-Dichloroethane	EPA 8260B	10184802	NELAP	LA
4640 - 1,1-Dichloroethylene	EPA 8260B	10184802	NELAP	LA
4670 - 1,1-Dichloropropene	EPA 8260B	10184802	NELAP	LA
5150 - 1,2,3-Trichlorobenzene	EPA 8260B	10184802	NELAP	LA
5180 - 1,2,3-Trichloropropane	EPA 8260B	10184802	NELAP	LA
5155 - 1,2,4-Trichlorobenzene	EPA 8260B	10184802	NELAP	LA
5210 - 1,2,4-Trimethylbenzene	EPA 8260B	10184802	NELAP	LA
4570 - 1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260B	10184802	NELAP	LA
4585 - 1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260B	10184802	NELAP	LA
4610 - 1,2-Dichlorobenzene	EPA 8260B	10184802	NELAP	LA
4635 - 1,2-Dichloroethane (Ethylene dichloride)	EPA 8260B	10184802	NELAP	LA
4655 - 1,2-Dichloropropane	EPA 8260B	10184802	NELAP	LA
6800 - 1,3,5-Trichlorobenzene	EPA 8260B	10184802	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
5215 - 1,3,5-Trimethylbenzene	EPA 8260B	10184802	NELAP	LA
4615 - 1,3-Dichlorobenzene	EPA 8260B	10184802	NELAP	LA
4660 - 1,3-Dichloropropane	EPA 8260B	10184802	NELAP	LA
4620 - 1,4-Dichlorobenzene	EPA 8260B	10184802	NELAP	LA
4735 - 1,4-Dioxane (1,4- Diethyleneoxide)	EPA 8260B	10184802	NELAP	LA
4665 - 2,2-Dichloropropane	EPA 8260B	10184802	NELAP	LA
4410 - 2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260B	10184802	NELAP	LA
4490 - 2-Chloroethanol	EPA 8260B	10184802	NELAP	LA
4500 - 2-Chloroethyl vinyl ether	EPA 8260B	10184802	NELAP	LA
4535 - 2-Chlorotoluene	EPA 8260B	10184802	NELAP	LA
4860 - 2-Hexanone	EPA 8260B	10184802	NELAP	LA
5145 - 2-Methylaniline (o-Toluidine)	EPA 8260B	10184802	NELAP	LA
5020 - 2-Nitropropane	EPA 8260B	10184802	NELAP	LA
5045 - 2-Pentanone	EPA 8260B	10184802	NELAP	LA
5050 - 2-Picoline (2-Methylpyridine)	EPA 8260B	10184802	NELAP	LA
4530 - 3-Chloropropionitrile	EPA 8260B	10184802	NELAP	LA
4540 - 4-Chlorotoluene	EPA 8260B	10184802	NELAP	LA
4910 - 4-Isopropyltoluene (p-Cymene)	EPA 8260B	10184802	NELAP	LA
4995 - 4-Methyl-2-pentanone (MIBK)	EPA 8260B	10184802	NELAP	LA
4315 - Acetone	EPA 8260B	10184802	NELAP	LA
4320 - Acetonitrile	EPA 8260B	10184802	NELAP	LA
4325 - Acrolein (Propenal)	EPA 8260B	10184802	NELAP	LA
4340 - Acrylonitrile	EPA 8260B	10184802	NELAP	LA
4350 - Allyl alcohol	EPA 8260B	10184802	NELAP	LA
4355 - Allyl chloride (3-Chloropropene)	EPA 8260B	10184802	NELAP	LA
4375 - Benzene	EPA 8260B	10184802	NELAP	LA
4385 - Bromobenzene	EPA 8260B	10184802	NELAP	LA
4390 - Bromochloromethane	EPA 8260B	10184802	NELAP	LA
4395 - Bromodichloromethane	EPA 8260B	10184802	NELAP	LA
4400 - Bromoform	EPA 8260B	10184802	NELAP	LA
4450 - Carbon disulfide	EPA 8260B	10184802	NELAP	LA
4455 - Carbon tetrachloride	EPA 8260B	10184802	NELAP	LA
4460 - Chloral hydrate	EPA 8260B	10184802	NELAP	LA
4470 - Chloroacetonitrile	EPA 8260B	10184802	NELAP	LA
4475 - Chlorobenzene	EPA 8260B	10184802	NELAP	LA
4575 - Chlorodibromomethane (dibromochloromethane)	EPA 8260B	10184802	NELAP	LA
4485 - Chloroethane (Ethyl chloride)	EPA 8260B	10184802	NELAP	LA
4505 - Chloroform	EPA 8260B	10184802	NELAP	LA
4525 - Chloroprene (2-Chloro-1,3-butadiene)	EPA 8260B	10184802	NELAP	LA
4545 - Crotonaldehyde	EPA 8260B	10184802	NELAP	LA
4580 - Dibromochloropropane	EPA 8260B	10184802	NELAP	LA
4590 - Dibromofluoromethane	EPA 8260B	10184802	NELAP	LA
4595 - Dibromomethane (Methylene bromide)	EPA 8260B	10184802	NELAP	LA
4625 - Dichlorodifluoromethane (Freon-12)	EPA 8260B	10184802	NELAP	LA
4725 - Diethyl ether	EPA 8260B	10184802	NELAP	LA
4745 - Epichlorohydrin (1-Chloro-2,3-epoxypropane)	EPA 8260B	10184802	NELAP	LA
4750 - Ethanol	EPA 8260B	10184802	NELAP	LA
4755 - Ethyl acetate	EPA 8260B	10184802	NELAP	LA
4810 - Ethyl methacrylate	EPA 8260B	10184802	NELAP	LA
4765 - Ethylbenzene	EPA 8260B	10184802	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
4835 - Hexachlorobutadiene	EPA 8260B	10184802	NELAP	LA
4870 - Iodomethane (Methyl iodide)	EPA 8260B	10184802	NELAP	LA
4875 - Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260B	10184802	NELAP	LA
4895 - Isopropyl alcohol (2-Propanol, Isopropanol)	EPA 8260B	10184802	NELAP	LA
4900 - Isopropylbenzene (Cumene)	EPA 8260B	10184802	NELAP	LA
4925 - Methacrylonitrile	EPA 8260B	10184802	NELAP	LA
4950 - Methyl bromide (Bromomethane)	EPA 8260B	10184802	NELAP	LA
4960 - Methyl chloride (Chloromethane)	EPA 8260B	10184802	NELAP	LA
4990 - Methyl methacrylate	EPA 8260B	10184802	NELAP	LA
5000 - Methyl tert-butyl ether (MTBE)	EPA 8260B	10184802	NELAP	LA
4975 - Methylene chloride (Dichloromethane)	EPA 8260B	10184802	NELAP	LA
5005 - Naphthalene	EPA 8260B	10184802	NELAP	LA
5035 - Pentachloroethane	EPA 8260B	10184802	NELAP	LA
5040 - Pentafluorobenzene	EPA 8260B	10184802	NELAP	LA
5070 - Propargyl alcohol	EPA 8260B	10184802	NELAP	LA
5080 - Propionitrile (Ethyl cyanide)	EPA 8260B	10184802	NELAP	LA
5095 - Pyridine	EPA 8260B	10184802	NELAP	LA
5100 - Styrene	EPA 8260B	10184802	NELAP	LA
5115 - Tetrachloroethylene (Perchloroethylene)	EPA 8260B	10184802	NELAP	LA
5120 - Tetrahydrofuran (THF)	EPA 8260B	10184802	NELAP	LA
5140 - Toluene	EPA 8260B	10184802	NELAP	LA
4027 - Total BTEX	EPA 8260B	10184802	NELAP	LA
5170 - Trichloroethene (Trichloroethylene)	EPA 8260B	10184802	NELAP	LA
5175 - Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260B	10184802	NELAP	LA
5225 - Vinyl acetate	EPA 8260B	10184802	NELAP	LA
5235 - Vinyl chloride	EPA 8260B	10184802	NELAP	LA
5260 - Xylene (total)	EPA 8260B	10184802	NELAP	LA
4645 - cis-1,2-Dichloroethylene	EPA 8260B	10184802	NELAP	LA
4680 - cis-1,3-Dichloropropene	EPA 8260B	10184802	NELAP	LA
4600 - cis-1,4-Dichloro-2-butene	EPA 8260B	10184802	NELAP	LA
5240 - m+p-xylene	EPA 8260B	10184802	NELAP	LA
5245 - m-Xylene	EPA 8260B	10184802	NELAP	LA
4425 - n-Butyl alcohol (1-Butanol, n-Butanol)	EPA 8260B	10184802	NELAP	LA
4435 - n-Butylbenzene	EPA 8260B	10184802	NELAP	LA
5085 - n-Propylamine	EPA 8260B	10184802	NELAP	LA
5090 - n-Propylbenzene	EPA 8260B	10184802	NELAP	LA
5250 - o-Xylene	EPA 8260B	10184802	NELAP	LA
5255 - p-Xylene	EPA 8260B	10184802	NELAP	LA
4440 - sec-Butylbenzene	EPA 8260B	10184802	NELAP	LA
4420 - tert-Butyl alcohol	EPA 8260B	10184802	NELAP	LA
4445 - tert-Butylbenzene	EPA 8260B	10184802	NELAP	LA
4700 - trans-1,2-Dichloroethylene	EPA 8260B	10184802	NELAP	LA
4685 - trans-1,3-Dichloropropylene	EPA 8260B	10184802	NELAP	LA
4605 - trans-1,4-Dichloro-2-butene	EPA 8260B	10184802	NELAP	LA
6715 - 1,2,4,5-Tetrachlorobenzene	EPA 8270D	10186002	NELAP	LA
5155 - 1,2,4-Trichlorobenzene	EPA 8270D	10186002	NELAP	LA
4610 - 1,2-Dichlorobenzene	EPA 8270D	10186002	NELAP	LA
6155 - 1,2-Dinitrobenzene	EPA 8270D	10186002	NELAP	LA
6220 - 1,2-Diphenylhydrazine	EPA 8270D	10186002	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
4615 - 1,3-Dichlorobenzene	EPA 8270D	10186002	NELAP	LA
4620 - 1,4-Dichlorobenzene	EPA 8270D	10186002	NELAP	LA
6420 - 1,4-Naphthoquinone	EPA 8270D	10186002	NELAP	LA
5790 - 1-Chloronaphthalene	EPA 8270D	10186002	NELAP	LA
6735 - 2,3,4,6-Tetrachlorophenol	EPA 8270D	10186002	NELAP	LA
6835 - 2,4,5-Trichlorophenol	EPA 8270D	10186002	NELAP	LA
6840 - 2,4,6-Trichlorophenol	EPA 8270D	10186002	NELAP	LA
6000 - 2,4-Dichlorophenol	EPA 8270D	10186002	NELAP	LA
6130 - 2,4-Dimethylphenol	EPA 8270D	10186002	NELAP	LA
6175 - 2,4-Dinitrophenol	EPA 8270D	10186002	NELAP	LA
6185 - 2,4-Dinitrotoluene (2,4-DNT)	EPA 8270D	10186002	NELAP	LA
6005 - 2,6-Dichlorophenol	EPA 8270D	10186002	NELAP	LA
6190 - 2,6-Dinitrotoluene (2,6-DNT)	EPA 8270D	10186002	NELAP	LA
5795 - 2-Chloronaphthalene	EPA 8270D	10186002	NELAP	LA
5800 - 2-Chlorophenol	EPA 8270D	10186002	NELAP	LA
6360 - 2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270D	10186002	NELAP	LA
6385 - 2-Methylnaphthalene	EPA 8270D	10186002	NELAP	LA
6400 - 2-Methylphenol (o-Cresol)	EPA 8270D	10186002	NELAP	LA
6460 - 2-Nitroaniline	EPA 8270D	10186002	NELAP	LA
6490 - 2-Nitrophenol	EPA 8270D	10186002	NELAP	LA
5945 - 3,3'-Dichlorobenzidine	EPA 8270D	10186002	NELAP	LA
6120 - 3,3'-Dimethylbenzidine	EPA 8270D	10186002	NELAP	LA
6405 - 3-Methylphenol (m-Cresol)	EPA 8270D	10186002	NELAP	LA
6465 - 3-Nitroaniline	EPA 8270D	10186002	NELAP	LA
5660 - 4-Bromophenyl phenyl ether	EPA 8270D	10186002	NELAP	LA
5700 - 4-Chloro-3-methylphenol	EPA 8270D	10186002	NELAP	LA
5745 - 4-Chloroaniline	EPA 8270D	10186002	NELAP	LA
5825 - 4-Chlorophenyl phenylether	EPA 8270D	10186002	NELAP	LA
6410 - 4-Methylphenol (p-Cresol)	EPA 8270D	10186002	NELAP	LA
6470 - 4-Nitroaniline	EPA 8270D	10186002	NELAP	LA
6500 - 4-Nitrophenol	EPA 8270D	10186002	NELAP	LA
5500 - Acenaphthene	EPA 8270D	10186002	NELAP	LA
5505 - Acenaphthylene	EPA 8270D	10186002	NELAP	LA
5510 - Acetophenone	EPA 8270D	10186002	NELAP	LA
5545 - Aniline	EPA 8270D	10186002	NELAP	LA
5555 - Anthracene	EPA 8270D	10186002	NELAP	LA
5560 - Aramite	EPA 8270D	10186002	NELAP	LA
7075 - Azinphos-methyl (Guthion)	EPA 8270D	10186002	NELAP	LA
5595 - Benzidine	EPA 8270D	10186002	NELAP	LA
5575 - Benzo(a)anthracene	EPA 8270D	10186002	NELAP	LA
5580 - Benzo(a)pyrene	EPA 8270D	10186002	NELAP	LA
5585 - Benzo(b)fluoranthene	EPA 8270D	10186002	NELAP	LA
5590 - Benzo(g,h,i)perylene	EPA 8270D	10186002	NELAP	LA
5600 - Benzo(k)fluoranthene	EPA 8270D	10186002	NELAP	LA
5610 - Benzoic acid	EPA 8270D	10186002	NELAP	LA
5630 - Benzyl alcohol	EPA 8270D	10186002	NELAP	LA
5780 - Bis(2-Chloroisopropyl) ether (2,2-oxybis(1-chloropropane))	EPA 8270D	10186002	NELAP	LA
5670 - Butyl benzyl phthalate	EPA 8270D	10186002	NELAP	LA
5680 - Carbazole	EPA 8270D	10186002	NELAP	LA
7260 - Chlorobenzilate	EPA 8270D	10186002	NELAP	LA
7300 - Chlorpyrifos	EPA 8270D	10186002	NELAP	LA
5855 - Chrysene	EPA 8270D	10186002	NELAP	LA
7315 - Coumaphos	EPA 8270D	10186002	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
7390 - Demeton	EPA 8270D	10186002	NELAP	LA
7395 - Demeton-o	EPA 8270D	10186002	NELAP	LA
7385 - Demeton-s	EPA 8270D	10186002	NELAP	LA
6065 - Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270D	10186002	NELAP	LA
5925 - Di-n-butyl phthalate	EPA 8270D	10186002	NELAP	LA
6200 - Di-n-octyl phthalate	EPA 8270D	10186002	NELAP	LA
7410 - Diazinon	EPA 8270D	10186002	NELAP	LA
5895 - Dibenzo(a,h)anthracene	EPA 8270D	10186002	NELAP	LA
5905 - Dibenzofuran	EPA 8270D	10186002	NELAP	LA
8610 - Dichlorovos (DDVP, Dichlorvos)	EPA 8270D	10186002	NELAP	LA
6070 - Diethyl phthalate	EPA 8270D	10186002	NELAP	LA
7475 - Dimethoate	EPA 8270D	10186002	NELAP	LA
6135 - Dimethyl phthalate	EPA 8270D	10186002	NELAP	LA
7495 - Dioxathion	EPA 8270D	10186002	NELAP	LA
6205 - Diphenylamine	EPA 8270D	10186002	NELAP	LA
8625 - Disulfoton	EPA 8270D	10186002	NELAP	LA
7550 - EPN	EPA 8270D	10186002	NELAP	LA
6260 - Ethyl methanesulfonate	EPA 8270D	10186002	NELAP	LA
7580 - Famphur	EPA 8270D	10186002	NELAP	LA
7600 - Fensulfothion	EPA 8270D	10186002	NELAP	LA
7605 - Fenthion	EPA 8270D	10186002	NELAP	LA
6265 - Fluoranthene	EPA 8270D	10186002	NELAP	LA
6270 - Fluorene	EPA 8270D	10186002	NELAP	LA
6275 - Hexachlorobenzene	EPA 8270D	10186002	NELAP	LA
4835 - Hexachlorobutadiene	EPA 8270D	10186002	NELAP	LA
6285 - Hexachlorocyclopentadiene	EPA 8270D	10186002	NELAP	LA
4840 - Hexachloroethane	EPA 8270D	10186002	NELAP	LA
6315 - Indeno(1,2,3-cd)pyrene	EPA 8270D	10186002	NELAP	LA
6320 - Isophorone	EPA 8270D	10186002	NELAP	LA
7740 - Kepone	EPA 8270D	10186002	NELAP	LA
7755 - Leptophos	EPA 8270D	10186002	NELAP	LA
7770 - Malathion	EPA 8270D	10186002	NELAP	LA
6375 - Methyl methanesulfonate	EPA 8270D	10186002	NELAP	LA
7825 - Methyl parathion (Parathion, methyl)	EPA 8270D	10186002	NELAP	LA
7850 - Mevinphos	EPA 8270D	10186002	NELAP	LA
7880 - Monocrotophos	EPA 8270D	10186002	NELAP	LA
7905 - Naled	EPA 8270D	10186002	NELAP	LA
5005 - Naphthalene	EPA 8270D	10186002	NELAP	LA
5015 - Nitrobenzene	EPA 8270D	10186002	NELAP	LA
7955 - Parathion, ethyl	EPA 8270D	10186002	NELAP	LA
7960 - Pendimethalin(Penoxalin)	EPA 8270D	10186002	NELAP	LA
6590 - Pentachlorobenzene	EPA 8270D	10186002	NELAP	LA
6600 - Pentachloronitrobenzene	EPA 8270D	10186002	NELAP	LA
6605 - Pentachlorophenol	EPA 8270D	10186002	NELAP	LA
6610 - Phenacetin	EPA 8270D	10186002	NELAP	LA
6615 - Phenanthrene	EPA 8270D	10186002	NELAP	LA
6620 - Phenobarbital	EPA 8270D	10186002	NELAP	LA
6625 - Phenol	EPA 8270D	10186002	NELAP	LA
7985 - Phorate	EPA 8270D	10186002	NELAP	LA
6665 - Pyrene	EPA 8270D	10186002	NELAP	LA
5095 - Pyridine	EPA 8270D	10186002	NELAP	LA
6680 - Resorcinol	EPA 8270D	10186002	NELAP	LA
8110 - Ronnel	EPA 8270D	10186002	NELAP	LA
8155 - Sulfotepp	EPA 8270D	10186002	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
8200 - Tetrachlorvinphos (Stirophos, Gardona) Z-isomer	EPA 8270D	10186002	NELAP	LA
5862 - Total Cresols	EPA 8270D	10186002	NELAP	LA
8295 - Trifluralin (Treflan)	EPA 8270D	10186002	NELAP	LA
5760 - bis(2-Chloroethoxy)methane	EPA 8270D	10186002	NELAP	LA
5765 - bis(2-Chloroethyl) ether	EPA 8270D	10186002	NELAP	LA
5025 - n-Nitroso-di-n-butylamine	EPA 8270D	10186002	NELAP	LA
6545 - n-Nitrosodi-n-propylamine	EPA 8270D	10186002	NELAP	LA
6525 - n-Nitrosodiethylamine	EPA 8270D	10186002	NELAP	LA
6530 - n-Nitrosodimethylamine	EPA 8270D	10186002	NELAP	LA
6535 - n-Nitrosodiphenylamine	EPA 8270D	10186002	NELAP	LA
4300 - Acetaldehyde	EPA 8315A	10188008	NELAP	LA
4815 - Formaldehyde	EPA 8315A	10188008	NELAP	LA
1510 - Amenable cyanide	EPA 9010B	10193007	NELAP	LA
1635 - Cyanide	EPA 9010B	10193007	NELAP	LA
1635 - Cyanide	EPA 9014	10193803	NELAP	LA
1645 - Total Cyanide	EPA 9014	10193803	NELAP	LA
2005 - Sulfide	EPA 9030	10195207	NELAP	LA
2005 - Sulfide	EPA 9031	10195809	NELAP	LA
1925 - Reactive sulfide	EPA 9034	10196006	NELAP	LA
2005 - Sulfide	EPA 9034	10196006	NELAP	LA
1900 - pH	EPA 9040B	10197203	NELAP	LA
1900 - pH	EPA 9045C	10198400	NELAP	LA
1610 - Conductivity	EPA 9050	10198604	NELAP	LA
1610 - Conductivity	EPA 9050A	10198808	NELAP	LA
1540 - Bromide	EPA 9056	10199005	NELAP	LA
1575 - Chloride	EPA 9056	10199005	NELAP	LA
1730 - Fluoride	EPA 9056	10199005	NELAP	LA
1810 - Nitrate as N	EPA 9056	10199005	NELAP	LA
1820 - Nitrate-Nitrite	EPA 9056	10199005	NELAP	LA
1835 - Nitrite	EPA 9056	10199005	NELAP	LA
1840 - Nitrite as N	EPA 9056	10199005	NELAP	LA
2000 - Sulfate	EPA 9056	10199005	NELAP	LA
1825 - Total Nitrate+Nitrite	EPA 9056	10199005	NELAP	LA
1540 - Bromide	EPA 9056A	10199607	NELAP	LA
1575 - Chloride	EPA 9056A	10199607	NELAP	LA
1730 - Fluoride	EPA 9056A	10199607	NELAP	LA
1810 - Nitrate as N	EPA 9056A	10199607	NELAP	LA
1820 - Nitrate-Nitrite	EPA 9056A	10199607	NELAP	LA
1840 - Nitrite as N	EPA 9056A	10199607	NELAP	LA
2000 - Sulfate	EPA 9056A	10199607	NELAP	LA
1825 - Total Nitrate+Nitrite	EPA 9056A	10199607	NELAP	LA
2040 - Total Organic Carbon	EPA 9060	10200201	NELAP	LA
6625 - Phenol	EPA 9065	10200405	NELAP	LA
1905 - Total Phenolics	EPA 9065	10200405	NELAP	LA
1860 - Oil & Grease	EPA 9071B, Rev.2	10201806	NELAP	LA
2050 - Total Petroleum Hydrocarbons (TPH)	EPA 9071B, Rev.2	10201806	NELAP	LA
1745 - Free liquid	EPA 9095A	10204203	NELAP	LA
1780 - Ignitability	EPA 1010A	10234807	NELAP	LA
1780 - Ignitability	EPA 1010B, Rev.Update VII	10234830	NELAP	LA
6380 - 1-Methylnaphthalene	EPA 8270D SIM	10242509	NELAP	LA
6385 - 2-Methylnaphthalene	EPA 8270D SIM	10242509	NELAP	LA
5500 - Acenaphthene	EPA 8270D SIM	10242509	NELAP	LA
5505 - Acenaphthylene	EPA 8270D SIM	10242509	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
5555 - Anthracene	EPA 8270D SIM	10242509	NELAP	LA
5575 - Benzo(a)anthracene	EPA 8270D SIM	10242509	NELAP	LA
5580 - Benzo(a)pyrene	EPA 8270D SIM	10242509	NELAP	LA
5585 - Benzo(b)fluoranthene	EPA 8270D SIM	10242509	NELAP	LA
5590 - Benzo(g,h,i)perylene	EPA 8270D SIM	10242509	NELAP	LA
5600 - Benzo(k)fluoranthene	EPA 8270D SIM	10242509	NELAP	LA
5855 - Chrysene	EPA 8270D SIM	10242509	NELAP	LA
5895 - Dibenzo(a,h)anthracene	EPA 8270D SIM	10242509	NELAP	LA
6265 - Fluoranthene	EPA 8270D SIM	10242509	NELAP	LA
6270 - Fluorene	EPA 8270D SIM	10242509	NELAP	LA
6315 - Indeno(1,2,3-cd)pyrene	EPA 8270D SIM	10242509	NELAP	LA
5005 - Naphthalene	EPA 8270D SIM	10242509	NELAP	LA
6615 - Phenanthrene	EPA 8270D SIM	10242509	NELAP	LA
6665 - Pyrene	EPA 8270D SIM	10242509	NELAP	LA
6715 - 1,2,4,5-Tetrachlorobenzene	EPA 8270E	10242543	NELAP	LA
5155 - 1,2,4-Trichlorobenzene	EPA 8270E	10242543	NELAP	LA
4610 - 1,2-Dichlorobenzene	EPA 8270E	10242543	NELAP	LA
6155 - 1,2-Dinitrobenzene	EPA 8270E	10242543	NELAP	LA
6220 - 1,2-Diphenylhydrazine	EPA 8270E	10242543	NELAP	LA
4615 - 1,3-Dichlorobenzene	EPA 8270E	10242543	NELAP	LA
4620 - 1,4-Dichlorobenzene	EPA 8270E	10242543	NELAP	LA
6420 - 1,4-Naphthoquinone	EPA 8270E	10242543	NELAP	LA
5790 - 1-Chloronaphthalene	EPA 8270E	10242543	NELAP	LA
4659 - 2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether (bis(2-chloroisopropyl)ether)	EPA 8270E	10242543	NELAP	LA
6735 - 2,3,4,6-Tetrachlorophenol	EPA 8270E	10242543	NELAP	LA
6835 - 2,4,5-Trichlorophenol	EPA 8270E	10242543	NELAP	LA
6840 - 2,4,6-Trichlorophenol	EPA 8270E	10242543	NELAP	LA
6000 - 2,4-Dichlorophenol	EPA 8270E	10242543	NELAP	LA
6130 - 2,4-Dimethylphenol	EPA 8270E	10242543	NELAP	LA
6175 - 2,4-Dinitrophenol	EPA 8270E	10242543	NELAP	LA
6185 - 2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	10242543	NELAP	LA
6005 - 2,6-Dichlorophenol	EPA 8270E	10242543	NELAP	LA
6190 - 2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	10242543	NELAP	LA
5795 - 2-Chloronaphthalene	EPA 8270E	10242543	NELAP	LA
5800 - 2-Chlorophenol	EPA 8270E	10242543	NELAP	LA
6360 - 2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	EPA 8270E	10242543	NELAP	LA
6385 - 2-Methylnaphthalene	EPA 8270E	10242543	NELAP	LA
6400 - 2-Methylphenol (o-Cresol)	EPA 8270E	10242543	NELAP	LA
6460 - 2-Nitroaniline	EPA 8270E	10242543	NELAP	LA
6490 - 2-Nitrophenol	EPA 8270E	10242543	NELAP	LA
6412 - 3+4 Methylphenol	EPA 8270E	10242543	NELAP	LA
5945 - 3,3'-Dichlorobenzidine	EPA 8270E	10242543	NELAP	LA
6120 - 3,3'-Dimethylbenzidine	EPA 8270E	10242543	NELAP	LA
6405 - 3-Methylphenol (m-Cresol)	EPA 8270E	10242543	NELAP	LA
6465 - 3-Nitroaniline	EPA 8270E	10242543	NELAP	LA
5660 - 4-Bromophenyl phenyl ether	EPA 8270E	10242543	NELAP	LA
5700 - 4-Chloro-3-methylphenol	EPA 8270E	10242543	NELAP	LA
5745 - 4-Chloroaniline	EPA 8270E	10242543	NELAP	LA
5825 - 4-Chlorophenyl phenylether	EPA 8270E	10242543	NELAP	LA
6410 - 4-Methylphenol (p-Cresol)	EPA 8270E	10242543	NELAP	LA
6470 - 4-Nitroaniline	EPA 8270E	10242543	NELAP	LA
6500 - 4-Nitrophenol	EPA 8270E	10242543	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
5500 - Acenaphthene	EPA 8270E	10242543	NELAP	LA
5505 - Acenaphthylene	EPA 8270E	10242543	NELAP	LA
5510 - Acetophenone	EPA 8270E	10242543	NELAP	LA
5545 - Aniline	EPA 8270E	10242543	NELAP	LA
5555 - Anthracene	EPA 8270E	10242543	NELAP	LA
5560 - Aramite	EPA 8270E	10242543	NELAP	LA
7075 - Azinphos-methyl (Guthion)	EPA 8270E	10242543	NELAP	LA
5595 - Benzidine	EPA 8270E	10242543	NELAP	LA
5575 - Benzo(a)anthracene	EPA 8270E	10242543	NELAP	LA
5580 - Benzo(a)pyrene	EPA 8270E	10242543	NELAP	LA
5585 - Benzo(b)fluoranthene	EPA 8270E	10242543	NELAP	LA
5590 - Benzo(g,h,i)perylene	EPA 8270E	10242543	NELAP	LA
5600 - Benzo(k)fluoranthene	EPA 8270E	10242543	NELAP	LA
5610 - Benzoic acid	EPA 8270E	10242543	NELAP	LA
5630 - Benzyl alcohol	EPA 8270E	10242543	NELAP	LA
5780 - Bis(2-Chloroisopropyl) ether (2,2-oxybis(1-chloropropane))	EPA 8270E	10242543	NELAP	LA
5670 - Butyl benzyl phthalate	EPA 8270E	10242543	NELAP	LA
5680 - Carbazole	EPA 8270E	10242543	NELAP	LA
7260 - Chlorobenzilate	EPA 8270E	10242543	NELAP	LA
7300 - Chlorpyrifos	EPA 8270E	10242543	NELAP	LA
5855 - Chrysene	EPA 8270E	10242543	NELAP	LA
7315 - Coumaphos	EPA 8270E	10242543	NELAP	LA
7390 - Demeton	EPA 8270E	10242543	NELAP	LA
7395 - Demeton-o	EPA 8270E	10242543	NELAP	LA
7385 - Demeton-s	EPA 8270E	10242543	NELAP	LA
6065 - Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	EPA 8270E	10242543	NELAP	LA
5925 - Di-n-butyl phthalate	EPA 8270E	10242543	NELAP	LA
6200 - Di-n-octyl phthalate	EPA 8270E	10242543	NELAP	LA
7410 - Diazinon	EPA 8270E	10242543	NELAP	LA
5895 - Dibenzo(a,h)anthracene	EPA 8270E	10242543	NELAP	LA
5905 - Dibenzofuran	EPA 8270E	10242543	NELAP	LA
6070 - Diethyl phthalate	EPA 8270E	10242543	NELAP	LA
7475 - Dimethoate	EPA 8270E	10242543	NELAP	LA
6135 - Dimethyl phthalate	EPA 8270E	10242543	NELAP	LA
6205 - Diphenylamine	EPA 8270E	10242543	NELAP	LA
8625 - Disulfoton	EPA 8270E	10242543	NELAP	LA
7550 - EPN	EPA 8270E	10242543	NELAP	LA
6260 - Ethyl methanesulfonate	EPA 8270E	10242543	NELAP	LA
7580 - Famphur	EPA 8270E	10242543	NELAP	LA
7600 - Fensulfothion	EPA 8270E	10242543	NELAP	LA
7605 - Fenthion	EPA 8270E	10242543	NELAP	LA
6265 - Fluoranthene	EPA 8270E	10242543	NELAP	LA
6270 - Fluorene	EPA 8270E	10242543	NELAP	LA
6275 - Hexachlorobenzene	EPA 8270E	10242543	NELAP	LA
4835 - Hexachlorobutadiene	EPA 8270E	10242543	NELAP	LA
6285 - Hexachlorocyclopentadiene	EPA 8270E	10242543	NELAP	LA
4840 - Hexachloroethane	EPA 8270E	10242543	NELAP	LA
6315 - Indeno(1,2,3-cd)pyrene	EPA 8270E	10242543	NELAP	LA
6320 - Isophorone	EPA 8270E	10242543	NELAP	LA
7740 - Kepone	EPA 8270E	10242543	NELAP	LA
7770 - Malathion	EPA 8270E	10242543	NELAP	LA
6375 - Methyl methanesulfonate	EPA 8270E	10242543	NELAP	LA
7825 - Methyl parathion (Parathion, methyl)	EPA 8270E	10242543	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
7880 - Monocrotophos	EPA 8270E	10242543	NELAP	LA
7905 - Naled	EPA 8270E	10242543	NELAP	LA
5005 - Naphthalene	EPA 8270E	10242543	NELAP	LA
5015 - Nitrobenzene	EPA 8270E	10242543	NELAP	LA
7955 - Parathion, ethyl	EPA 8270E	10242543	NELAP	LA
7960 - Pendimethalin(Penoxalin)	EPA 8270E	10242543	NELAP	LA
6590 - Pentachlorobenzene	EPA 8270E	10242543	NELAP	LA
6600 - Pentachloronitrobenzene	EPA 8270E	10242543	NELAP	LA
6605 - Pentachlorophenol	EPA 8270E	10242543	NELAP	LA
6610 - Phenacetin	EPA 8270E	10242543	NELAP	LA
6615 - Phenanthrene	EPA 8270E	10242543	NELAP	LA
6620 - Phenobarbital	EPA 8270E	10242543	NELAP	LA
6625 - Phenol	EPA 8270E	10242543	NELAP	LA
7985 - Phorate	EPA 8270E	10242543	NELAP	LA
6665 - Pyrene	EPA 8270E	10242543	NELAP	LA
5095 - Pyridine	EPA 8270E	10242543	NELAP	LA
6680 - Resorcinol	EPA 8270E	10242543	NELAP	LA
8110 - Ronnel	EPA 8270E	10242543	NELAP	LA
8155 - Sulfotepp	EPA 8270E	10242543	NELAP	LA
8197 - Tetrachlorvinphos (Stirophos, Gardona) E-isomer	EPA 8270E	10242543	NELAP	LA
5862 - Total Cresols	EPA 8270E	10242543	NELAP	LA
8295 - Trifluralin (Treflan)	EPA 8270E	10242543	NELAP	LA
5760 - bis(2-Chloroethoxy)methane	EPA 8270E	10242543	NELAP	LA
5765 - bis(2-Chloroethyl) ether	EPA 8270E	10242543	NELAP	LA
5025 - n-Nitroso-di-n-butylamine	EPA 8270E	10242543	NELAP	LA
6545 - n-Nitrosodi-n-propylamine	EPA 8270E	10242543	NELAP	LA
6525 - n-Nitrosodiethylamine	EPA 8270E	10242543	NELAP	LA
6530 - n-Nitrosodimethylamine	EPA 8270E	10242543	NELAP	LA
6535 - n-Nitrosodiphenylamine	EPA 8270E	10242543	NELAP	LA
1645 - Total Cyanide	EPA 9010C	10243002	NELAP	LA
1900 - pH	EPA 9040C	10244403	NELAP	LA
1900 - pH	EPA 9045D	10244607	NELAP	LA
2040 - Total Organic Carbon	EPA 9060A	10244801	NELAP	LA
1745 - Free liquid	EPA 9095B	10245600	NELAP	LA
1429 - Microextraction of Organics in Water	EPA 3511	10279808	NELAP	LA
5238 - Volatile Organics	EPA 5021A, Rev.Update V	10284227	NELAP	LA
5105 - 1,1,1,2-Tetrachloroethane	EPA 8260D	10307127	NELAP	LA
5160 - 1,1,1-Trichloroethane	EPA 8260D	10307127	NELAP	LA
5110 - 1,1,2,2-Tetrachloroethane	EPA 8260D	10307127	NELAP	LA
5185 - 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	10307127	NELAP	LA
5195 - 1,1,1-Trichloro-2,2,2-trifluoroethane (Freon 113a)	EPA 8260D	10307127	NELAP	LA
5165 - 1,1,2-Trichloroethane	EPA 8260D	10307127	NELAP	LA
4630 - 1,1-Dichloroethane	EPA 8260D	10307127	NELAP	LA
4640 - 1,1-Dichloroethylene	EPA 8260D	10307127	NELAP	LA
4670 - 1,1-Dichloropropene	EPA 8260D	10307127	NELAP	LA
5150 - 1,2,3-Trichlorobenzene	EPA 8260D	10307127	NELAP	LA
5180 - 1,2,3-Trichloropropane	EPA 8260D	10307127	NELAP	LA
5155 - 1,2,4-Trichlorobenzene	EPA 8260D	10307127	NELAP	LA
5210 - 1,2,4-Trimethylbenzene	EPA 8260D	10307127	NELAP	LA
4570 - 1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	10307127	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
4585 - 1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	10307127	NELAP	LA
4610 - 1,2-Dichlorobenzene	EPA 8260D	10307127	NELAP	LA
4635 - 1,2-Dichloroethane (Ethylene dichloride)	EPA 8260D	10307127	NELAP	LA
4655 - 1,2-Dichloropropane	EPA 8260D	10307127	NELAP	LA
6800 - 1,3,5-Trichlorobenzene	EPA 8260D	10307127	NELAP	LA
5215 - 1,3,5-Trimethylbenzene	EPA 8260D	10307127	NELAP	LA
4615 - 1,3-Dichlorobenzene	EPA 8260D	10307127	NELAP	LA
4660 - 1,3-Dichloropropane	EPA 8260D	10307127	NELAP	LA
4620 - 1,4-Dichlorobenzene	EPA 8260D	10307127	NELAP	LA
4735 - 1,4-Dioxane (1,4- Diethyleneoxide)	EPA 8260D	10307127	NELAP	LA
4665 - 2,2-Dichloropropane	EPA 8260D	10307127	NELAP	LA
4410 - 2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	10307127	NELAP	LA
4490 - 2-Chloroethanol	EPA 8260D	10307127	NELAP	LA
4500 - 2-Chloroethyl vinyl ether	EPA 8260D	10307127	NELAP	LA
4535 - 2-Chlorotoluene	EPA 8260D	10307127	NELAP	LA
4860 - 2-Hexanone	EPA 8260D	10307127	NELAP	LA
5145 - 2-Methylaniline (o-Toluidine)	EPA 8260D	10307127	NELAP	LA
5020 - 2-Nitropropane	EPA 8260D	10307127	NELAP	LA
5045 - 2-Pentanone	EPA 8260D	10307127	NELAP	LA
5050 - 2-Picoline (2-Methylpyridine)	EPA 8260D	10307127	NELAP	LA
4530 - 3-Chloropropionitrile	EPA 8260D	10307127	NELAP	LA
4540 - 4-Chlorotoluene	EPA 8260D	10307127	NELAP	LA
4910 - 4-Isopropyltoluene (p-Cymene)	EPA 8260D	10307127	NELAP	LA
4995 - 4-Methyl-2-pentanone (MIBK)	EPA 8260D	10307127	NELAP	LA
4315 - Acetone	EPA 8260D	10307127	NELAP	LA
4320 - Acetonitrile	EPA 8260D	10307127	NELAP	LA
4325 - Acrolein (Propenal)	EPA 8260D	10307127	NELAP	LA
4340 - Acrylonitrile	EPA 8260D	10307127	NELAP	LA
4350 - Allyl alcohol	EPA 8260D	10307127	NELAP	LA
4355 - Allyl chloride (3-Chloropropene)	EPA 8260D	10307127	NELAP	LA
4375 - Benzene	EPA 8260D	10307127	NELAP	LA
4385 - Bromobenzene	EPA 8260D	10307127	NELAP	LA
4390 - Bromochloromethane	EPA 8260D	10307127	NELAP	LA
4395 - Bromodichloromethane	EPA 8260D	10307127	NELAP	LA
4400 - Bromoform	EPA 8260D	10307127	NELAP	LA
4450 - Carbon disulfide	EPA 8260D	10307127	NELAP	LA
4455 - Carbon tetrachloride	EPA 8260D	10307127	NELAP	LA
4460 - Chloral hydrate	EPA 8260D	10307127	NELAP	LA
4470 - Chloroacetonitrile	EPA 8260D	10307127	NELAP	LA
4475 - Chlorobenzene	EPA 8260D	10307127	NELAP	LA
4575 - Chlorodibromomethane (dibromochloromethane)	EPA 8260D	10307127	NELAP	LA
4485 - Chloroethane (Ethyl chloride)	EPA 8260D	10307127	NELAP	LA
4505 - Chloroform	EPA 8260D	10307127	NELAP	LA
4525 - Chloroprene (2-Chloro-1,3-butadiene)	EPA 8260D	10307127	NELAP	LA
4545 - Crotonaldehyde	EPA 8260D	10307127	NELAP	LA
4580 - Dibromochloropropane	EPA 8260D	10307127	NELAP	LA
4590 - Dibromofluoromethane	EPA 8260D	10307127	NELAP	LA
4595 - Dibromomethane (Methylene bromide)	EPA 8260D	10307127	NELAP	LA
4625 - Dichlorodifluoromethane (Freon-12)	EPA 8260D	10307127	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
4725 - Diethyl ether	EPA 8260D	10307127	NELAP	LA
4745 - Epichlorohydrin (1-Chloro-2,3-epoxypropane)	EPA 8260D	10307127	NELAP	LA
4750 - Ethanol	EPA 8260D	10307127	NELAP	LA
4755 - Ethyl acetate	EPA 8260D	10307127	NELAP	LA
4810 - Ethyl methacrylate	EPA 8260D	10307127	NELAP	LA
4765 - Ethylbenzene	EPA 8260D	10307127	NELAP	LA
4835 - Hexachlorobutadiene	EPA 8260D	10307127	NELAP	LA
4870 - Iodomethane (Methyl iodide)	EPA 8260D	10307127	NELAP	LA
4875 - Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260D	10307127	NELAP	LA
4895 - Isopropyl alcohol (2-Propanol, Isopropanol)	EPA 8260D	10307127	NELAP	LA
4900 - Isopropylbenzene (Cumene)	EPA 8260D	10307127	NELAP	LA
4925 - Methacrylonitrile	EPA 8260D	10307127	NELAP	LA
4950 - Methyl bromide (Bromomethane)	EPA 8260D	10307127	NELAP	LA
4960 - Methyl chloride (Chloromethane)	EPA 8260D	10307127	NELAP	LA
4990 - Methyl methacrylate	EPA 8260D	10307127	NELAP	LA
5000 - Methyl tert-butyl ether (MTBE)	EPA 8260D	10307127	NELAP	LA
4975 - Methylene chloride (Dichloromethane)	EPA 8260D	10307127	NELAP	LA
5005 - Naphthalene	EPA 8260D	10307127	NELAP	LA
5035 - Pentachloroethane	EPA 8260D	10307127	NELAP	LA
5040 - Pentafluorobenzene	EPA 8260D	10307127	NELAP	LA
5070 - Propargyl alcohol	EPA 8260D	10307127	NELAP	LA
5080 - Propionitrile (Ethyl cyanide)	EPA 8260D	10307127	NELAP	LA
5095 - Pyridine	EPA 8260D	10307127	NELAP	LA
5100 - Styrene	EPA 8260D	10307127	NELAP	LA
5115 - Tetrachloroethylene (Perchloroethylene)	EPA 8260D	10307127	NELAP	LA
5120 - Tetrahydrofuran (THF)	EPA 8260D	10307127	NELAP	LA
5140 - Toluene	EPA 8260D	10307127	NELAP	LA
4027 - Total BTEX	EPA 8260D	10307127	NELAP	LA
5170 - Trichloroethene (Trichloroethylene)	EPA 8260D	10307127	NELAP	LA
5175 - Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	EPA 8260D	10307127	NELAP	LA
5225 - Vinyl acetate	EPA 8260D	10307127	NELAP	LA
5235 - Vinyl chloride	EPA 8260D	10307127	NELAP	LA
5260 - Xylene (total)	EPA 8260D	10307127	NELAP	LA
4645 - cis-1,2-Dichloroethylene	EPA 8260D	10307127	NELAP	LA
4680 - cis-1,3-Dichloropropene	EPA 8260D	10307127	NELAP	LA
4600 - cis-1,4-Dichloro-2-butene	EPA 8260D	10307127	NELAP	LA
5240 - m+p-xylene	EPA 8260D	10307127	NELAP	LA
5245 - m-Xylene	EPA 8260D	10307127	NELAP	LA
4425 - n-Butyl alcohol (1-Butanol, n-Butanol)	EPA 8260D	10307127	NELAP	LA
4435 - n-Butylbenzene	EPA 8260D	10307127	NELAP	LA
5085 - n-Propylamine	EPA 8260D	10307127	NELAP	LA
5090 - n-Propylbenzene	EPA 8260D	10307127	NELAP	LA
5250 - o-Xylene	EPA 8260D	10307127	NELAP	LA
5255 - p-Xylene	EPA 8260D	10307127	NELAP	LA
4440 - sec-Butylbenzene	EPA 8260D	10307127	NELAP	LA
4420 - tert-Butyl alcohol	EPA 8260D	10307127	NELAP	LA
4445 - tert-Butylbenzene	EPA 8260D	10307127	NELAP	LA
4700 - trans-1,2-Dichloroethylene	EPA 8260D	10307127	NELAP	LA

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
4685 - trans-1,3-Dichloropropylene	EPA 8260D	10307127	NELAP	LA
4605 - trans-1,4-Dichloro-2-butene	EPA 8260D	10307127	NELAP	LA
1950 - Residue-total	SM 2540 G-2011, Rev.22nd	20005270	NELAP	LA
1970 - Residue-volatile	SM 2540 G-2011, Rev.22nd	20005270	NELAP	LA
1820 - Nitrate-Nitrite	SM 4500-NO_3^- I-2016	20018585	NELAP	LA
1404 - Ammonia distillation	SM 4500-NH3 B-2011	20106018	NELAP	LA
1515 - Ammonia as N	SM 4500-NH3 C-2011	20108412	NELAP	LA
1795 - Kjeldahl nitrogen - total	SM 4500-NH3 C-2011	20108412	NELAP	LA
1820 - Nitrate-Nitrite	SM 4500-NO_3^- F-2011	20117628	NELAP	LA
1820 - Nitrate-Nitrite	SM 4500-NO_3^- F-2016	20117684	NELAP	LA
1795 - Kjeldahl nitrogen - total	SM 4500-Norg B-2011	20119215	NELAP	LA
1795 - Kjeldahl nitrogen - total	SM 4500-Norg D-2011	20120289	NELAP	LA
6117 - Flash Point	ASTM D93-80	30005744	NELAP	LA
1544 - Calcium carbonate equivalent	AOAC 955.01, 16th ED	50000834	NELAP	LA
2040 - Total Organic Carbon	Walkley-Black Method	60012002	NELAP	LA
1400 - Acid Digestion of Solids	LDNR 29-B	90012058	NELAP	LA
1015 - Barium	LDNR 29-B	90012058	NELAP	LA
1560 - Cation Exchange Capacity (CEC)	LDNR 29-B	90012058	NELAP	LA
1610 - Conductivity	LDNR 29-B	90012058	NELAP	LA
6121 - Exchangeable Sodium Percentage (ESP)	LDNR 29-B	90012058	NELAP	LA
8641 - Moisture % (LDNR 29-B)	LDNR 29-B	90012058	NELAP	LA
1860 - Oil & Grease	LDNR 29-B	90012058	NELAP	LA
8031 - Sample Preparation Procedure (LDNR 29-B)	LDNR 29-B	90012058	NELAP	LA
1445 - Saturated Paste Preparation	LDNR 29-B	90012058	NELAP	LA
8631 - Saturation %	LDNR 29-B	90012058	NELAP	LA
8041 - Sodium Absorption Ratio (SAR)	LDNR 29-B	90012058	NELAP	LA
1447 - Soluble Cation Extraction Procedure	LDNR 29-B	90012058	NELAP	LA
8044 - Soluble Cations (Na, Ca, Mg)	LDNR 29-B	90012058	NELAP	LA
1900 - pH	LDNR 29-B	90012058	NELAP	LA
6218 - EPH Aliphatic C19-C36	MA DEP EPH, Rev.1.1	90017202	NELAP	LA
6222 - EPH Aliphatic C9-C18	MA DEP EPH, Rev.1.1	90017202	NELAP	LA
6234 - EPH Aromatic C11-C22 Unadjusted	MA DEP EPH, Rev.1.1	90017202	NELAP	LA
100278 - Extractable Petroleum Hydrocarbons (EPH)	MA DEP EPH, Rev.1.1	90017202	NELAP	LA
3797 - Total EPH	MA DEP EPH, Rev.1.1	90017202	NELAP	LA
5312 - VPH Aliphatic C6-C8	MA DEP VPH, Rev.1.1	90017406	NELAP	LA
5313 - VPH Aliphatic C8-C10	MA DEP VPH, Rev.1.1	90017406	NELAP	LA
5310 - VPH Aromatic >C8-C10	MA DEP VPH, Rev.1.1	90017406	NELAP	LA
5312 - VPH Aliphatic C6-C8	MA DEP VPH, Rev.2.1	90017451	NELAP	LA
5313 - VPH Aliphatic C8-C10	MA DEP VPH, Rev.2.1	90017451	NELAP	LA
5310 - VPH Aromatic >C8-C10	MA DEP VPH, Rev.2.1	90017451	NELAP	LA
2051 - Total Petroleum Hydrocarbons (>C12-C28)	TNRCC 1005, Rev.3	90019208	NELAP	LA
2052 - Total Petroleum Hydrocarbons (>C28-C35)	TNRCC 1005, Rev.3	90019208	NELAP	LA
9302 - Total Petroleum Hydrocarbons (C6-C12)	TNRCC 1005, Rev.3	90019208	NELAP	LA
9308 - Total Petroleum Hydrocarbons (C6-C35)	TNRCC 1005, Rev.3	90019208	NELAP	LA
2050 - Total Petroleum Hydrocarbons (TPH)	TNRCC 1005, Rev.3	90019208	NELAP	LA

Biological Tissue

Analyte	Method Name	Method Code	Type	AB
NONE	NONE	NONE	NONE	NONE

The State of Tennessee

DEPARTMENT OF ENVIRONMENT AND CONSERVATION

DIVISION OF WATER RESOURCES

Certifies That

Waypoint Analytical, LLC

Having Met the Requirements of the Regulations for the Certification of Laboratories Analyzing Drinking Water is hereby Approved as a

State Certified Laboratory in Chemistry

To perform the Analyses as Indicated on the

Certified Parameter List For the Public Water Systems of Tennessee

Laboratory ID Number 02027

Prasad Subbanna
Laboratory Certification Program Manager
Division of Water Resources

Issue/Effective Date: 02-10-2023 Expiration Date: 11-14-2025

This certification is subject to performance on E.P.A. Proficiency Testing Samples, laboratory inspections, payment of annual fees, is nontransferable, and supersedes previously issued certificates.

The State of Tennessee

DEPARTMENT OF ENVIRONMENT AND CONSERVATION

DIVISION OF WATER RESOURCES

Certifies That

Waypoint Analytical, LLC – Memphis Lab

Having Met the Requirements of the Regulations for the Certification of Laboratories Analyzing Drinking Water is hereby Approved as a

State Certified Laboratory in Microbiology

To perform the Analyses as Indicated on the

Certified Parameter List For the Public Water Systems of Tennessee

Laboratory ID Number 02027

Prasad Subbanna
Laboratory Certification Program Manager
Division of Water Resources

Issue: 01-17-2023 Expiration Date: 11-14-2025

This certification is subject to performance on E.P.A. Proficiency Testing Samples, laboratory inspections, payment of annual fees, is nontransferable, and supersedes previously issued certificates.

Certified Parameters - 2023

TENNESSEE

Waypoint Analytical, LLC (Memphis) TN02027 EPA # TN00012 3/4/2024

Attn: Richard Medina
2790 Whitten Road
Memphis, TN 38133

Parameter	EPA Parameter #	Approved Method	Study Type	Date Complete	PT Provider / WS #
Disinfectant Residuals					
Total Chlorine Residual	1012	SM - 4500-Cl G	Proficiency Test	6/12/2023	ERA / 052223B
Disinfection By-Products					
HAA					
Bromoacetic Acid (HAA5)	2453	EPA - 552.2	Proficiency Test	1/10/2024	ERA / 121223J
Bromoacetic Acid (HAA5)	2453	EPA - 552.2	Proficiency Test	11/20/2023	ERA / WS-327
Bromoacetic Acid (HAA5)	2453	SM - 6251 B	Proficiency Test	11/20/2023	ERA / WS-327
Bromoacetic Acid (HAA5)	2453	SM - 6251 B	Proficiency Test	5/18/2023	ERA / 042623K
Chloroacetic Acid (HAA5)	2450	SM - 6251 B	Proficiency Test	11/20/2023	ERA / WS-327
Chloroacetic Acid (HAA5)	2450	SM - 6251 B	Proficiency Test	5/18/2023	ERA / 042623K
Chloroacetic Acid (HAA5)	2450	EPA - 552.2	Proficiency Test	11/20/2023	ERA / WS-327
Chloroacetic Acid (HAA5)	2450	EPA - 552.2	Proficiency Test	1/10/2024	ERA / 121223J
Dibromoacetic Acid (HAA5)	2454	SM - 6251 B	Proficiency Test	5/18/2023	ERA / 042623K
Dibromoacetic Acid (HAA5)	2454	SM - 6251 B	Proficiency Test	11/20/2023	ERA / WS-327
Dibromoacetic Acid (HAA5)	2454	EPA - 552.2	Proficiency Test	11/20/2023	ERA / WS-327
Dibromoacetic Acid (HAA5)	2454	EPA - 552.2	Proficiency Test	1/10/2024	ERA / 121223J
Dichloroacetic Acid (HAA5)	2451	EPA - 552.2	Proficiency Test	1/10/2024	ERA / 121223J
Dichloroacetic Acid (HAA5)	2451	EPA - 552.2	Proficiency Test	11/20/2023	ERA / WS-327
Dichloroacetic Acid (HAA5)	2451	SM - 6251 B	Proficiency Test	11/20/2023	ERA / WS-327
Dichloroacetic Acid (HAA5)	2451	SM - 6251 B	Proficiency Test	5/18/2023	ERA / 042623K
Trichloroacetic Acid (HAA5)	2452	SM - 6251 B	Proficiency Test	5/18/2023	ERA / 042623K
Trichloroacetic Acid (HAA5)	2452	EPA - 552.2	Proficiency Test	1/10/2024	ERA / 121223J
Trichloroacetic Acid (HAA5)	2452	SM - 6251 B	Proficiency Test	11/20/2023	ERA / WS-327
Trichloroacetic Acid (HAA5)	2452	EPA - 552.2	Proficiency Test	11/20/2023	ERA / WS-327
THM					
Bromodichloromethane	2943	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Bromodichloromethane	2943	EPA - 524.2	Proficiency Test	11/20/2023	ERA / WS-327
Bromoform	2942	EPA - 524.2	Proficiency Test	11/20/2023	ERA / WS-327
Bromoform	2942	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Chlorodibromomethane	2944	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Chlorodibromomethane	2944	EPA - 524.2	Proficiency Test	11/20/2023	ERA / WS-327
Chloroform	2941	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Chloroform	2941	EPA - 524.2	Proficiency Test	11/20/2023	ERA / WS-327
Inorganics					

Parameter	EPA Parameter #	Approved Method	Study Type	Date Complete	PT Provider / WS #
Calcium	1016	EPA - 200.7	Proficiency Test	4/20/2023	ERA / WS-320
Chloride	1017	EPA - 300.0	Proficiency Test	4/20/2023	ERA / WS-320
Color	1905	SM - 2120 B	Proficiency Test	3/23/2023	ERA / 030123I
Conductivity	1064	SM - 2510 B	Proficiency Test	4/20/2023	ERA / WS-320
Cyanide	1024	SM - 4500-CN-E	Proficiency Test	4/20/2023	ERA / WS-320
Fluoride	1025	EPA - 300.0	Proficiency Test	4/20/2023	ERA / WS-320
Hardness, Total (as CACO3)	1915	SM - 2340B	Proficiency Test	4/20/2023	ERA / WS-320
Iron	1028	EPA - 200.7	Proficiency Test	4/20/2023	ERA / WS-320
MBAS (Foaming Agent)	1089	SM - 5540 C	Proficiency Test	5/25/2023	ERA / WS-321
Nitrate	1040	EPA - 300.0	Proficiency Test	4/20/2023	ERA / WS-320
Nitrate + Nitrite	1038	EPA - 300.0	Proficiency Test	4/20/2023	ERA / WS-320
Nitrite	1041	EPA - 300.0	Proficiency Test	4/20/2023	ERA / WS-320
Odor	1920	SM - 2150 B	Proficiency Test	5/5/2023	RTC / WS23-2
Ortho-phosphate	1044	SM - 4500-P E	Proficiency Test	4/20/2023	ERA / WS-320
pH	1925	SM - 4500-H+B	Proficiency Test	4/20/2023	ERA / WS-320
Potassium	1042	EPA - 200.7	Proficiency Test	4/20/2023	ERA / WS-320
Sodium	1052	EPA - 200.7	Proficiency Test	4/20/2023	ERA / WS-320
Sulfate	1055	EPA - 300.0	Proficiency Test	4/20/2023	ERA / WS-320
Total Dissolved Solids	1930	SM - 2540 C	Proficiency Test	4/20/2023	ERA / WS-320
Total Organic Carbon(TOC)	2920	SM - 5310 C	Proficiency Test	4/20/2023	ERA / WS-320
Turbidity	0100	SM - 2130 B	Proficiency Test	4/20/2023	ERA / WS-320
Alkalinity, Total	1927	SM - 2320 B	Proficiency Test	4/20/2023	ERA / WS-320
Metals					
Antimony	1074	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Arsenic	1005	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Barium	1010	EPA - 200.7	Proficiency Test	4/20/2023	ERA / WS-320
Barium	1010	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Beryllium	1075	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Beryllium	1075	EPA - 200.7	Proficiency Test	5/18/2023	ERA / 042623K
Cadmium	1015	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Cadmium	1015	EPA - 200.7	Proficiency Test	4/20/2023	ERA / WS-320
Chromium	1020	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Chromium	1020	EPA - 200.7	Proficiency Test	4/20/2023	ERA / WS-320
Copper	1022	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Copper	1022	EPA - 200.7	Proficiency Test	4/20/2023	ERA / WS-320
Copper	1022	EPA - 200.8	Proficiency Test	1/10/2024	ERA / 121223J
Lead	5000	EPA - 200.8	Proficiency Test	11/20/2023	ERA / WS-327
Lead	5000	EPA - 200.8	Proficiency Test	11/20/2023	ERA / WS-327
Lead	5000	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Magnesium	1031	EPA - 200.7	Proficiency Test	4/20/2023	ERA / WS-320

Parameter	EPA Parameter #	Approved Method	Study Type	Date Complete	PT Provider / WS #
Manganese	1032	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Manganese	1032	EPA - 200.7	Proficiency Test	4/20/2023	ERA / WS-320
Mercury	1035	EPA - 245.1	Proficiency Test	4/20/2023	ERA / WS-320
Nickel	1036	EPA - 200.7	Proficiency Test	4/20/2023	ERA / WS-320
Nickel	1036	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Selenium	1045	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Thallium	1085	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Aluminum	1002	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Aluminum	1002	EPA - 200.7	Proficiency Test	5/18/2023	ERA / 042623K
Silver	1050	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Silver	1050	EPA - 200.7	Proficiency Test	4/20/2023	ERA / WS-320
Zinc	1095	EPA - 200.8	Proficiency Test	4/20/2023	ERA / WS-320
Zinc	1095	EPA - 200.7	Proficiency Test	4/20/2023	ERA / WS-320
Microbiologicals					
Escherichia coli, Colilert	3014	SM - 9223	Proficiency Test	4/20/2023	ERA / WS-320
Escherichia coli, Colilert - QuantiTray	3014	SM - 9223	Proficiency Test	4/20/2023	ERA / WS-320
Escherichia coli, Colilert - QuantiTray	3014	SM - 9223	Proficiency Test	5/25/2023	ERA / WS-321
Escherichia coli, Colilert-18	3014	SM - 9223	Proficiency Test	4/20/2023	ERA / WS-320
Heterotrophic Bacteria, Pour plate metho	3001	SM - 9215 B	Proficiency Test	4/20/2023	ERA / WS-320
Total Coliform, Colilert	3000	SM - 9223	Proficiency Test	4/20/2023	ERA / WS-320
Total Coliform, Colilert-18	3000	SM - 9223	Proficiency Test	4/20/2023	ERA / WS-320
Total Coliform, Colilert-QuantiTray	3000	SM - 9223	Proficiency Test	4/20/2023	ERA / WS-320
Total Coliform, Colilert-QuantiTray	3000	SM - 9223	Proficiency Test	5/25/2023	ERA / WS-321
Organics					
DBCP (Dibromochloropropane)	2931	EPA - 504.1	Proficiency Test	4/20/2023	ERA / WS-320
Ethylene dibromide (EDB)	2946	EPA - 504.1	Proficiency Test	5/18/2023	ERA / 042623K
VOCs - Regulated					
1,1,1-Trichloroethane	2981	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
1,1,2-Trichloroethane	2985	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
1,1-Dichloroethylene	2977	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
1,2,4-Trichlorobenzene	2378	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
1,2-Dichlorobenzene	2968	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
1,2-Dichloroethane	2980	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
1,2-Dichloropropane	2983	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
1,4-Dichlorobenzene	2969	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Benzene	2990	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Carbon Tetrachloride	2982	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Chlorobenzene	2989	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320

Parameter	EPA Parameter #	Approved Method	Study Type	Date Complete	PT Provider / WS #
cis-1,2-Dichloroethylene	2380	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Ethylbenzene	2992	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Methylene chloride (dichloromethane)	2964	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Styrene	2996	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Tetrachloroethylene	2987	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Toluene	2991	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Total Xylenes	2955	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
trans-1,2-dichloroethylene	2979	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Trichloroethylene	2984	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320
Vinyl Chloride	2976	EPA - 524.2	Proficiency Test	4/20/2023	ERA / WS-320

State of Tennessee

DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES

Certifies That

Pace National Center for Testing & Innovation Chemistry Laboratory

Having Met the Requirements of the Regulations for the Certification of Laboratories Analyzing Drinking Water is hereby Approved as a

State Certified Laboratory in Chemistry

To perform the Analyses as Indicated on the Certified Parameter List For the Public Water Systems of Tennessee

Laboratory ID Number 02006

Prasad Subbanna

Prasad Subbanna
Laboratory Certification Officer
Division of Water Resources

Issue/Effective Date: 05/23/2022

Expiration Date: 02/27/2025

This certification is subject to performance on E.P.A. Proficiency Testing Samples, laboratory inspections, payment of annual fees, is nontransferable, and supersedes previously issued certificates.

Certified Parameters - 2022

TENNESSEE

Pace Analytical National Center for Testing&Evaluation TN02006 EPA # TN00003 2/2/2023

Attn: Elizabeth Turner
12065 Lebanon Road
Mount Juliet, TN 37122-2605

Parameter	EPA Parameter #	Approved Method	Study Type	Date Complete	PT Provider / WS #
Disinfectant Residuals					
Total Chlorine Residual	1012	SM - 4500-Cl G	Proficiency Test	3/3/2022	Phenova / WS0122
Disinfection By-Products					
Bromide	1004	EPA - 300.0	Proficiency Test	3/3/2022	Phenova / WS0122
DOC (dissolved organic carbon)	2923	SM - 5310 C	Proficiency Test	3/3/2022	Phenova / WS0122
DOC (dissolved organic carbon)	2923	SM - 5310 C	Proficiency Test	12/1/2022	Phenova / R34272
UV 254 Absorbance	2922	SM - 5910 B	Proficiency Test	3/3/2022	Phenova / WS0122
HAA					
Dibromoacetic Acid (HAA5)	2454	EPA - 552.2	Proficiency Test	3/3/2022	Phenova / WS0122
Dichloroacetic Acid (HAA5)	2451	EPA - 552.2	Proficiency Test	3/3/2022	Phenova / WS0122
Monobromoacetic Acid (HAA5)	2453	EPA - 552.2	Proficiency Test	3/3/2022	Phenova / WS0122
Monochloroacetic Acid (HAA5)	2450	EPA - 552.2	Proficiency Test	3/3/2022	Phenova / WS0122
Trichloroacetic Acid (HAA5)	2452	EPA - 552.2	Proficiency Test	3/3/2022	Phenova / WS0122
THM					
Bromodichloromethane	2943	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Bromoform	2942	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Chlorodibromomethane	2944	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Chloroform	2941	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Total Trihalomethanes (TTHM)	2950	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Herbicides					
Alachlor	2051	EPA - 507	Proficiency Test	3/3/2022	Phenova / WS0122
Inorganics					
Calcium	1016	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Chlorate	N/A	EPA - 300.1	Proficiency Test	3/3/2022	Phenova / WS0122
Chloride	1017	EPA - 300.0	Proficiency Test	10/19/2022	Phenova / R34176
Chloride	1017	SM - 4500-Cl-B	Proficiency Test	3/3/2022	Phenova / WS0122
Chloride	1017	SM - 4110 B	Proficiency Test	10/19/2022	Phenova / R34176
Chloride	1017	EPA - 300.0	Proficiency Test	5/5/2022	Phenova / R32844
Chloride	1017	SM - 4110 B	Proficiency Test	3/3/2022	Phenova / WS0122
Chlorite	1009	EPA - 300.1	Proficiency Test	3/3/2022	Phenova / WS0122

Parameter	EPA Parameter #	Approved Method	Study Type	Date Complete	PT Provider / WS #
Conductivity	1064	SM - 2510 B	Proficiency Test	3/3/2022	Phenova / WS0122
Corrosivity	1910	SM - 2330 B	Proficiency Test	3/3/2022	Phenova / WS0122
Corrosivity	1910	SM - 2330 B	Proficiency Test	11/4/2022	Phenova / R34271
Cyanide	1024	SM - 4500-CN-E	Proficiency Test	3/3/2022	Phenova / WS0122
Cyanide	1024	EPA - 335.4	Proficiency Test	3/3/2022	Phenova / WS0122
Fluoride	1025	SM - 4500-F-C	Proficiency Test	3/3/2022	Phenova / WS0122
Fluoride	1025	SM - 4110 B	Proficiency Test	5/5/2022	Phenova / R32844
Fluoride	1025	EPA - 300.0	Proficiency Test	5/5/2022	Phenova / R32844
Fluoride	1025	EPA - 300.0	Proficiency Test	12/9/2022	ERA / 112322G
Fluoride	1025	EPA - 300.0	Proficiency Test	10/19/2022	Phenova / R34176
Fluoride	1025	SM - 4110 B	Proficiency Test	10/19/2022	Phenova / R34176
Hardness, Carbonate	1916	EPA - 130.1	Proficiency Test	3/3/2022	Phenova / WS0122
Hardness, Total (as CACO3)	1915	SM - 2340B	Proficiency Test	3/3/2022	Phenova / WS0122
Iron	1028	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
MBAS (Foaming Agent)	1089	SM - 5540 C	Proficiency Test	3/3/2022	Phenova / WS0122
Nitrate	1040	SM - 4500-NO3-F	Proficiency Test	3/3/2022	Phenova / WS0122
Nitrate	1040	SM - 4110 B	Proficiency Test	5/5/2022	Phenova / R32844
Nitrate	1040	EPA - 300.0	Proficiency Test	3/3/2022	Phenova / WS0122
Nitrate + Nitrite	1038	EPA - 353.2	Proficiency Test	3/3/2022	Phenova / WS0122
Nitrite	1041	SM - 4500-NO3-F	Proficiency Test	3/3/2022	Phenova / WS0122
Nitrite	1041	SM - 4110 B	Proficiency Test	3/3/2022	Phenova / WS0122
Nitrite	1041	EPA - 300.0	Proficiency Test	3/3/2022	Phenova / WS0122
Ortho-phosphate	1044	SM - 4500-P E	Proficiency Test	12/9/2022	ERA / 112322G
Ortho-phosphate	1044	SM - 4500-P E	Proficiency Test	3/3/2022	Phenova / WS0122
Ortho-phosphate	1044	EPA - 300.0	Proficiency Test	3/3/2022	Phenova / WS0122
pH	1925	EPA - 150.1	Proficiency Test	3/3/2022	Phenova / WS0122
pH	1925	SM - 4500-H+B	Proficiency Test	3/3/2022	Phenova / WS0122
Potassium	1042	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Silica	1049	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Sodium	1052	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Sulfate	1055	SM - 4500-SO4 E	Proficiency Test	3/3/2022	Phenova / WS0122
Sulfate	1055	SM - 4110 B	Proficiency Test	10/19/2022	Phenova / R34176
Sulfate	1055	SM - 4110 B	Proficiency Test	5/5/2022	Phenova / R32844
Sulfate	1055	EPA - 300.0	Proficiency Test	10/19/2022	Phenova / R34176
Sulfate	1055	EPA - 300.0	Proficiency Test	5/5/2022	Phenova / R32844
TOC (total organic carbon)	2920	SM - 5310 C	Proficiency Test	3/3/2022	Phenova / WS0122
TOC (total organic carbon)	2920	SM - 5310 C	Proficiency Test	12/1/2022	Phenova / R34272
Total Dissolved Solids	1930	SM - 2540 C	Proficiency Test	3/3/2022	Phenova / WS0122
Turbidity	0100	SM - 2130 B	Proficiency Test	3/3/2022	Phenova / WS0122
Turbidity	0100	EPA - 180.1	Proficiency Test	3/3/2022	Phenova / WS0122
Alkalinity, Total	1927	SM - 2320 B	Proficiency Test	12/1/2022	Phenova / R34272
Alkalinity, Total	1927	SM - 2320 B	Proficiency Test	3/3/2022	Phenova / WS0122

Parameter	EPA Parameter #	Approved Method	Study Type	Date Complete	PT Provider / WS #
Hardness, Calcium	1919	SM - 2340 B	Proficiency Test	3/3/2022	Phenova / WS0122
Perchlorate	1039	EPA - 314.0	Proficiency Test	3/3/2022	Phenova / WS0122
Metals					
Antimony	1074	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Arsenic	1005	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Barium	1010	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Barium	1010	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Beryllium	1075	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Beryllium	1075	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Cadmium	1015	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Cadmium	1015	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Chromium	1020	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Chromium	1020	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Copper	1022	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Copper	1022	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Lead	5000	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Magnesium	1031	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Manganese	1032	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Manganese	1032	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Mercury	1035	EPA - 245.1	Proficiency Test	3/3/2022	Phenova / WS0122
Nickel	1036	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Nickel	1036	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Selenium	1045	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Thallium	1085	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Uranium (Trace Metal)	4400	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Aluminum	1002	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Aluminum	1002	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Silver	1050	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Silver	1050	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Zinc	1095	EPA - 200.7	Proficiency Test	3/3/2022	Phenova / WS0122
Zinc	1095	EPA - 200.8	Proficiency Test	3/3/2022	Phenova / WS0122
Microbiologicals					
E. Coli, Colilert -QuantiTray 18hr	3014	SM - 9223	Proficiency Test	2/10/2022	Phenova / WSM0122
E. Coli, Colilert -QuantiTray 18hr	3014	SM - 9223	Proficiency Test	2/10/2022	Phenova / WSM0122
E. Coli, Colilert -QuantiTray 18hr	3014	SM - 9223	Proficiency Test	8/4/2022	Phenova / WSM0722
Escherichia coli, Colilert - QuantiTray	3014	SM - 9223	Proficiency Test	2/10/2022	Phenova / WSM0122
Escherichia coli, Colilert - QuantiTray	3014	SM - 9223	Proficiency Test	2/10/2022	Phenova / WSM0122
Escherichia coli, Colilert - QuantiTray	3014	SM - 9223	Proficiency Test	8/4/2022	Phenova / WSM0722

Parameter	EPA Parameter #	Approved Method	Study Type	Date Complete	PT Provider / WS #
Heterotrophic Bacteria, Pour plate metho	3001	SM - 9215 B	Proficiency Test	2/10/2022	Phenova / WSM0122
Heterotrophic Bacteria, Pour plate metho	3001	SM - 9215 B	Proficiency Test	8/4/2022	Phenova / WSM0722
Heterotrophic Bacteria, Pour plate metho	3001	SM - 9215 B	Proficiency Test	2/10/2022	Phenova / WSM0122
Total Coliform, Colilert-QuantiTray	3000	SM - 9223	Proficiency Test	2/10/2022	Phenova / WSM0122
Total Coliform, Colilert-QuantiTray	3000	SM - 9223	Proficiency Test	2/10/2022	Phenova / WSM0122
Total Coliform, Colilert-QuantiTray	3000	SM - 9223	Proficiency Test	8/4/2022	Phenova / WSM0722
Total Coliform, Colilert-QuantiTray 18hr	3000	SM - 9223	Proficiency Test	2/10/2022	Phenova / WSM0122
Total Coliform, Colilert-QuantiTray 18hr	3000	SM - 9223	Proficiency Test	8/4/2022	Phenova / WSM0722
Total Coliform, Colilert-QuantiTray 18hr	3000	SM - 9223	Proficiency Test	2/10/2022	Phenova / WSM0122
Organics					
DBCP (Dibromochloropropane)	2931	EPA - 504.1	Proficiency Test	3/3/2022	Phenova / WS0122
EDB (Ethylene dibromide)	2946	EPA - 504.1	Proficiency Test	3/3/2022	Phenova / WS0122
Pesticides					
Atrazine	2050	EPA - 507	Proficiency Test	3/3/2022	Phenova / WS0122
Simazine	2037	EPA - 507	Proficiency Test	3/3/2022	Phenova / WS0122
Radiological					
Cesium-134 (Radioactive)	4270	DOE - 4.5.2.3	Proficiency Test	2/24/2022	ERA / RAD-128
Cesium-134 (Radioactive)	4266	DOE - GA-01-R	Proficiency Test	2/24/2022	ERA / RAD-128
Cesium-134 (Radioactive)	4270	EPA - 901.1	Proficiency Test	2/24/2022	ERA / RAD-128
Cesium-137 (Radioactive)	4276	DOE - 4.5.2.3	Proficiency Test	2/24/2022	ERA / RAD-128
Cesium-137 (Radioactive)	4266	DOE - GA-01-R	Proficiency Test	2/24/2022	ERA / RAD-128
Cesium-137 (Radioactive)	4276	EPA - 901.1	Proficiency Test	2/24/2022	ERA / RAD-128
Cobalt-60 (Radioactive)	4142	DOE - 4.5.2.3	Proficiency Test	2/24/2022	ERA / RAD-128
Cobalt-60 (Radioactive)	4142	EPA - 901.1	Proficiency Test	2/24/2022	ERA / RAD-128
Gross Alpha	4000	EPA - 900.0	Proficiency Test	2/24/2022	ERA / RAD-128
Gross Beta	4100	EPA - 900.0	Proficiency Test	2/24/2022	ERA / RAD-128
Radium-226	4020	SM - 7500-Ra B (M)	Proficiency Test	2/24/2022	ERA / RAD-128
Radium-226	4020	SM - 7500-Ra B	Proficiency Test	2/24/2022	ERA / RAD-128
Radium-226	4020	SM - 304, 305	Proficiency Test	2/24/2022	ERA / RAD-128
Radium-226	4020	EPA - 903.0	Proficiency Test	2/24/2022	ERA / RAD-128
Radium-228	4030	EPA - 904.0	Proficiency Test	2/24/2022	ERA / RAD-128
Strontium 89 (Radioactive)	4172	EPA - 905.0	Proficiency Test	2/24/2022	ERA / RAD-128
Strontium 90 (Radioactive)	4174	EPA - 905.0	Proficiency Test	2/24/2022	ERA / RAD-128
Tritium (Radioactive)	4102	EPA - 906.0	Proficiency Test	2/24/2022	ERA / RAD-128
Uranium (Radioactive)	4400	ASTM - D 5174-97	Proficiency Test	2/24/2022	ERA / RAD-128
Uranium (Radioactive)	4400	ASTM - D 3972-02	Proficiency Test	2/24/2022	ERA / RAD-128
Uranium (Radioactive)	4400	ASTM - D 5174-07	Proficiency Test	2/24/2022	ERA / RAD-128
Uranium (Radioactive)	4400	ASTM - D 3972-97	Proficiency Test	2/24/2022	ERA / RAD-128

Parameter	EPA Parameter #	Approved Method	Study Type	Date Complete	PT Provider / WS #
VOCs - Regulated					
1,1,1-Trichloroethane	2981	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
1,1,2-Trichloroethane	2985	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
1,1-Dichloroethylene	2977	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
1,2,4-Trichlorobenzene	2378	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
1,2-Dichlorobenzene	2968	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
1,2-Dichloroethane	2980	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
1,2-Dichloropropane	2983	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
1,4-Dichlorobenzene	2969	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Benzene	2990	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Carbon Tetrachloride	2982	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Chlorobenzene	2989	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
cis-1,2-Dichloroethylene	2380	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Ethylbenzene	2992	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Methylene chloride (dichloromethane)	2964	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Styrene	2996	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Tetrachloroethylene	2987	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Toluene	2991	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Total Xylenes	2955	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
trans-1,2-dichloroethylene	2979	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Trichloroethylene	2984	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122
Vinyl Chloride	2976	EPA - 524.2	Proficiency Test	3/3/2022	Phenova / WS0122

The State of Tennessee

DEPARTMENT OF ENVIRONMENT AND CONSERVATION

DIVISION OF WATER RESOURCES

Certifies That

Pace Analytical

Having Met the Requirements of the Regulations for the Certification of Laboratories Analyzing Drinking Water is hereby Approved as a

State Certified Laboratory in Microbiology

Total Coliform – Enzyme Substrate Method – Colilert & Colilert-18 SM9223

Escherichia coli – Enzyme Substrate Method – Colilert & Colilert-18 SM9223

Total Coliform/Escherichia coli Enumeration - SM 9223 (Colilert Quanti-tray 2000)

Heterotrophic Bacteria – Pour Plate Method – SM 9215B

Laboratory ID Number 02006

Prasad Subbanna
Lab Certification Program Manager
Division of Water Resources

Amy P. Francis
Lab Certification Officer
Division of water Resources

Issue Date: 03/28/2024

Expiration Date: 03/12/2027

This certification is subject to performance on E.P.A. Proficiency Testing Samples, laboratory inspections, payment of annual fees, is nontransferable, and supersedes previously issued certificates.

RHS 8-7

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF RADIOLOGICAL HEALTH
William R. Snodgrass TN Tower 312 Rosa L. Parks Avenue, 15th Floor Nashville, TN 37243
615-532-0364

RADIOACTIVE MATERIAL LICENSE

Amendment 16

Pursuant to Tennessee Department of Environment and Conservation Regulations, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules and regulations of the Tennessee Department of Environment and Conservation and orders of the Division of Radiological Health, now or hereafter in effect and to any conditions specified below.

LICENSEE	
1. Name ESC Lab Sciences	3. License number R-95006-D25
	4. Expiration date April 30, 2025
2. Address 12065 Lebanon Road Mt. Juliet, Tennessee 37122	5. File no. R-95006

6. Radioactive Material (Element and Mass Number)	8. Chemical and/or physical form	9. Maximum Radioactivity and/or quantity of material which licensee may possess at any one time.
SEE SUPPLEMENTARY SHEETS		

10. Authorized Use

SEE SUPPLEMENTARY SHEETS

CONDITIONS

11. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.

For the Commissioner
Tennessee Department of Environment and Conservation

Date of Issuance: January 4, 2017

By: Charles Arnott

Division of Radiological Health
Charles Arnott, Environmental Consultant

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
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License Number R-95006-D25

Supplementary Sheet

6. Radioactive Material (Element and Mass Number)	8. Chemical and/or Physical Form	9. Maximum Radioactivity and/or Quantity of Material Which Licensee May Possess at Any One Time	
A. Any radioactive materials with atomic numbers 2-83	A. Any	A. 100 millicuries	
B. Any radioactive materials with atomic numbers 84-100	B. Any	B. 10 millicuries	*
C. Source material (Natural or Depleted Uranium and/or Natural Thorium)	C. Any	C. 50 kilograms	
D. Uranium 235	D. Any	D. 300 grams	*
E. Uranium 233	E. Any	E. 2 grams	*
F. Hydrogen 3	F. Any	F. 1 curie	
G. Any radioactive materials with atomic numbers 1-96	G. Any	G. 2 millicuries per radionuclide. Total not to exceed 100 millicuries	*

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H. Any radioactive material	H. Sealed, plated, and/or electrodeposited sources	H. No single source to * exceed the maximum activity authorized by the Registry of Sealed Sources and Devices for that source, or for non-registered sources, not to exceed 10 micro-curies of alpha emitting material, 100 micro-curies of beta and/or gamma emitting material. Total not to exceed one (1) millicurie.

* For each kind of special nuclear material determine the ratio between the quantity of that special nuclear material and the quantity specified here for the same kind of special nuclear material. The sums of such ratios for all kinds of special nuclear material in combination shall not exceed "1" (i.e. unity).

A. through F. and H. Analytical testing of environmental, waste, bioassay, and test samples that may contain low levels of radioactive materials. This would include radioactive materials, environmental aquatic toxicology, bioassay, and radioactive sealed source leak test analyses.

G. and H. Laboratory reference and calibration standards. Instrument standardization and/or calibration sources.

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Conditions (continued)

12. The licensee shall comply with applicable provisions of 0400-20-04, 0400-20-05, and 0400-20-10 of "State Regulations for Protection Against Radiation."

13. A. **Radioactive material authorized by this license shall be used by, or under the supervision of, William Mock, Jim Burns, or Ron Eidson.**

    B. **The Radiation Safety Officer for this license is Jim Burns.**

14. A. Sealed sources authorized by this license shall be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to transfer, the sealed source shall not be put into use until tested.

    B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surface of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak tests shall be kept in units of microcuries and maintained for inspection by the Department.

    C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five days of the tests with the Tennessee Department of Environment and Conservation, Division of Radiological Health, William R. Snodgrass Tennessee Tower, 15th Floor, 312 Rosa L. Parks Avenue, Nashville, Tennessee 37243, describing the equipment involved, the test results, and the corrective action taken.

    D. Tests for leakage and/or contamination shall be performed by the licensee, or by other persons authorized by this Department, the U.S. Nuclear Regulatory Commission, or another Agreement State to perform such services.

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15. The licensee shall not open or remove sealed sources containing radioactive material from their respective source holders.

16. The licensee shall maintain complete and accurate records of the receipt and disposal of radioactive material. The licensee shall, for radioactive material no longer useful for any purpose and for any equipment or supplies contaminated with such material for which further use and decontamination are not planned, define those materials as radioactive waste and treat them as such in accordance with the following provisions:

    A. Radioactive waste material shall not be stored with non-radioactive waste.

    B. A written record of all radioactive waste material shall be maintained until it has been determined by a suitable survey or radioassay that it has decayed to background levels or until it has been shipped to an authorized recipient in accordance with all applicable regulations. Accountability of radioactive waste material prepared for shipment but not yet shipped from the licensee's premises shall be maintained by the licensee by an internal record system such that the licensee is constantly aware of the material's location and the proposed time of shipment. Individuals, who are involved in the shipping of such material and/or the storage of such material prior to shipment, shall be trained in the precautions necessary for such handling and storage.

    C. For material which has decayed to background levels as determined by radioassay or external level as measured with appropriately calibrated instruments, records shall indicate that the material was determined to be no longer radioactive and will indicate the methods and results of the survey or analysis.

    D. Shipment records of radioactive waste material shall be maintained and the licensee shall require written confirmation from the authorized recipient of such material that this material has been received.

    E. All records and written confirmations required by this condition shall be maintained for

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF RADIOLOGICAL HEALTH
William R. Snodgrass TN Tower 312 Rosa L. Parks Avenue, 15th Floor Nashville, TN 37243
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inspection by the Department.

The requirements for this condition are in addition to any other requirements for the handling and/or disposal of radioactive material contained in this license and "State Regulations for Protection Against Radiation."

17. The licensee is authorized to receive, possess, and use any radioactive material distributed under a general license, issued by the U.S. Nuclear Regulatory Commission, or another Agreement State, without being specifically referenced in Items 6, 8, 9 and 10 of this license. Notwithstanding any other conditions of this license, the general licensee may possess and use radioactive material received under the provisions of 0400-20-10 of "State Regulations for Protection Against Radiation" in accordance with the requirements provided at the time of the transfer of the radioactive material under the terms of the general license.

18. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources and/or devices received and possessed under this license. Records of inventories shall be maintained for inspection by the Department.

19. Upon possession of specifically licensed radioactive material, the licensee shall submit a diagram of the radioactive material use and storage areas showing the distances to unrestricted areas. Shielding, locks, and other means of control shall be included.

20. The licensee in making disposal of radioactive wastes to the sanitary sewer system shall do so in conformity with 0400-20-5-.122 of "State Regulations for Protection Against Radiation."

21. The licensee is authorized to perform tests for leakage and/or contamination upon sealed sources containing these radioactive materials and upon devices which contain sealed sources. This license also authorizes possession of radioactive material collected as a

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DIVISION OF RADIOLOGICAL HEALTH
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result of these tests. Such waste material will be disposed of in conformance with 0400-20-5-.120 of "State Regulations for Protection Against Radiation."

22. **The tests for leakage and/or contamination shall be capable of detecting 0.005 microcurie of contamination on the test sample. The customer shall be furnished a report of leak tests results in units of microcuries.**

    If the test reveals the presence of removable contamination equivalent to or greater than 0.005 microcurie, the customer of the licensee shall be informed of the Department's requirements as follows: "The licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five days of the test with the Tennessee Department of Environment and Conservation, Division of Radiological Health, William R. Snodgrass Tennessee Tower, 15th Floor, 312 Rosa L. Parks Avenue, Nashville, Tennessee 37243, describing the equipment involved, the test results, and the corrective action taken."

23. **The tests for leakage and/or contamination shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample, or in the case or radium, the escape of radon at the rate of 0.001 microcurie per 24 hours. The test samples shall be taken from the sealed source or from the surface of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak tests shall be kept in units of microcuries and maintained for inspection by the Department.**

    If the test reveals the presence of 0.005 microcurie of more of removable contamination, or in the case of radium, the escape of radon at the rate of 0.001 microcurie or more per 24 hours, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five days of the test with the Tennessee Department of Environment and Conservation, Division of Radiological Health, William R. Snodgrass Tennessee Tower, 15th Floor, 312 Rosa L. Parks Avenue, Nashville, Tennessee 37243, describing the equipment involved, the test results, and the corrective action taken.

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF RADIOLOGICAL HEALTH
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24. No provision of this license relieves the licensee from compliance with other Federal, State, and local laws, ordinances, and regulations applicable to the licensee's activities.

25. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in the following
    - Application dated July 15, 2014, with attachments
    - Email dated October 17, 2014
    - Letters dated February 27, 2015, **November 1, 2016, with attachments, and November 18, 2016, with attachments**
    - **Emails dated November 28, 2016, with attachments, and November 29, 2016, with attachments**

State of Florida
Department of Health, Bureau of Public Health Laboratories
This is to certify that

E87052

EUROFINS SAVANNAH
5102 LAROCHE AVENUE
SAVANNAH, GA 31404

has complied with Florida Administrative Code 64E-1,
for the examination of environmental samples in the following categories

DRINKING WATER - GROUP I UNREGULATED CONTAMINANTS, DRINKING WATER - GROUP II UNREGULATED CONTAMINANTS, DRINKING WATER - GROUP III UNREGULATED CONTAMINANTS, DRINKING WATER - PRIMARY INORGANIC CONTAMINANTS, DRINKING WATER - SECONDARY INORGANIC CONTAMINANTS, DRINKING WATER - SYNTHETIC ORGANIC CONTAMINANTS, NON-POTABLE WATER - EXTRACTABLE ORGANICS, NON-POTABLE WATER - GENERAL CHEMISTRY, NON-POTABLE WATER - METALS, NON-POTABLE WATER - MICROBIOLOGY, NON-POTABLE WATER - PESTICIDES-HERBICIDES-PCB'S, NON-POTABLE WATER - VOLATILE ORGANICS, SOLID AND CHEMICAL MATERIALS - EXTRACTABLE ORGANICS, SOLID AND CHEMICAL MATERIALS - GENERAL CHEMISTRY, SOLID AND CHEMICAL MATERIALS - METALS, SOLID AND CHEMICAL MATERIALS - PESTICIDES-HERBICIDES-PCB'S, SOLID AND CHEMICAL MATERIALS - VOLATILE ORGANICS

Continued certification is contingent upon successful on-going compliance with the NELAC Standards and FAC Rule 64E-1 regulations. Specific methods and analytes certified are cited on the Laboratory Scope of Accreditation for this laboratory and are on file at the Bureau of Public Health Laboratories, P. O. Box 210, Jacksonville, Florida 32231. Clients and customers are urged to verify with this agency the laboratory's certification status in Florida for particular methods and analytes.

Date Issued: July 01, 2024 Expiration Date: June 30, 2025

Marie-Claire Rowlinson, PhD, D(ABMM)
Bureau of Public Health Laboratories
DH Form 1697, 7/04
NON-TRANSFERABLE E87052-83-07/01/2024
Supersedes all previously issued certificates

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Drinking Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
5180	1,2,3-Trichloropropane	EPA 504.1	10082801	Group II Unregulated Contaminants	4/18/2011
4570	1,2-Dibromo-3-chloropropane (DBCP)	EPA 504.1	10082801	Synthetic Organic Contaminants	2/6/2002
4585	1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 504.1	10082801	Synthetic Organic Contaminants	2/6/2002
9490	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid (11-ClPF3OUdS)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
9490	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid (11-ClPF3OUdS)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
6948	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2 FTS)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6946	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6947	1H,1H,2H,2H-Perfluoro-octanesulfonic Acid (6:2 FTS)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6951	4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6951	4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
6952	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic Acid (9-ClPF3ONS)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6952	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic Acid (9-ClPF3ONS)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
1505	Alkalinity as CaCO3	SM 2320 B-2011	20045618	Primary Inorganic Contaminants	1/31/2024
1000	Aluminum	EPA 200.7	10013806	Secondary Inorganic Contaminants	6/17/2003
1000	Aluminum	EPA 200.8	10014605	Secondary Inorganic Contaminants	6/17/2003
1510	Amenable cyanide	SM 4500-CN^- G-2016	20097238	Primary Inorganic Contaminants	1/31/2024
1005	Antimony	EPA 200.8	10014605	Primary Inorganic Contaminants	6/24/2003
1010	Arsenic	EPA 200.8	10014605	Primary Inorganic Contaminants	6/24/2003
1015	Barium	EPA 200.7	10013806	Primary Inorganic Contaminants	2/6/2002
1015	Barium	EPA 200.8	10014605	Primary Inorganic Contaminants	6/24/2003
1020	Beryllium	EPA 200.7	10013806	Primary Inorganic Contaminants	2/6/2002
1020	Beryllium	EPA 200.8	10014605	Primary Inorganic Contaminants	6/24/2003
1025	Boron	EPA 200.7	10013806	Secondary Inorganic Contaminants	12/2/2010
1535	Bromate	EPA 300.1	10275602	Primary Inorganic Contaminants	9/5/2002
1540	Bromide	EPA 300.1	10275602	Primary Inorganic Contaminants	10/17/2003
9312	Bromoacetic acid	EPA 552.2	10095804	Group I Unregulated Contaminants	9/5/2002
1030	Cadmium	EPA 200.7	10013806	Primary Inorganic Contaminants	2/6/2002
1030	Cadmium	EPA 200.8	10014605	Primary Inorganic Contaminants	6/24/2003
1035	Calcium	EPA 200.7	10013806	Primary Inorganic Contaminants	2/6/2002
1570	Chlorate	EPA 300.1	10275602	Secondary Inorganic Contaminants	7/30/2007
1575	Chloride	EPA 300.0	10053200	Secondary Inorganic Contaminants	2/6/2002
1575	Chloride	EPA 325.2	10057202	Secondary Inorganic Contaminants	2/6/2002

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Drinking Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
1575	Chloride	SM 4500-Cl^- E-2011	20086811	Secondary Inorganic Contaminants	1/31/2024
1595	Chlorite	EPA 300.1	10275602	Primary Inorganic Contaminants	12/2/2005
9336	Chloroacetic acid	EPA 552.2	10095804	Group I Unregulated Contaminants	9/5/2002
1040	Chromium	EPA 200.7	10013806	Primary Inorganic Contaminants	2/6/2002
1040	Chromium	EPA 200.8	10014605	Primary Inorganic Contaminants	6/24/2003
1605	Color	EPA 110.2	10005604	Secondary Inorganic Contaminants	2/6/2002
1605	Color	SM 2120 B-2011	20039310	Secondary Inorganic Contaminants	1/31/2024
1610	Conductivity	SM 2510 B-2011	20048617	Primary Inorganic Contaminants	1/31/2024
1055	Copper	EPA 200.7	10013806	Primary Inorganic Contaminants,Secondary Inorganic Contaminants	2/6/2002
1055	Copper	EPA 200.8	10014605	Primary Inorganic Contaminants,Secondary Inorganic Contaminants	6/24/2003
1620	Corrosivity (langlier index)	SM 2330 B	20003207	Secondary Inorganic Contaminants	2/6/2002
1635	Cyanide	EPA 335.4	10061402	Primary Inorganic Contaminants	2/6/2002
9357	Dibromoacetic acid	EPA 552.2	10095804	Group I Unregulated Contaminants	9/5/2002
9360	Dichloroacetic acid	EPA 552.2	10095804	Group I Unregulated Contaminants	9/5/2002
1710	Dissolved organic carbon (DOC)	SM 5310 B-2014	20137831	Primary Inorganic Contaminants	1/31/2024
1730	Fluoride	EPA 300.0	10053200	Primary Inorganic Contaminants,Secondary Inorganic Contaminants	2/6/2002
1750	Hardness	EPA 130.2	10007202	Secondary Inorganic Contaminants	11/18/2008
1750	Hardness	SM 2340 B-2011	20046611	Secondary Inorganic Contaminants	1/31/2024
1750	Hardness	SM 2340 C	20047603	Secondary Inorganic Contaminants	11/18/2008
9460	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA, GenX)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
9460	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA, GenX)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
1070	Iron	EPA 200.7	10013806	Secondary Inorganic Contaminants	2/6/2002
1075	Lead	EPA 200.8	10014605	Primary Inorganic Contaminants	6/24/2003
1085	Magnesium	EPA 200.7	10013806	Secondary Inorganic Contaminants	2/6/2002
1090	Manganese	EPA 200.7	10013806	Secondary Inorganic Contaminants	2/6/2002
1090	Manganese	EPA 200.8	10014605	Secondary Inorganic Contaminants	6/24/2003
1095	Mercury	EPA 200.8	10014605	Primary Inorganic Contaminants	6/24/2003
1095	Mercury	EPA 245.1	10036609	Primary Inorganic Contaminants	6/24/2003
1100	Molybdenum	EPA 200.7	10013806	Secondary Inorganic Contaminants	12/2/2005
1100	Molybdenum	EPA 200.8	10014605	Secondary Inorganic Contaminants	6/23/2010
4846	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Drinking Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
1105	Nickel	EPA 200.7	10013806	Primary Inorganic Contaminants	2/6/2002
1105	Nickel	EPA 200.8	10014605	Primary Inorganic Contaminants	6/24/2003
1805	Nitrate	EPA 353.2	10067604	Primary Inorganic Contaminants	2/6/2002
1835	Nitrite	EPA 300.0	10053200	Primary Inorganic Contaminants	2/6/2002
4847	N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
6956	Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
1870	Orthophosphate as P	EPA 365.1	10070005	Primary Inorganic Contaminants	12/2/2005
1870	Orthophosphate as P	SM 4500-P F-2011	20125024	Primary Inorganic Contaminants	1/31/2024
6957	Perfluoro(2-ethoxyethane) Sulfonic Acid (PFEESA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6965	Perfluoro-3-methoxypropanoic Acid (PFMPA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6966	Perfluoro-4-methoxybutanoic Acid (PFMBA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6911	Perfluorobutane Sulfonate (PFBS)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6911	Perfluorobutane Sulfonate (PFBS)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
6919	Perfluorobutanoate (PFBA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6921	Perfluorodecanoate (PFDA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6921	Perfluorodecanoate (PFDA)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
6903	Perfluorododecanoic Acid (PFDoA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6903	Perfluorododecanoic Acid (PFDoA)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
6925	Perfluoroheptane Sulfonate (PFHpS)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6926	Perfluoroheptanoate (PFHpA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6926	Perfluoroheptanoate (PFHpA)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
6927	Perfluorohexane Sulfonic Acid (PFHxS)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6927	Perfluorohexane Sulfonic Acid (PFHxS)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
6928	Perfluorohexanoate (PFHxA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6928	Perfluorohexanoate (PFHxA)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
6930	Perfluorononanoate (PFNA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6930	Perfluorononanoate (PFNA)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
6931	Perfluorooctane sulfonic acid (PFOS)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6931	Perfluorooctane sulfonic acid (PFOS)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
6932	Perfluoro-octanoate (PFOA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6932	Perfluoro-octanoate (PFOA)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
6934	Perfluoropentane Sulfonic Acid (PFPeS)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6935	Perfluoropentanoate (PFPeA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6902	Perfluorotetradecanoic acid (PFTDA)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
9563	Perfluorotridecanoic acid (PFTrDA)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Drinking Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
6944	Perfluoroundecanoate (PFUnDA)	EPA 533	10091619	Group III Unregulated Contaminants	6/16/2023
6904	Perfluoroundecanoic acid (PFUnDA)	EPA 537.1	10091642	Group III Unregulated Contaminants	6/16/2023
1900	pH	EPA 150.1	10008409	Secondary Inorganic Contaminants,Primary Inorganic Contaminants	2/6/2002
1900	pH	SM 4500-H+ B-2011	20105220	Secondary Inorganic Contaminants	1/31/2024
1125	Potassium	EPA 200.7	10013806	Secondary Inorganic Contaminants	3/25/2003
1955	Residue-filterable (TDS)	EPA 160.1	10009208	Secondary Inorganic Contaminants	2/6/2002
1955	Residue-filterable (TDS)	SM 2540 C-2011	20050413	Secondary Inorganic Contaminants	1/31/2024
1140	Selenium	EPA 200.8	10014605	Primary Inorganic Contaminants	6/24/2003
1990	Silica as SiO2	EPA 200.7	10013806	Primary Inorganic Contaminants	10/5/2020
1150	Silver	EPA 200.7	10013806	Secondary Inorganic Contaminants	2/6/2002
1150	Silver	EPA 200.8	10014605	Secondary Inorganic Contaminants	6/24/2003
1155	Sodium	EPA 200.7	10013806	Primary Inorganic Contaminants	2/6/2002
2000	Sulfate	EPA 300.0	10053200	Primary Inorganic Contaminants,Secondary Inorganic Contaminants	2/6/2002
2000	Sulfate	EPA 375.4	10073800	Secondary Inorganic Contaminants	2/6/2002
1165	Thallium	EPA 200.8	10014605	Primary Inorganic Contaminants	6/24/2003
1645	Total cyanide	SM 4500-CN^- E-2016	20096439	Primary Inorganic Contaminants	1/31/2024
9414	Total haloacetic acids (HAA5)	EPA 552.2	10095804	Synthetic Organic Contaminants	12/2/2005
1825	Total nitrate-nitrite	EPA 300.0	10053200	Primary Inorganic Contaminants	2/6/2002
1825	Total nitrate-nitrite	EPA 353.2	10067604	Primary Inorganic Contaminants	2/6/2002
2040	Total organic carbon	SM 5310 B-2014	20137831	Primary Inorganic Contaminants	1/31/2024
9642	Trichloroacetic acid	EPA 552.2	10095804	Group I Unregulated Contaminants	9/5/2002
2055	Turbidity	EPA 180.1	10011800	Secondary Inorganic Contaminants	2/6/2002
2055	Turbidity	SM 2130 B-2011	20048220	Secondary Inorganic Contaminants	1/31/2024
2060	UV 254	SM 5910 B	20146401	Primary Inorganic Contaminants	12/2/2005
1185	Vanadium	EPA 200.7	10013806	Secondary Inorganic Contaminants	12/2/2005
1185	Vanadium	EPA 200.8	10014605	Secondary Inorganic Contaminants	3/19/2012
1190	Zinc	EPA 200.7	10013806	Secondary Inorganic Contaminants	12/2/2010
1190	Zinc	EPA 200.8	10014605	Secondary Inorganic Contaminants	6/24/2003

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
5105	1,1,1,2-Tetrachloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
5160	1,1,1-Trichloroethane	EPA 624.1	10298121	Volatile Organics	4/4/2018
5160	1,1,1-Trichloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
5110	1,1,2,2-Tetrachloroethane	EPA 624.1	10298121	Volatile Organics	4/4/2018
5110	1,1,2,2-Tetrachloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
5185	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	10307127	Volatile Organics	1/5/2024
5165	1,1,2-Trichloroethane	EPA 624.1	10298121	Volatile Organics	4/4/2018
5165	1,1,2-Trichloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4630	1,1-Dichloroethane	EPA 624.1	10298121	Volatile Organics	4/4/2018
4630	1,1-Dichloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4640	1,1-Dichloroethylene	EPA 624.1	10298121	Volatile Organics	4/4/2018
4640	1,1-Dichloroethylene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4670	1,1-Dichloropropene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5150	1,2,3-Trichlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5180	1,2,3-Trichloropropane	EPA 8260D	10307127	Volatile Organics	1/5/2024
5182	1,2,3-Trimethylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
6715	1,2,4,5-Tetrachlorobenzene	EPA 8270	10185203	Extractable Organics	7/1/2003
6715	1,2,4,5-Tetrachlorobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5155	1,2,4-Trichlorobenzene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5155	1,2,4-Trichlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5155	1,2,4-Trichlorobenzene	EPA 8270	10185203	Extractable Organics	7/1/2003
5155	1,2,4-Trichlorobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5210	1,2,4-Trimethylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4570	1,2-Dibromo-3-chloropropane (DBCP)	EPA 8011	10173009	Volatile Organics	7/1/2003
4570	1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4585	1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8011	10173009	Volatile Organics	7/1/2003
4585	1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4610	1,2-Dichlorobenzene	EPA 624.1	10298121	Volatile Organics	4/4/2018
4610	1,2-Dichlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4610	1,2-Dichlorobenzene	EPA 8270	10185203	Extractable Organics	7/1/2003
4610	1,2-Dichlorobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4635	1,2-Dichloroethane	EPA 624.1	10298121	Volatile Organics	4/4/2018
4635	1,2-Dichloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4655	1,2-Dichloropropane	EPA 624.1	10298121	Volatile Organics	4/4/2018
4655	1,2-Dichloropropane	EPA 8260D	10307127	Volatile Organics	1/5/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
6220	1,2-Diphenylhydrazine	EPA 8270	10185203	Extractable Organics	7/1/2003
6220	1,2-Diphenylhydrazine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6411	1,2-Diphenylhydrazine (as Azobenzene)	EPA 625.1	10300024	Extractable Organics	12/4/2020
6800	1,3,5-Trichlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5215	1,3,5-Trimethylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
6885	1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8270	10185203	Extractable Organics	7/1/2003
6885	1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8270E	10242543	Extractable Organics	1/5/2024
4615	1,3-Dichlorobenzene	EPA 624.1	10298121	Volatile Organics	4/4/2018
4615	1,3-Dichlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4615	1,3-Dichlorobenzene	EPA 8270	10185203	Extractable Organics	7/1/2003
4615	1,3-Dichlorobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4660	1,3-Dichloropropane	EPA 8260D	10307127	Volatile Organics	1/5/2024
6160	1,3-Dinitrobenzene (1,3-DNB)	EPA 8270	10185203	Extractable Organics	7/1/2003
6160	1,3-Dinitrobenzene (1,3-DNB)	EPA 8270E	10242543	Extractable Organics	1/5/2024
4620	1,4-Dichlorobenzene	EPA 624.1	10298121	Volatile Organics	4/4/2018
4620	1,4-Dichlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4620	1,4-Dichlorobenzene	EPA 8270	10185203	Extractable Organics	7/1/2003
4620	1,4-Dichlorobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4735	1,4-Dioxane (1,4-Diethyleneoxide)	EPA 624.1	10298121	Volatile Organics	9/15/2022
4735	1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4735	1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270	10185203	Volatile Organics	7/1/2003
4735	1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	10242543	Extractable Organics	1/5/2024
6420	1,4-Naphthoquinone	EPA 8270	10185203	Extractable Organics	7/1/2003
6420	1,4-Naphthoquinone	EPA 8270E	10242543	Extractable Organics	1/5/2024
6630	1,4-Phenylenediamine	EPA 8270	10185203	Extractable Organics	7/1/2003
6630	1,4-Phenylenediamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
9490	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid (11-ClPF3OUdS)	EPA 1633	10123463	Extractable Organics	1/31/2024
4510	1-Chlorohexane	EPA 8260D	10307127	Volatile Organics	1/5/2024
6948	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2 FTS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6946	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6947	1H,1H,2H,2H-Perfluoro-octanesulfonic Acid (6:2 FTS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6380	1-Methylnaphthalene	EPA 8270	10185203	Extractable Organics	7/30/2007
6380	1-Methylnaphthalene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6425	1-Naphthylamine	EPA 8270	10185203	Extractable Organics	7/1/2003

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
6425	1-Naphthylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
4665	2,2-Dichloropropane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4659	2,2'-Oxybis(1-chloropropane),bis(2-Chloro-1-methylethyl)ether (fka bis(2-Chloroisopropyl) ether	EPA 625.1	10300024	Extractable Organics	4/4/2018
4659	2,2'-Oxybis(1-chloropropane),bis(2-Chloro-1-methylethyl)ether (fka bis(2-Chloroisopropyl) ether	EPA 8270	10185203	Extractable Organics	7/1/2003
4659	2,2'-Oxybis(1-chloropropane),bis(2-Chloro-1-methylethyl)ether (fka bis(2-Chloroisopropyl) ether	EPA 8270E	10242543	Extractable Organics	1/5/2024
6735	2,3,4,6-Tetrachlorophenol	EPA 8270	10185203	Extractable Organics	7/1/2003
6735	2,3,4,6-Tetrachlorophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
8920	2,3-Dichlorobiphenyl (BZ 5)	EPA 625.1	10300024	Pesticides-Herbicides-PCB's	12/4/2020
8655	2,4,5-T	EPA 615	10105609	Pesticides-Herbicides-PCB's	2/6/2002
8655	2,4,5-T	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
9253	2,4,5-Trichlorobiphenyl (BZ 29)	EPA 625.1	10300024	Pesticides-Herbicides-PCB's	12/4/2020
6835	2,4,5-Trichlorophenol	EPA 8270	10185203	Extractable Organics	7/1/2003
6835	2,4,5-Trichlorophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6840	2,4,6-Trichlorophenol	EPA 625.1	10300024	Extractable Organics	4/4/2018
6840	2,4,6-Trichlorophenol	EPA 8270	10185203	Extractable Organics	7/1/2003
6840	2,4,6-Trichlorophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
8545	2,4-D	EPA 615	10105609	Pesticides-Herbicides-PCB's	2/6/2002
8545	2,4-D	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
8560	2,4-DB	EPA 615	10105609	Pesticides-Herbicides-PCB's	2/6/2002
8560	2,4-DB	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
6000	2,4-Dichlorophenol	EPA 625.1	10300024	Extractable Organics	4/4/2018
6000	2,4-Dichlorophenol	EPA 8270	10185203	Extractable Organics	7/1/2003
6000	2,4-Dichlorophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6130	2,4-Dimethylphenol	EPA 625.1	10300024	Extractable Organics	4/4/2018
6130	2,4-Dimethylphenol	EPA 8270	10185203	Extractable Organics	7/1/2003
6130	2,4-Dimethylphenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6175	2,4-Dinitrophenol	EPA 625.1	10300024	Extractable Organics	4/4/2018
6175	2,4-Dinitrophenol	EPA 8270	10185203	Extractable Organics	7/1/2003
6175	2,4-Dinitrophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6185	2,4-Dinitrotoluene (2,4-DNT)	EPA 625.1	10300024	Extractable Organics	4/4/2018
6185	2,4-Dinitrotoluene (2,4-DNT)	EPA 8270	10185203	Extractable Organics	7/1/2003
6185	2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	10242543	Extractable Organics	1/5/2024
6005	2,6-Dichlorophenol	EPA 8270	10185203	Extractable Organics	7/1/2003

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
6190	2,6-Dinitrotoluene (2,6-DNT)	EPA 625.1	10300024	Extractable Organics	4/4/2018
6190	2,6-Dinitrotoluene (2,6-DNT)	EPA 8270	10185203	Extractable Organics	7/1/2003
6190	2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	10242543	Extractable Organics	1/5/2024
5515	2-Acetylaminofluorene	EPA 8270	10185203	Extractable Organics	7/1/2003
5515	2-Acetylaminofluorene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4410	2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4500	2-Chloroethyl vinyl ether	EPA 624.1	10298121	Volatile Organics	4/4/2018
4500	2-Chloroethyl vinyl ether	EPA 8260D	10307127	Volatile Organics	1/5/2024
5795	2-Chloronaphthalene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5795	2-Chloronaphthalene	EPA 8270	10185203	Extractable Organics	7/1/2003
5795	2-Chloronaphthalene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5800	2-Chlorophenol	EPA 625.1	10300024	Extractable Organics	4/4/2018
5800	2-Chlorophenol	EPA 8270	10185203	Extractable Organics	7/1/2003
5800	2-Chlorophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
4535	2-Chlorotoluene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5866	2-Ethoxyethanol (Ethyl Cellusolve)	EPA 8270E	10242543	Extractable Organics	1/5/2024
9340	2H,2H,3H,3H-Perfluorodecanoic Acid (7:3 FTCA)	EPA 1633	10123463	Extractable Organics	1/31/2024
9338	2H,2H,3H,3H-Perfluorooctanoic Acid (5:3 FTCA)	EPA 1633	10123463	Extractable Organics	1/31/2024
4860	2-Hexanone	EPA 8260D	10307127	Volatile Organics	1/5/2024
6360	2-Methyl-4,6-dinitrophenol	EPA 625.1	10300024	Extractable Organics	4/4/2018
6360	2-Methyl-4,6-dinitrophenol	EPA 8270	10185203	Extractable Organics	7/1/2003
6360	2-Methyl-4,6-dinitrophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6385	2-Methylnaphthalene	EPA 8260D	10307127	Volatile Organics	1/5/2024
6385	2-Methylnaphthalene	EPA 8270	10185203	Extractable Organics	7/1/2003
6385	2-Methylnaphthalene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6400	2-Methylphenol (o-Cresol)	EPA 8270	10185203	Extractable Organics	7/1/2003
6400	2-Methylphenol (o-Cresol)	EPA 8270E	10242543	Extractable Organics	1/5/2024
6430	2-Naphthylamine	EPA 8270	10185203	Extractable Organics	7/30/2007
6430	2-Naphthylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6460	2-Nitroaniline	EPA 8270	10185203	Extractable Organics	7/1/2003
6460	2-Nitroaniline	EPA 8270E	10242543	Extractable Organics	1/5/2024
6490	2-Nitrophenol	EPA 625.1	10300024	Extractable Organics	4/4/2018
6490	2-Nitrophenol	EPA 8270	10185203	Extractable Organics	7/1/2003
6490	2-Nitrophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
5020	2-Nitropropane	EPA 8260D	10307127	Volatile Organics	1/5/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
5045	2-Pentanone	EPA 8015C	10173816	Volatile Organics	1/5/2024
5050	2-Picoline (2-Methylpyridine)	EPA 8270	10185203	Extractable Organics	7/1/2003
5050	2-Picoline (2-Methylpyridine)	EPA 8270E	10242543	Extractable Organics	1/5/2024
5945	3,3'-Dichlorobenzidine	EPA 625.1	10300024	Extractable Organics	4/4/2018
5945	3,3'-Dichlorobenzidine	EPA 8270	10185203	Extractable Organics	7/1/2003
5945	3,3'-Dichlorobenzidine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6103	3,3-Dimethyl-1-butanol	EPA 8260D	10307127	Volatile Organics	1/5/2024
6120	3,3'-Dimethylbenzidine	EPA 8270	10185203	Extractable Organics	7/1/2003
6120	3,3'-Dimethylbenzidine	EPA 8270E	10242543	Extractable Organics	1/5/2024
8600	3,5-Dichlorobenzoic acid	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
6412	3/4-Methylphenols (m/p-Cresols)	EPA 8270	10185203	Extractable Organics	11/18/2008
6412	3/4-Methylphenols (m/p-Cresols)	EPA 8270E	10242543	Extractable Organics	1/5/2024
6355	3-Methylcholanthrene	EPA 8270	10185203	Extractable Organics	7/30/2007
6355	3-Methylcholanthrene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6465	3-Nitroaniline	EPA 8270	10185203	Extractable Organics	7/1/2003
6465	3-Nitroaniline	EPA 8270E	10242543	Extractable Organics	1/5/2024
9353	4,4,5,5,6,6,6-Heptafluorohexanoic Acid (3:3 FTCA)	EPA 1633	10123463	Extractable Organics	1/31/2024
7355	4,4'-DDD	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7355	4,4'-DDD	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7360	4,4'-DDE	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7360	4,4'-DDE	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7365	4,4'-DDT	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7365	4,4'-DDT	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
6951	4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)	EPA 1633	10123463	Extractable Organics	1/31/2024
5540	4-Aminobiphenyl	EPA 8270	10185203	Extractable Organics	7/1/2003
5540	4-Aminobiphenyl	EPA 8270E	10242543	Extractable Organics	1/5/2024
5660	4-Bromophenyl phenyl ether	EPA 625.1	10300024	Extractable Organics	4/4/2018
5660	4-Bromophenyl phenyl ether	EPA 8270	10185203	Extractable Organics	7/1/2003
5700	4-Chloro-3-methylphenol	EPA 625.1	10300024	Extractable Organics	4/4/2018
5700	4-Chloro-3-methylphenol	EPA 8270	10185203	Extractable Organics	7/1/2003
5700	4-Chloro-3-methylphenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
5745	4-Chloroaniline	EPA 8270	10185203	Extractable Organics	7/1/2003
5745	4-Chloroaniline	EPA 8270E	10242543	Extractable Organics	1/5/2024
5825	4-Chlorophenyl phenylether	EPA 625.1	10300024	Extractable Organics	4/4/2018
5825	4-Chlorophenyl phenylether	EPA 8270	10185203	Extractable Organics	7/1/2003

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
5825	4-Chlorophenyl phenylether	EPA 8270E	10242543	Extractable Organics	1/5/2024
4540	4-Chlorotoluene	EPA 8260D	10307127	Volatile Organics	1/5/2024
6105	4-Dimethyl aminoazobenzene	EPA 8270	10185203	Extractable Organics	7/1/2003
6105	4-Dimethyl aminoazobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4995	4-Methyl-2-pentanone (MIBK)	EPA 8260D	10307127	Volatile Organics	1/5/2024
6470	4-Nitroaniline	EPA 8270	10185203	Extractable Organics	7/1/2003
6470	4-Nitroaniline	EPA 8270E	10242543	Extractable Organics	1/5/2024
6500	4-Nitrophenol	EPA 625.1	10300024	Extractable Organics	4/4/2018
6500	4-Nitrophenol	EPA 8270	10185203	Extractable Organics	7/1/2003
6500	4-Nitrophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6510	4-Nitroquinoline 1-oxide	EPA 8270	10185203	Extractable Organics	7/1/2003
6510	4-Nitroquinoline 1-oxide	EPA 8270E	10242543	Extractable Organics	1/5/2024
6570	5-Nitro-o-toluidine	EPA 8270	10185203	Extractable Organics	7/1/2003
6570	5-Nitro-o-toluidine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6115	7,12-Dimethylbenz(a) anthracene	EPA 8270	10185203	Extractable Organics	7/1/2003
6115	7,12-Dimethylbenz(a) anthracene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6952	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic Acid (9-ClPF3ONS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6125	a,a-Dimethylphenethylamine	EPA 8270	10185203	Extractable Organics	7/1/2003
6125	a,a-Dimethylphenethylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
5500	Acenaphthene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5500	Acenaphthene	EPA 8270	10185203	Extractable Organics	7/1/2003
5500	Acenaphthene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5505	Acenaphthylene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5505	Acenaphthylene	EPA 8270	10185203	Extractable Organics	7/1/2003
5505	Acenaphthylene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4315	Acetone	EPA 8260D	10307127	Volatile Organics	1/5/2024
4320	Acetonitrile	EPA 8260D	10307127	Volatile Organics	1/5/2024
5510	Acetophenone	EPA 8270	10185203	Extractable Organics	7/1/2003
5510	Acetophenone	EPA 8270E	10242543	Extractable Organics	1/5/2024
8505	Acifluorfen	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
4325	Acrolein (Propenal)	EPA 624.1	10298121	Volatile Organics	4/4/2018
4325	Acrolein (Propenal)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4330	Acrylamide	EPA 8316	10188202	Volatile Organics	9/20/2017
4335	Acrylic acid	SOP SA-LC-074	60048159	Volatile Organics	9/20/2017
4340	Acrylonitrile	EPA 624.1	10298121	Volatile Organics	4/4/2018
4340	Acrylonitrile	EPA 8260D	10307127	Volatile Organics	1/5/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
4345	Adsorbable organic halogens (AOX)	EPA 1650	10125005	General Chemistry	2/6/2002
7025	Aldrin	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7025	Aldrin	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
1505	Alkalinity as CaCO3	EPA 310.1	10054805	General Chemistry	2/6/2002
1505	Alkalinity as CaCO3	SM 2320 B-2011	20045618	General Chemistry	1/31/2024
4350	Allyl alcohol	EPA 8015C	10173816	Volatile Organics	1/5/2024
4355	Allyl chloride (3-Chloropropene)	EPA 8260D	10307127	Volatile Organics	1/5/2024
7110	alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7110	alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7240	alpha-Chlordane	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
1000	Aluminum	EPA 200.7	10013806	Metals	2/6/2002
1000	Aluminum	EPA 200.8	10014605	Metals	10/17/2003
1000	Aluminum	EPA 6010D	10155950	Metals	1/5/2024
1000	Aluminum	EPA 6020B	10156420	Metals	1/5/2024
1510	Amenable cyanide	EPA 335.1	10060001	General Chemistry	2/6/2002
1510	Amenable cyanide	EPA 9012B	10243228	General Chemistry	1/5/2024
1510	Amenable cyanide	SM 4500-CN^- G-2016	20097238	General Chemistry	1/31/2024
1515	Ammonia as N	EPA 350.1	10063602	General Chemistry	2/6/2002
5545	Aniline	EPA 8270	10185203	Extractable Organics	7/1/2003
5545	Aniline	EPA 8270E	10242543	Extractable Organics	1/5/2024
5555	Anthracene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5555	Anthracene	EPA 8270	10185203	Extractable Organics	7/1/2003
5555	Anthracene	EPA 8270E	10242543	Extractable Organics	1/5/2024
1005	Antimony	EPA 200.7	10013806	Metals	2/6/2002
1005	Antimony	EPA 200.8	10014605	Metals	10/17/2003
1005	Antimony	EPA 6010D	10155950	Metals	1/5/2024
1005	Antimony	EPA 6020B	10156420	Metals	1/5/2024
5560	Aramite	EPA 8270	10185203	Extractable Organics	7/1/2003
5560	Aramite	EPA 8270E	10242543	Extractable Organics	1/5/2024
8880	Aroclor-1016 (PCB-1016)	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
8880	Aroclor-1016 (PCB-1016)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8885	Aroclor-1221 (PCB-1221)	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
8885	Aroclor-1221 (PCB-1221)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8890	Aroclor-1232 (PCB-1232)	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
8890	Aroclor-1232 (PCB-1232)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8895	Aroclor-1242 (PCB-1242)	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
8895	Aroclor-1242 (PCB-1242)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8900	Aroclor-1248 (PCB-1248)	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
8900	Aroclor-1248 (PCB-1248)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8905	Aroclor-1254 (PCB-1254)	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
8905	Aroclor-1254 (PCB-1254)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8910	Aroclor-1260 (PCB-1260)	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
8910	Aroclor-1260 (PCB-1260)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8912	Aroclor-1262 (PCB-1262)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8913	Aroclor-1268 (PCB-1268)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
1010	Arsenic	EPA 200.7	10013806	Metals	2/6/2002
1010	Arsenic	EPA 200.8	10014605	Metals	10/17/2003
1010	Arsenic	EPA 6010D	10155950	Metals	1/5/2024
1010	Arsenic	EPA 6020B	10156420	Metals	1/5/2024
7065	Atrazine	EPA 8270	10185203	Pesticides-Herbicides-PCB's	12/4/2020
7065	Atrazine	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
1015	Barium	EPA 200.7	10013806	Metals	2/6/2002
1015	Barium	EPA 200.8	10014605	Metals	10/17/2003
1015	Barium	EPA 6010D	10155950	Metals	1/5/2024
1015	Barium	EPA 6020B	10156420	Metals	1/5/2024
8530	Bentazon	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
5570	Benzaldehyde	EPA 8270	10185203	Extractable Organics	12/4/2020
5570	Benzaldehyde	EPA 8270E	10242543	Extractable Organics	1/5/2024
4375	Benzene	EPA 624.1	10298121	Volatile Organics	4/4/2018
4375	Benzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5595	Benzidine	EPA 625.1	10300024	Extractable Organics	4/4/2018
5595	Benzidine	EPA 8270	10185203	Extractable Organics	7/1/2003
5595	Benzidine	EPA 8270E	10242543	Extractable Organics	1/5/2024
5575	Benzo(a)anthracene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5575	Benzo(a)anthracene	EPA 8270	10185203	Extractable Organics	7/1/2003
5575	Benzo(a)anthracene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5580	Benzo(a)pyrene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5580	Benzo(a)pyrene	EPA 8270	10185203	Extractable Organics	7/1/2003
5580	Benzo(a)pyrene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5585	Benzo(b)fluoranthene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5585	Benzo(b)fluoranthene	EPA 8270	10185203	Extractable Organics	7/1/2003
5585	Benzo(b)fluoranthene	EPA 8270E	10242543	Extractable Organics	1/5/2024

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
5605	Benzo(e)pyrene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5590	Benzo(g,h,i)perylene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5590	Benzo(g,h,i)perylene	EPA 8270	10185203	Extractable Organics	7/1/2003
5590	Benzo(g,h,i)perylene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5600	Benzo(k)fluoranthene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5600	Benzo(k)fluoranthene	EPA 8270	10185203	Extractable Organics	7/1/2003
5600	Benzo(k)fluoranthene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5610	Benzoic acid	EPA 8270	10185203	Extractable Organics	7/1/2003
5610	Benzoic acid	EPA 8270E	10242543	Extractable Organics	1/5/2024
5630	Benzyl alcohol	EPA 8270	10185203	Extractable Organics	7/1/2003
5630	Benzyl alcohol	EPA 8270E	10242543	Extractable Organics	1/5/2024
5635	Benzyl chloride	EPA 8260D	10307127	Volatile Organics	1/5/2024
1020	Beryllium	EPA 200.7	10013806	Metals	2/6/2002
1020	Beryllium	EPA 200.8	10014605	Metals	10/17/2003
1020	Beryllium	EPA 6010D	10155950	Metals	1/5/2024
1020	Beryllium	EPA 6020B	10156420	Metals	1/5/2024
7115	beta-BHC (beta-Hexachlorocyclohexane)	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7115	beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
1530	Biochemical oxygen demand	EPA 405.1	10075602	General Chemistry	2/6/2002
1530	Biochemical oxygen demand	SM 5210 B-2016	20135039	General Chemistry	1/31/2024
6703	Biphenyl (1,1-Biphenyl, BZ 0)	EPA 8270	10185203	Extractable Organics	12/4/2020
6703	Biphenyl (1,1-Biphenyl, BZ 0)	EPA 8270E	10242543	Extractable Organics	1/5/2024
5760	bis(2-Chloroethoxy)methane	EPA 625.1	10300024	Extractable Organics	4/4/2018
5760	bis(2-Chloroethoxy)methane	EPA 8270	10185203	Extractable Organics	7/1/2003
5760	bis(2-Chloroethoxy)methane	EPA 8270E	10242543	Extractable Organics	1/5/2024
5765	bis(2-Chloroethyl) ether	EPA 625.1	10300024	Extractable Organics	4/4/2018
5765	bis(2-Chloroethyl) ether	EPA 8270	10185203	Extractable Organics	7/1/2003
5765	bis(2-Chloroethyl) ether	EPA 8270E	10242543	Extractable Organics	1/5/2024
1025	Boron	EPA 200.7	10013806	Metals	2/6/2002
1025	Boron	EPA 200.8	10014605	Metals	1/10/2023
1025	Boron	EPA 6010D	10155950	Metals	1/5/2024
1025	Boron	EPA 6020B	10156420	Metals	1/5/2024
1535	Bromate	EPA 300.0	10053200	General Chemistry	3/22/2013
1535	Bromate	EPA 300.1	10275602	General Chemistry	7/30/2007
1540	Bromide	EPA 300.0	10053200	General Chemistry	2/6/2002
1540	Bromide	EPA 300.1	10275602	General Chemistry	7/30/2007

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
1540	Bromide	EPA 9056A	10199607	General Chemistry	1/5/2024
4385	Bromobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4390	Bromochloromethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4395	Bromodichloromethane	EPA 624.1	10298121	Volatile Organics	4/4/2018
4395	Bromodichloromethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4400	Bromoform	EPA 624.1	10298121	Volatile Organics	4/4/2018
4400	Bromoform	EPA 8260D	10307127	Volatile Organics	1/5/2024
5670	Butyl benzyl phthalate	EPA 625.1	10300024	Extractable Organics	4/4/2018
5670	Butyl benzyl phthalate	EPA 8270	10185203	Extractable Organics	7/1/2003
5670	Butyl benzyl phthalate	EPA 8270E	10242543	Extractable Organics	1/5/2024
1030	Cadmium	EPA 200.7	10013806	Metals	2/6/2002
1030	Cadmium	EPA 200.8	10014605	Metals	10/17/2003
1030	Cadmium	EPA 6010D	10155950	Metals	1/5/2024
1030	Cadmium	EPA 6020B	10156420	Metals	1/5/2024
1035	Calcium	EPA 200.7	10013806	Metals	2/6/2002
1035	Calcium	EPA 6010D	10155950	Metals	1/5/2024
1035	Calcium	EPA 6020B	10156420	Metals	1/5/2024
7180	Caprolactam	EPA 8270	10185203	Extractable Organics	12/4/2020
7180	Caprolactam	EPA 8270E	10242543	Extractable Organics	1/5/2024
5680	Carbazole	EPA 8270	10185203	Extractable Organics	7/1/2003
5680	Carbazole	EPA 8270E	10242543	Extractable Organics	1/5/2024
4450	Carbon disulfide	EPA 8260D	10307127	Volatile Organics	1/5/2024
4455	Carbon tetrachloride	EPA 624.1	10298121	Volatile Organics	4/4/2018
4455	Carbon tetrachloride	EPA 8260D	10307127	Volatile Organics	1/5/2024
1555	Carbonaceous BOD (CBOD)	SM 5210 B-2016	20135039	General Chemistry	1/31/2024
1565	Chemical oxygen demand	EPA 410.4	10077404	General Chemistry	2/6/2002
1565	Chemical oxygen demand	SM 5220-D-2011	20136816	General Chemistry	1/31/2024
8540	Chloramben	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
1570	Chlorate	EPA 300.1	10275602	General Chemistry	7/30/2007
7250	Chlordane (tech.)	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7250	Chlordane (tech.)	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
1575	Chloride	EPA 300.0	10053200	General Chemistry	2/6/2002
1575	Chloride	EPA 325.2	10057202	General Chemistry	2/6/2002
1575	Chloride	EPA 9056A	10199607	General Chemistry	1/5/2024
1575	Chloride	EPA 9251	10207406	General Chemistry	7/1/2003
1575	Chloride	SM 4500-Cl^- E-2011	20086811	General Chemistry	1/31/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
1595	Chlorite	EPA 300.1	10275602	General Chemistry	7/30/2007
4475	Chlorobenzene	EPA 624.1	10298121	Volatile Organics	4/4/2018
4475	Chlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
7260	Chlorobenzilate	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
4485	Chloroethane	EPA 624.1	10298121	Volatile Organics	4/4/2018
4485	Chloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4505	Chloroform	EPA 624.1	10298121	Volatile Organics	4/4/2018
4505	Chloroform	EPA 8260D	10307127	Volatile Organics	1/5/2024
4525	Chloroprene	EPA 8260D	10307127	Volatile Organics	1/5/2024
1040	Chromium	EPA 200.7	10013806	Metals	2/6/2002
1040	Chromium	EPA 200.8	10014605	Metals	10/17/2003
1040	Chromium	EPA 6010D	10155950	Metals	1/5/2024
1040	Chromium	EPA 6020B	10156420	Metals	1/5/2024
1045	Chromium VI	EPA 7196A	10162400	Metals	1/5/2024
1045	Chromium VI	SM 3500-Cr B-2011	20066266	General Chemistry	1/31/2024
1045	Chromium VI	SM 3500-Cr D (18th/19th Ed.)/UV-VIS	20009001	General Chemistry	2/6/2002
5855	Chrysene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5855	Chrysene	EPA 8270	10185203	Extractable Organics	7/1/2003
5855	Chrysene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4645	cis-1,2-Dichloroethylene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4680	cis-1,3-Dichloropropene	EPA 624.1	10298121	Volatile Organics	4/4/2018
4680	cis-1,3-Dichloropropene	EPA 8260D	10307127	Volatile Organics	1/5/2024
1050	Cobalt	EPA 200.7	10013806	Metals	2/6/2002
1050	Cobalt	EPA 200.8	10014605	Metals	10/17/2003
1050	Cobalt	EPA 6010D	10155950	Metals	1/5/2024
1050	Cobalt	EPA 6020B	10156420	Metals	1/5/2024
1605	Color	EPA 110.2	10005604	General Chemistry	2/6/2002
1605	Color	SM 2120 B-2011	20039310	General Chemistry	1/31/2024
1610	Conductivity	EPA 120.1	10006403	General Chemistry	2/6/2002
1610	Conductivity	EPA 9050A	10198808	General Chemistry	1/5/2024
1610	Conductivity	SM 2510 B-2011	20048617	General Chemistry	1/31/2024
1055	Copper	EPA 200.7	10013806	Metals	2/6/2002
1055	Copper	EPA 200.8	10014605	Metals	10/17/2003
1055	Copper	EPA 6010D	10155950	Metals	1/5/2024
1055	Copper	EPA 6020B	10156420	Metals	1/5/2024
1620	Corrosivity (langlier index)	SM 2330 B	20003207	General Chemistry	2/6/2002

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
1635	Cyanide	EPA 335.4	10061402	General Chemistry	2/6/2002
4555	Cyclohexane	EPA 8260D	10307127	Volatile Organics	1/5/2024
8550	Dacthal (DCPA)	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
8555	Dalapon	EPA 615	10105609	Pesticides-Herbicides-PCB's	2/6/2002
8555	Dalapon	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
7105	delta-BHC	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7105	delta-BHC	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
6065	Di(2-ethylhexyl) phthalate (DEHP)	EPA 625.1	10300024	Extractable Organics	4/4/2018
6065	Di(2-ethylhexyl) phthalate (DEHP)	EPA 8270	10185203	Extractable Organics	7/1/2003
6065	Di(2-ethylhexyl) phthalate (DEHP)	EPA 8270E	10242543	Extractable Organics	1/5/2024
7405	Diallate	EPA 8270	10185203	Pesticides-Herbicides-PCB's	7/1/2003
7405	Diallate	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
5895	Dibenz(a,h)anthracene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5895	Dibenz(a,h)anthracene	EPA 8270	10185203	Extractable Organics	7/1/2003
5895	Dibenz(a,h)anthracene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5905	Dibenzofuran	EPA 8270	10185203	Extractable Organics	7/1/2003
5905	Dibenzofuran	EPA 8270E	10242543	Extractable Organics	1/5/2024
4575	Dibromochloromethane	EPA 624.1	10298121	Volatile Organics	4/4/2018
4575	Dibromochloromethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
8595	Dicamba	EPA 615	10105609	Pesticides-Herbicides-PCB's	2/6/2002
8595	Dicamba	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
4625	Dichlorodifluoromethane	EPA 624.1	10298121	Volatile Organics	12/4/2020
8605	Dichloroprop (Dichlorprop)	EPA 615	10105609	Pesticides-Herbicides-PCB's	2/6/2002
8605	Dichloroprop (Dichlorprop)	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
7470	Dieldrin	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7470	Dieldrin	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
9369	Diesel range organics (DRO)	EPA 8015C	10173816	Extractable Organics	1/5/2024
4725	Diethyl ether	EPA 8260D	10307127	Volatile Organics	1/5/2024
6070	Diethyl phthalate	EPA 625.1	10300024	Extractable Organics	4/4/2018
6070	Diethyl phthalate	EPA 8270	10185203	Extractable Organics	7/1/2003
6070	Diethyl phthalate	EPA 8270E	10242543	Extractable Organics	1/5/2024
9375	Di-isopropylether (DIPE)	EPA 8260D	10307127	Volatile Organics	1/5/2024
7475	Dimethoate	EPA 8270	10185203	Pesticides-Herbicides-PCB's	7/1/2003
7475	Dimethoate	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
8332	Dimethomorph	EPA 8270E	10242543	Extractable Organics	1/5/2024
6135	Dimethyl phthalate	EPA 625.1	10300024	Extractable Organics	4/4/2018

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
6135	Dimethyl phthalate	EPA 8270	10185203	Extractable Organics	7/1/2003
5925	Di-n-butyl phthalate	EPA 625.1	10300024	Extractable Organics	4/4/2018
5925	Di-n-butyl phthalate	EPA 8270	10185203	Extractable Organics	7/1/2003
5925	Di-n-butyl phthalate	EPA 8270E	10242543	Extractable Organics	1/5/2024
6200	Di-n-octyl phthalate	EPA 625.1	10300024	Extractable Organics	4/4/2018
6200	Di-n-octyl phthalate	EPA 8270	10185203	Extractable Organics	7/1/2003
6200	Di-n-octyl phthalate	EPA 8270E	10242543	Extractable Organics	1/5/2024
8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 615	10105609	Pesticides-Herbicides-PCB's	2/6/2002
8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8270	10185203	Pesticides-Herbicides-PCB's	7/1/2003
8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
8625	Disulfoton	EPA 8270	10185203	Pesticides-Herbicides-PCB's	7/1/2003
8625	Disulfoton	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
7510	Endosulfan I	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7510	Endosulfan I	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7515	Endosulfan II	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7515	Endosulfan II	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7520	Endosulfan sulfate	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7520	Endosulfan sulfate	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7540	Endrin	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7540	Endrin	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7530	Endrin aldehyde	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7530	Endrin aldehyde	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7535	Endrin ketone	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
2520	Enterococci	SM 9230 D-2013	20219696	Microbiology	1/10/2023
2525	Escherichia coli	SM 9223 B (Colilert Quanti-Tray)-2016	20211647	Microbiology	1/31/2024
2525	Escherichia coli	SM 9223 B /QUANTI-TRAY	20211603	Microbiology	1/10/2023
4747	Ethane	RSK-175	10212905	Volatile Organics	12/2/2005
4750	Ethanol	EPA 8015C	10173816	Volatile Organics	1/5/2024
4750	Ethanol	EPA 8260D	10307127	Volatile Organics	1/5/2024
4755	Ethyl acetate	EPA 1666A	10128208	Volatile Organics	7/30/2007
4755	Ethyl acetate	EPA 8015C	10173816	Volatile Organics	1/5/2024
4755	Ethyl acetate	EPA 8260D	10307127	Volatile Organics	1/5/2024
4760	Ethyl acrylate	EPA 8260D	10307127	Volatile Organics	1/5/2024

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
4810	Ethyl methacrylate	EPA 8260D	10307127	Volatile Organics	1/5/2024
6260	Ethyl methanesulfonate	EPA 8270	10185203	Extractable Organics	7/1/2003
6260	Ethyl methanesulfonate	EPA 8270E	10242543	Extractable Organics	1/5/2024
4765	Ethylbenzene	EPA 624.1	10298121	Volatile Organics	4/4/2018
4765	Ethylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4752	Ethylene	RSK-175	10212905	Volatile Organics	12/2/2005
4785	Ethylene glycol	EPA 8015C	10173816	Volatile Organics	1/5/2024
4770	Ethyl-t-butylether (ETBE)	EPA 8260D	10307127	Volatile Organics	1/5/2024
7580	Famphur	EPA 8270	10185203	Pesticides-Herbicides-PCB's	7/1/2003
7580	Famphur	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
2530	Fecal coliforms	COLILERT®-18 (Fecal Coliforms)	60002688	Microbiology	1/10/2023
6265	Fluoranthene	EPA 625.1	10300024	Extractable Organics	4/4/2018
6265	Fluoranthene	EPA 8270	10185203	Extractable Organics	7/1/2003
6265	Fluoranthene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6270	Fluorene	EPA 625.1	10300024	Extractable Organics	4/4/2018
6270	Fluorene	EPA 8270	10185203	Extractable Organics	7/1/2003
6270	Fluorene	EPA 8270E	10242543	Extractable Organics	1/5/2024
1730	Fluoride	EPA 300.0	10053200	General Chemistry	2/6/2002
1730	Fluoride	EPA 9056A	10199607	General Chemistry	1/5/2024
7120	gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7120	gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7245	gamma-Chlordane	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
9408	Gasoline range organics (GRO)	EPA 8015C	10173816	Volatile Organics	1/5/2024
1750	Hardness	EPA 130.2	10007202	General Chemistry	11/18/2008
1750	Hardness	SM 2340 B-2011	20046611	General Chemistry	1/31/2024
1750	Hardness	SM 2340 C-2011	20047614	General Chemistry	1/31/2024
1760	Hardness (calc.)	EPA 200.7	10013806	Metals	7/30/2007
7685	Heptachlor	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7685	Heptachlor	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7690	Heptachlor epoxide	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
7690	Heptachlor epoxide	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
6275	Hexachlorobenzene	EPA 625.1	10300024	Extractable Organics	4/4/2018
6275	Hexachlorobenzene	EPA 8270	10185203	Pesticides-Herbicides-PCB's	7/1/2003
6275	Hexachlorobenzene	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
4835	Hexachlorobutadiene	EPA 625.1	10300024	Extractable Organics	4/4/2018

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
4835	Hexachlorobutadiene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4835	Hexachlorobutadiene	EPA 8270	10185203	Extractable Organics	7/1/2003
4835	Hexachlorobutadiene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6285	Hexachlorocyclopentadiene	EPA 625.1	10300024	Extractable Organics	4/4/2018
6285	Hexachlorocyclopentadiene	EPA 8270	10185203	Extractable Organics	7/1/2003
6285	Hexachlorocyclopentadiene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4840	Hexachloroethane	EPA 625.1	10300024	Extractable Organics	4/4/2018
4840	Hexachloroethane	EPA 8270	10185203	Extractable Organics	7/1/2003
4840	Hexachloroethane	EPA 8270E	10242543	Extractable Organics	1/5/2024
6290	Hexachlorophene	EPA 8270	10185203	Extractable Organics	7/1/2003
6290	Hexachlorophene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6295	Hexachloropropene	EPA 8270	10185203	Extractable Organics	7/1/2003
6295	Hexachloropropene	EPA 8270E	10242543	Extractable Organics	1/5/2024
9460	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA, GenX)	EPA 1633	10123463	Extractable Organics	1/31/2024
1780	Ignitability	EPA 1010	10116606	General Chemistry	9/15/2022
6315	Indeno(1,2,3-cd)pyrene	EPA 625.1	10300024	Extractable Organics	4/4/2018
6315	Indeno(1,2,3-cd)pyrene	EPA 8270	10185203	Extractable Organics	7/1/2003
6315	Indeno(1,2,3-cd)pyrene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4870	Iodomethane (Methyl iodide)	EPA 8260D	10307127	Volatile Organics	1/5/2024
1070	Iron	EPA 200.7	10013806	Metals	2/6/2002
1070	Iron	EPA 6010D	10155950	Metals	1/5/2024
1070	Iron	EPA 6020B	10156420	Metals	1/5/2024
4875	Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8015C	10173816	Volatile Organics	1/5/2024
4875	Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260D	10307127	Volatile Organics	1/5/2024
7725	Isodrin	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
6320	Isophorone	EPA 625.1	10300024	Extractable Organics	4/4/2018
6320	Isophorone	EPA 8270	10185203	Extractable Organics	7/1/2003
6320	Isophorone	EPA 8270E	10242543	Extractable Organics	1/5/2024
4890	Isopropyl acetate	EPA 1666A	10128208	Volatile Organics	7/30/2007
4895	Isopropyl alcohol (2-Propanol)	EPA 8015C	10173816	Volatile Organics	1/5/2024
4900	Isopropylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
6325	Isosafrole	EPA 8270	10185203	Extractable Organics	7/1/2003
6325	Isosafrole	EPA 8270E	10242543	Extractable Organics	1/5/2024
7740	Kepone	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
1795	Kjeldahl nitrogen - total	EPA 351.2	10065404	General Chemistry	2/6/2002
1075	Lead	EPA 200.7	10013806	Metals	2/6/2002

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
1075	Lead	EPA 200.8	10014605	Metals	10/17/2003
1075	Lead	EPA 6010D	10155950	Metals	1/5/2024
1075	Lead	EPA 6020B	10156420	Metals	1/5/2024
1080	Lithium	EPA 200.7	10013806	Metals	9/15/2022
1080	Lithium	EPA 200.8	10014605	Metals	1/10/2023
1080	Lithium	EPA 6010D	10155950	Metals	1/5/2024
1080	Lithium	EPA 6020B	10156420	Metals	1/5/2024
5240	m+p-Xylenes	EPA 8260D	10307127	Volatile Organics	1/5/2024
1085	Magnesium	EPA 200.7	10013806	Metals	2/6/2002
1085	Magnesium	EPA 6010D	10155950	Metals	1/5/2024
1085	Magnesium	EPA 6020B	10156420	Metals	1/5/2024
1090	Manganese	EPA 200.7	10013806	Metals	2/6/2002
1090	Manganese	EPA 200.8	10014605	Metals	10/17/2003
1090	Manganese	EPA 6010D	10155950	Metals	1/5/2024
1090	Manganese	EPA 6020B	10156420	Metals	1/5/2024
7775	MCPA	EPA 615	10105609	Pesticides-Herbicides-PCB's	2/6/2002
7775	MCPA	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
7780	MCPP	EPA 615	10105609	Pesticides-Herbicides-PCB's	2/6/2002
7780	MCPP	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
1095	Mercury	EPA 200.8	10014605	Metals	10/17/2003
1095	Mercury	EPA 245.1	10036609	Metals	2/6/2002
1095	Mercury	EPA 6020B	10156420	Metals	1/5/2024
1095	Mercury	EPA 7470	10165603	Metals	7/1/2003
4925	Methacrylonitrile	EPA 8260D	10307127	Volatile Organics	1/5/2024
4926	Methane	RSK-175	10212905	Volatile Organics	12/2/2005
4930	Methanol	EPA 8015C	10173816	Volatile Organics	1/5/2024
6345	Methapyrilene	EPA 8270	10185203	Extractable Organics	7/1/2003
6345	Methapyrilene	EPA 8270E	10242543	Extractable Organics	1/5/2024
7810	Methoxychlor	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	12/4/2020
7810	Methoxychlor	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
4940	Methyl acetate	EPA 8260D	10307127	Volatile Organics	1/5/2024
4950	Methyl bromide (Bromomethane)	EPA 624.1	10298121	Volatile Organics	4/4/2018
4950	Methyl bromide (Bromomethane)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4960	Methyl chloride (Chloromethane)	EPA 624.1	10298121	Volatile Organics	4/4/2018
4960	Methyl chloride (Chloromethane)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4990	Methyl methacrylate	EPA 8260D	10307127	Volatile Organics	1/5/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
6375	Methyl methanesulfonate	EPA 8270	10185203	Extractable Organics	7/1/2003
6375	Methyl methanesulfonate	EPA 8270E	10242543	Extractable Organics	1/5/2024
7825	Methyl parathion (Parathion, methyl)	EPA 8270	10185203	Pesticides-Herbicides-PCB's	7/1/2003
7825	Methyl parathion (Parathion, methyl)	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
5000	Methyl tert-butyl ether (MTBE)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4965	Methylcyclohexane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4975	Methylene chloride	EPA 624.1	10298121	Volatile Organics	4/4/2018
4975	Methylene chloride	EPA 8260D	10307127	Volatile Organics	1/5/2024
7870	Mirex	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
1100	Molybdenum	EPA 200.7	10013806	Metals	2/6/2002
1100	Molybdenum	EPA 200.8	10014605	Metals	10/17/2003
1100	Molybdenum	EPA 6010D	10155950	Metals	1/5/2024
1100	Molybdenum	EPA 6020B	10156420	Metals	1/5/2024
4360	n-Amyl acetate	EPA 1666A	10128208	Volatile Organics	7/30/2007
5005	Naphthalene	EPA 624.1	10298121	Volatile Organics	9/15/2022
5005	Naphthalene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5005	Naphthalene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5005	Naphthalene	EPA 8270	10185203	Extractable Organics	7/1/2003
5005	Naphthalene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4403	n-Butyl Acetate	EPA 1666A	10128208	Volatile Organics	7/30/2007
4403	n-Butyl Acetate	EPA 8260D	10307127	Volatile Organics	1/5/2024
4425	n-Butyl alcohol	EPA 8015C	10173816	Volatile Organics	1/5/2024
4425	n-Butyl alcohol	EPA 8260D	10307127	Volatile Organics	1/5/2024
4435	n-Butylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
9395	N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	EPA 1633	10123463	Extractable Organics	1/31/2024
4846	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	10123463	Extractable Organics	1/31/2024
9431	N-ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	10123463	Extractable Organics	1/31/2024
1105	Nickel	EPA 200.7	10013806	Metals	2/6/2002
1105	Nickel	EPA 200.8	10014605	Metals	10/17/2003
1105	Nickel	EPA 6010D	10155950	Metals	1/5/2024
1105	Nickel	EPA 6020B	10156420	Metals	1/5/2024
1805	Nitrate	EPA 9056A	10199607	General Chemistry	1/5/2024
1810	Nitrate as N	EPA 300.0	10053200	General Chemistry	2/6/2002
1810	Nitrate as N	EPA 353.2	10067604	General Chemistry	2/6/2002
1820	Nitrate-nitrite	EPA 300.0	10053200	General Chemistry	2/6/2002

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
1820	Nitrate-nitrite	EPA 353.2	10067604	General Chemistry	2/6/2002
1835	Nitrite	EPA 9056A	10199607	General Chemistry	1/5/2024
1840	Nitrite as N	EPA 300.0	10053200	General Chemistry	2/6/2002
1840	Nitrite as N	EPA 353.2	10067604	General Chemistry	2/6/2002
5015	Nitrobenzene	EPA 625.1	10300024	Extractable Organics	4/4/2018
5015	Nitrobenzene	EPA 8270	10185203	Extractable Organics	7/1/2003
5015	Nitrobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
9433	N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	10123463	Extractable Organics	1/31/2024
4847	N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6949	N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	10123463	Extractable Organics	1/31/2024
6525	n-Nitrosodiethylamine	EPA 8270	10185203	Extractable Organics	7/1/2003
6525	n-Nitrosodiethylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6530	n-Nitrosodimethylamine	EPA 625.1	10300024	Extractable Organics	4/4/2018
6530	n-Nitrosodimethylamine	EPA 8270	10185203	Extractable Organics	7/1/2003
6530	n-Nitrosodimethylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
5025	n-Nitroso-di-n-butylamine	EPA 8270	10185203	Extractable Organics	7/1/2003
5025	n-Nitroso-di-n-butylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6545	n-Nitrosodi-n-propylamine	EPA 625.1	10300024	Extractable Organics	4/4/2018
6545	n-Nitrosodi-n-propylamine	EPA 8270	10185203	Extractable Organics	7/1/2003
6545	n-Nitrosodi-n-propylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6535	n-Nitrosodiphenylamine	EPA 625.1	10300024	Extractable Organics	4/4/2018
6535	n-Nitrosodiphenylamine	EPA 8270	10185203	Extractable Organics	7/1/2003
6535	n-Nitrosodiphenylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6550	n-Nitrosomethylethylamine	EPA 8270	10185203	Extractable Organics	7/1/2003
6550	n-Nitrosomethylethylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6555	n-Nitrosomorpholine	EPA 8270	10185203	Extractable Organics	7/1/2003
6555	n-Nitrosomorpholine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6560	n-Nitrosopiperidine	EPA 8270	10185203	Extractable Organics	7/1/2003
6560	n-Nitrosopiperidine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6565	n-Nitrosopyrrolidine	EPA 8270	10185203	Extractable Organics	7/1/2003
6565	n-Nitrosopyrrolidine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6956	Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA)	EPA 1633	10123463	Extractable Organics	1/31/2024
5055	n-Propanol (1-Propanol)	EPA 8015C	10173816	Volatile Organics	1/5/2024
5090	n-Propylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
8290	o,o,o-Triethyl phosphorothioate	EPA 8270	10185203	Pesticides-Herbicides-PCB's	7/1/2003
8290	o,o,o-Triethyl phosphorothioate	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
1860	Oil & Grease	EPA 1664A	10127807	General Chemistry	12/2/2015
1865	Organic nitrogen	TKN minus AMMONIA	60034437	General Chemistry	7/30/2007
1870	Orthophosphate as P	EPA 365.1	10070005	General Chemistry	11/18/2008
1870	Orthophosphate as P	SM 4500-P F-2011	20125024	General Chemistry	1/31/2024
5145	o-Toluidine	EPA 8270	10185203	Extractable Organics	7/1/2003
5145	o-Toluidine	EPA 8270E	10242543	Extractable Organics	1/5/2024
5250	o-Xylene	EPA 8260D	10307127	Volatile Organics	1/5/2024
7955	Parathion, ethyl	EPA 8270	10185203	Pesticides-Herbicides-PCB's	7/1/2003
7955	Parathion, ethyl	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
6590	Pentachlorobenzene	EPA 8270	10185203	Extractable Organics	7/1/2003
6590	Pentachlorobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5035	Pentachloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
6600	Pentachloronitrobenzene (Quintozene)	EPA 8270	10185203	Extractable Organics	7/1/2003
6600	Pentachloronitrobenzene (Quintozene)	EPA 8270E	10242543	Extractable Organics	1/5/2024
6605	Pentachlorophenol	EPA 625.1	10300024	Extractable Organics	4/4/2018
6605	Pentachlorophenol	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
6605	Pentachlorophenol	EPA 8270	10185203	Extractable Organics	7/1/2003
6605	Pentachlorophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6957	Perfluoro(2-ethoxyethane) Sulfonic Acid (PFEESA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6965	Perfluoro-3-methoxypropanoic Acid (PFMPA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6966	Perfluoro-4-methoxybutanoic Acid (PFMBA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6918	Perfluorobutane Sulfonic Acid (PFBS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6915	Perfluorobutanoic Acid (PFBA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6920	Perfluorodecane Sulfonic Acid (PFDS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6905	Perfluorodecanoic Acid (PFDA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6923	Perfluorododecane Sulfonic Acid (PFDoS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6903	Perfluorododecanoic Acid (PFDoA)	EPA 1633	10123463	Extractable Organics	1/31/2024
9470	Perfluoroheptane Sulfonic Acid (PFHpS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6908	Perfluoroheptanoic Acid (PFHpA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6927	Perfluorohexane Sulfonic Acid (PFHxS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6913	Perfluorohexanoic Acid (PFHxA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6929	Perfluorononane Sulfonic Acid (PFNS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6906	Perfluorononanoic Acid (PFNA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6917	Perfluorooctane sulfonamide (PFOSA)	EPA 1633	10123463	Extractable Organics	1/31/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
6931	Perfluorooctane sulfonic acid (PFOS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6912	Perfluorooctanoic Acid (PFOA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6934	Perfluoropentane Sulfonic Acid (PFPeS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6914	Perfluoropentanoic Acid (PFPeA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6902	Perfluorotetradecanoic acid (PFTDA)	EPA 1633	10123463	Extractable Organics	1/31/2024
9563	Perfluorotridecanoic acid (PFTrDA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6904	Perfluoroundecanoic acid (PFUnDA)	EPA 1633	10123463	Extractable Organics	1/31/2024
1900	pH	EPA 150.1	10008409	General Chemistry	2/6/2002
1900	pH	EPA 9040C	10244403	General Chemistry	1/5/2024
1900	pH	SM 4500-H+ B-2011	20105220	General Chemistry	1/31/2024
6610	Phenacetin	EPA 8270	10185203	Extractable Organics	7/1/2003
6610	Phenacetin	EPA 8270E	10242543	Extractable Organics	1/5/2024
6615	Phenanthrene	EPA 625.1	10300024	Extractable Organics	4/4/2018
6615	Phenanthrene	EPA 8270	10185203	Extractable Organics	7/1/2003
6615	Phenanthrene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6625	Phenol	EPA 625.1	10300024	Extractable Organics	4/4/2018
6625	Phenol	EPA 8270	10185203	Extractable Organics	7/1/2003
6625	Phenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
7985	Phorate	EPA 8270	10185203	Pesticides-Herbicides-PCB's	7/1/2003
7985	Phorate	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
1910	Phosphorus, total	EPA 200.7	10013806	Metals	1/10/2023
1910	Phosphorus, total	EPA 365.4	10071202	General Chemistry	2/6/2002
1910	Phosphorus, total	EPA 6010D	10155950	Metals	1/5/2024
8645	Picloram	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
4910	p-Isopropyltoluene	EPA 8260D	10307127	Volatile Organics	1/5/2024
1125	Potassium	EPA 200.7	10013806	Metals	2/6/2002
1125	Potassium	EPA 6010D	10155950	Metals	1/5/2024
1125	Potassium	EPA 6020B	10156420	Metals	1/5/2024
6650	Pronamide (Kerb)	EPA 8270	10185203	Extractable Organics	7/1/2003
6650	Pronamide (Kerb)	EPA 8270E	10242543	Extractable Organics	1/5/2024
5080	Propionitrile (Ethyl cyanide)	EPA 8260D	10307127	Volatile Organics	1/5/2024
6665	Pyrene	EPA 625.1	10300024	Extractable Organics	4/4/2018
6665	Pyrene	EPA 8270	10185203	Extractable Organics	7/1/2003
6665	Pyrene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5095	Pyridine	EPA 8270	10185203	Extractable Organics	7/1/2003
5095	Pyridine	EPA 8270E	10242543	Extractable Organics	1/5/2024

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
1945	Residual free chlorine	EPA 330.3	10058807	General Chemistry	2/6/2002
1955	Residue-filterable (TDS)	EPA 160.1	10009208	General Chemistry	2/6/2002
1955	Residue-filterable (TDS)	SM 2540 C-2015	20050435	General Chemistry	1/31/2024
1960	Residue-nonfilterable (TSS)	EPA 160.2	10009606	General Chemistry	2/6/2002
1960	Residue-nonfilterable (TSS)	SM 2540 D-2015	20051223	General Chemistry	1/31/2024
1965	Residue-settleable	EPA 160.5	10010807	General Chemistry	2/6/2002
1965	Residue-settleable	SM 2540 F-2015	20052226	General Chemistry	1/31/2024
1950	Residue-total	EPA 160.3	10010001	General Chemistry	2/6/2002
1950	Residue-total	SM 2540 B-2015	20049438	General Chemistry	1/31/2024
6685	Safrole	EPA 8270	10185203	Extractable Organics	7/1/2003
6685	Safrole	EPA 8270E	10242543	Extractable Organics	1/5/2024
1975	Salinity	SM 2520 B-2011	20040088	General Chemistry	1/31/2024
4440	sec-Butylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
1140	Selenium	EPA 200.7	10013806	Metals	2/6/2002
1140	Selenium	EPA 200.8	10014605	Metals	10/17/2003
1140	Selenium	EPA 6010D	10155950	Metals	1/5/2024
1140	Selenium	EPA 6020B	10156420	Metals	1/5/2024
1990	Silica as SiO2	EPA 200.7	10013806	Metals	7/30/2007
1145	Silicon	EPA 200.7	10013806	Metals	2/6/2002
1145	Silicon	EPA 6010D	10155950	Metals	1/5/2024
1150	Silver	EPA 200.7	10013806	Metals	2/6/2002
1150	Silver	EPA 200.8	10014605	Metals	10/17/2003
1150	Silver	EPA 6010D	10155950	Metals	1/5/2024
1150	Silver	EPA 6020B	10156420	Metals	1/5/2024
8650	Silvex (2,4,5-TP)	EPA 615	10105609	Pesticides-Herbicides-PCB's	2/6/2002
8650	Silvex (2,4,5-TP)	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
1155	Sodium	EPA 200.7	10013806	Metals	2/6/2002
1155	Sodium	EPA 6010D	10155950	Metals	1/5/2024
1155	Sodium	EPA 6020B	10156420	Metals	1/5/2024
1160	Strontium	EPA 200.7	10013806	Metals	2/6/2002
1160	Strontium	EPA 6010D	10155950	Metals	1/5/2024
5100	Styrene	EPA 8260D	10307127	Volatile Organics	1/5/2024
2000	Sulfate	EPA 300.0	10053200	General Chemistry	2/6/2002
2000	Sulfate	EPA 375.4	10073800	General Chemistry	2/6/2002
2000	Sulfate	EPA 9038	10196608	General Chemistry	7/1/2003
2000	Sulfate	EPA 9056A	10199607	General Chemistry	1/5/2024

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
2005	Sulfide	EPA 376.1	10074201	General Chemistry	7/30/2007
2005	Sulfide	EPA 9030B	10195605	General Chemistry	1/5/2024
2005	Sulfide	EPA 9034	10196006	General Chemistry	7/1/2003
2005	Sulfide	SM 4500-S F (19th/20th/21st Ed.)/TITR	20126652	General Chemistry	7/30/2007
2015	Sulfite-SO3	EPA 377.1	10075000	General Chemistry	9/15/2022
2015	Sulfite-SO3	SM 4500-SO_3^{-} B-2011	20130636	General Chemistry	1/31/2024
8155	Sulfotepp	EPA 8270	10185203	Pesticides-Herbicides-PCB's	7/1/2003
8155	Sulfotepp	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
4370	T-amylmethylether (TAME)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4368	tert-Amyl Alcohol	EPA 8260D	10307127	Volatile Organics	1/5/2024
4420	tert-Butyl alcohol (2-Methyl-2-propanol)	EPA 8015C	10173816	Volatile Organics	1/5/2024
4420	tert-Butyl alcohol (2-Methyl-2-propanol)	EPA 8260D	10307127	Volatile Organics	1/5/2024
9557	tert-Butyl Formate	EPA 8260D	10307127	Volatile Organics	1/5/2024
4445	tert-Butylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5115	Tetrachloroethylene (Perchloroethylene)	EPA 624.1	10298121	Volatile Organics	4/4/2018
1165	Thallium	EPA 200.7	10013806	Metals	2/6/2002
1165	Thallium	EPA 200.8	10014605	Metals	10/17/2003
1165	Thallium	EPA 6010D	10155950	Metals	1/5/2024
1165	Thallium	EPA 6020B	10156420	Metals	1/5/2024
8235	Thionazin (Zinophos)	EPA 8270	10185203	Pesticides-Herbicides-PCB's	7/1/2003
8235	Thionazin (Zinophos)	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
1175	Tin	EPA 200.7	10013806	Metals	2/6/2002
1175	Tin	EPA 200.8	10014605	Metals	1/10/2023
1175	Tin	EPA 6010D	10155950	Metals	1/5/2024
1175	Tin	EPA 6020B	10156420	Metals	1/5/2024
1180	Titanium	EPA 200.7	10013806	Metals	2/6/2002
1180	Titanium	EPA 6010D	10155950	Metals	1/5/2024
5140	Toluene	EPA 624.1	10298121	Volatile Organics	4/4/2018
5140	Toluene	EPA 8260D	10307127	Volatile Organics	1/5/2024
2500	Total coliforms	SM 9223 B (Colilert Quanti-Tray)-2016	20211647	Microbiology	1/31/2024
2500	Total coliforms	SM 9223 B /QUANTI-TRAY	20211603	Microbiology	1/10/2023
1645	Total cyanide	EPA 9012B	10243228	General Chemistry	1/5/2024
1825	Total nitrate-nitrite	EPA 9056A	10199607	General Chemistry	1/5/2024
2040	Total organic carbon	EPA 415.1	10078407	General Chemistry	2/6/2002
2040	Total organic carbon	EPA 9060A	10244823	General Chemistry	1/5/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Non-Potable Water**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
2040	Total organic carbon	SM 5310 B-2014	20137831	Microbiology	1/31/2024
2045	Total organic halides (TOX)	EPA 9020B	10194408	General Chemistry	1/5/2024
2050	Total Petroleum Hydrocarbons (TPH)	EPA 1664A	10127807	General Chemistry	2/6/2002
2050	Total Petroleum Hydrocarbons (TPH)	FL-PRO	90015808	Extractable Organics	9/15/2022
1905	Total phenolics	EPA 420.1	10079400	General Chemistry	2/6/2002
1905	Total phenolics	EPA 9065	10200405	General Chemistry	7/1/2003
1940	Total residual chlorine	SM 4500 Cl B	20018808	General Chemistry	11/18/2008
8250	Toxaphene (Chlorinated camphene)	EPA 608.3	10296614	Pesticides-Herbicides-PCB's	4/4/2018
4700	trans-1,2-Dichloroethylene	EPA 624.1	10298121	Volatile Organics	4/4/2018
4700	trans-1,2-Dichloroethylene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4685	trans-1,3-Dichloropropene	EPA 624.1	10298121	Volatile Organics	4/4/2018
4685	trans-1,3-Dichloropropene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4605	trans-1,4-Dichloro-2-butene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5170	Trichloroethene (Trichloroethylene)	EPA 624.1	10298121	Volatile Organics	4/4/2018
5170	Trichloroethene (Trichloroethylene)	EPA 8260D	10307127	Volatile Organics	1/5/2024
5175	Trichlorofluoromethane	EPA 624.1	10298121	Volatile Organics	4/4/2018
5175	Trichlorofluoromethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
2055	Turbidity	EPA 180.1	10011800	General Chemistry	2/6/2002
2055	Turbidity	SM 2130 B-2011	20048220	General Chemistry	1/31/2024
2058	Un-Ionized Ammonia	DEP SOP 10/03/83	90015842	General Chemistry	7/30/2007
1185	Vanadium	EPA 200.7	10013806	Metals	2/6/2002
1185	Vanadium	EPA 200.8	10014605	Metals	10/17/2003
1185	Vanadium	EPA 6010D	10155950	Metals	1/5/2024
1185	Vanadium	EPA 6020B	10156420	Metals	1/5/2024
5225	Vinyl acetate	EPA 8260D	10307127	Volatile Organics	1/5/2024
5235	Vinyl chloride	EPA 624.1	10298121	Volatile Organics	4/4/2018
5235	Vinyl chloride	EPA 8260D	10307127	Volatile Organics	1/5/2024
5260	Xylene (total)	EPA 624.1	10298121	Volatile Organics	4/4/2018
5260	Xylene (total)	EPA 8260D	10307127	Volatile Organics	1/5/2024
1190	Zinc	EPA 200.7	10013806	Metals	2/6/2002
1190	Zinc	EPA 200.8	10014605	Metals	10/17/2003
1190	Zinc	EPA 6010D	10155950	Metals	1/5/2024
1190	Zinc	EPA 6020B	10156420	Metals	1/5/2024

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Solid and Chemical Materials**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
5105	1,1,1,2-Tetrachloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
5160	1,1,1-Trichloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
5110	1,1,2,2-Tetrachloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
5185	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260D	10307127	Volatile Organics	1/5/2024
5165	1,1,2-Trichloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4630	1,1-Dichloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4640	1,1-Dichloroethylene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5150	1,2,3-Trichlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5180	1,2,3-Trichloropropane	EPA 8260D	10307127	Volatile Organics	1/5/2024
5182	1,2,3-Trimethylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
6715	1,2,4,5-Tetrachlorobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5155	1,2,4-Trichlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5155	1,2,4-Trichlorobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4570	1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4585	1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4610	1,2-Dichlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4610	1,2-Dichlorobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4635	1,2-Dichloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4655	1,2-Dichloropropane	EPA 8260D	10307127	Volatile Organics	1/5/2024
6220	1,2-Diphenylhydrazine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6800	1,3,5-Trichlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5215	1,3,5-Trimethylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
6885	1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8270E	10242543	Extractable Organics	1/5/2024
4615	1,3-Dichlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4615	1,3-Dichlorobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4660	1,3-Dichloropropane	EPA 8260D	10307127	Volatile Organics	1/5/2024
6160	1,3-Dinitrobenzene (1,3-DNB)	EPA 8270E	10242543	Extractable Organics	1/5/2024
4620	1,4-Dichlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4620	1,4-Dichlorobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4735	1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4735	1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270E	10242543	Extractable Organics	1/5/2024
6420	1,4-Naphthoquinone	EPA 8270E	10242543	Extractable Organics	1/5/2024
6630	1,4-Phenylenediamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
9490	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid (11-ClPF3OUdS)	EPA 1633	10123463	Extractable Organics	1/31/2024
4510	1-Chlorohexane	EPA 8260D	10307127	Volatile Organics	1/5/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Solid and Chemical Materials**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
6948	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2 FTS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6946	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6947	1H,1H,2H,2H-Perfluoro-octanesulfonic Acid (6:2 FTS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6380	1-Methylnaphthalene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6425	1-Naphthylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
4665	2,2-Dichloropropane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4659	2,2'-Oxybis(1-chloropropane),bis(2-Chloro-1-methylethyl)ether (fka bis(2-Chloroisopropyl) ether	EPA 8270E	10242543	Extractable Organics	1/5/2024
6735	2,3,4,6-Tetrachlorophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
8655	2,4,5-T	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
6835	2,4,5-Trichlorophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6840	2,4,6-Trichlorophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
8545	2,4-D	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
8560	2,4-DB	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
6000	2,4-Dichlorophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6130	2,4-Dimethylphenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6175	2,4-Dinitrophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6185	2,4-Dinitrotoluene (2,4-DNT)	EPA 8270E	10242543	Extractable Organics	1/5/2024
6005	2,6-Dichlorophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6190	2,6-Dinitrotoluene (2,6-DNT)	EPA 8270E	10242543	Extractable Organics	1/5/2024
5515	2-Acetylaminofluorene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4410	2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260D	10307127	Volatile Organics	1/5/2024
5795	2-Chloronaphthalene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5800	2-Chlorophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
4535	2-Chlorotoluene	EPA 8260D	10307127	Volatile Organics	1/5/2024
9340	2H,2H,3H,3H-Perfluorodecanoic Acid (7:3 FTCA)	EPA 1633	10123463	Extractable Organics	1/31/2024
9338	2H,2H,3H,3H-Perfluorooctanoic Acid (5:3 FTCA)	EPA 1633	10123463	Extractable Organics	1/31/2024
4860	2-Hexanone	EPA 8260D	10307127	Volatile Organics	1/5/2024
6360	2-Methyl-4,6-dinitrophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6385	2-Methylnaphthalene	EPA 8260D	10307127	Volatile Organics	1/5/2024
6385	2-Methylnaphthalene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6400	2-Methylphenol (o-Cresol)	EPA 8270E	10242543	Extractable Organics	1/5/2024
6430	2-Naphthylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6460	2-Nitroaniline	EPA 8270E	10242543	Extractable Organics	1/5/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Solid and Chemical Materials**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
6490	2-Nitrophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
5020	2-Nitropropane	EPA 8260D	10307127	Volatile Organics	1/5/2024
5050	2-Picoline (2-Methylpyridine)	EPA 8270E	10242543	Extractable Organics	1/5/2024
5945	3,3'-Dichlorobenzidine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6120	3,3'-Dimethylbenzidine	EPA 8270E	10242543	Extractable Organics	1/5/2024
8600	3,5-Dichlorobenzoic acid	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
6412	3/4-Methylphenols (m/p-Cresols)	EPA 8270E	10242543	Extractable Organics	1/5/2024
6355	3-Methylcholanthrene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6465	3-Nitroaniline	EPA 8270E	10242543	Extractable Organics	1/5/2024
9353	4,4,5,5,6,6,6-Heptafluorohexanoic Acid (3:3 FTCA)	EPA 1633	10123463	Extractable Organics	1/31/2024
7355	4,4'-DDD	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7360	4,4'-DDE	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7365	4,4'-DDT	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
6951	4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)	EPA 1633	10123463	Extractable Organics	1/31/2024
5540	4-Aminobiphenyl	EPA 8270E	10242543	Extractable Organics	1/5/2024
5660	4-Bromophenyl phenyl ether	EPA 8270E	10242543	Extractable Organics	1/5/2024
5700	4-Chloro-3-methylphenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
5745	4-Chloroaniline	EPA 8270E	10242543	Extractable Organics	1/5/2024
5825	4-Chlorophenyl phenylether	EPA 8270E	10242543	Extractable Organics	1/5/2024
4540	4-Chlorotoluene	EPA 8260D	10307127	Volatile Organics	1/5/2024
6105	4-Dimethyl aminoazobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4995	4-Methyl-2-pentanone (MIBK)	EPA 8260D	10307127	Volatile Organics	1/5/2024
6470	4-Nitroaniline	EPA 8270E	10242543	Extractable Organics	1/5/2024
6500	4-Nitrophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6570	5-Nitro-o-toluidine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6115	7,12-Dimethylbenz(a) anthracene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6952	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic Acid (9-ClPF3ONS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6125	a,a-Dimethylphenethylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
5500	Acenaphthene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5505	Acenaphthylene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4315	Acetone	EPA 8260D	10307127	Volatile Organics	1/5/2024
4320	Acetonitrile	EPA 8260D	10307127	Volatile Organics	1/5/2024
5510	Acetophenone	EPA 8270E	10242543	Extractable Organics	1/5/2024
8505	Acifluorfen	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
4325	Acrolein (Propenal)	EPA 8260D	10307127	Volatile Organics	1/5/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Solid and Chemical Materials**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
4340	Acrylonitrile	EPA 8260D	10307127	Volatile Organics	1/5/2024
7025	Aldrin	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
4355	Allyl chloride (3-Chloropropene)	EPA 8260D	10307127	Volatile Organics	1/5/2024
7110	alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7240	alpha-Chlordane	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
1000	Aluminum	EPA 6010D	10155950	Metals	1/5/2024
1000	Aluminum	EPA 6020B	10156420	Metals	1/5/2024
1510	Amenable cyanide	EPA 9012B	10243228	General Chemistry	1/5/2024
1515	Ammonia as N	EPA 350.1	10063602	General Chemistry	7/30/2007
5545	Aniline	EPA 8270E	10242543	Extractable Organics	1/5/2024
5555	Anthracene	EPA 8270E	10242543	Extractable Organics	1/5/2024
1005	Antimony	EPA 6010D	10155950	Metals	1/5/2024
1005	Antimony	EPA 6020B	10156420	Metals	1/5/2024
5560	Aramite	EPA 8270E	10242543	Extractable Organics	1/5/2024
8880	Aroclor-1016 (PCB-1016)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8885	Aroclor-1221 (PCB-1221)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8890	Aroclor-1232 (PCB-1232)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8895	Aroclor-1242 (PCB-1242)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8900	Aroclor-1248 (PCB-1248)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8905	Aroclor-1254 (PCB-1254)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8910	Aroclor-1260 (PCB-1260)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8912	Aroclor-1262 (PCB-1262)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
8913	Aroclor-1268 (PCB-1268)	EPA 8082A	10179358	Pesticides-Herbicides-PCB's	1/5/2024
1010	Arsenic	EPA 6010D	10155950	Metals	1/5/2024
1010	Arsenic	EPA 6020B	10156420	Metals	1/5/2024
7065	Atrazine	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
1015	Barium	EPA 6010D	10155950	Metals	1/5/2024
1015	Barium	EPA 6020B	10156420	Metals	1/5/2024
8530	Bentazon	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
5570	Benzaldehyde	EPA 8270E	10242543	Extractable Organics	1/5/2024
4375	Benzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5595	Benzidine	EPA 8270E	10242543	Extractable Organics	1/5/2024
5575	Benzo(a)anthracene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5580	Benzo(a)pyrene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5585	Benzo(b)fluoranthene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5590	Benzo(g,h,i)perylene	EPA 8270E	10242543	Extractable Organics	1/5/2024

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Solid and Chemical Materials**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
5600	Benzo(k)fluoranthene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5610	Benzoic acid	EPA 8270E	10242543	Extractable Organics	1/5/2024
5630	Benzyl alcohol	EPA 8270E	10242543	Extractable Organics	1/5/2024
5635	Benzyl chloride	EPA 8260D	10307127	Volatile Organics	1/5/2024
1020	Beryllium	EPA 6010D	10155950	Metals	1/5/2024
1020	Beryllium	EPA 6020B	10156420	Metals	1/5/2024
7115	beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
6703	Biphenyl (1,1-Biphenyl, BZ 0)	EPA 8270E	10242543	Extractable Organics	1/5/2024
5760	bis(2-Chloroethoxy)methane	EPA 8270E	10242543	Extractable Organics	1/5/2024
5765	bis(2-Chloroethyl) ether	EPA 8270E	10242543	Extractable Organics	1/5/2024
1025	Boron	EPA 6010D	10155950	Metals	1/5/2024
1540	Bromide	EPA 300.0	10053200	General Chemistry	7/30/2007
1540	Bromide	EPA 9056A	10199607	General Chemistry	1/5/2024
4385	Bromobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4390	Bromochloromethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4395	Bromodichloromethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4400	Bromoform	EPA 8260D	10307127	Volatile Organics	1/5/2024
5670	Butyl benzyl phthalate	EPA 8270E	10242543	Extractable Organics	1/5/2024
1030	Cadmium	EPA 6010D	10155950	Metals	1/5/2024
1030	Cadmium	EPA 6020B	10156420	Metals	1/5/2024
1035	Calcium	EPA 6010D	10155950	Metals	1/5/2024
1035	Calcium	EPA 6020B	10156420	Metals	1/5/2024
7180	Caprolactam	EPA 8270E	10242543	Extractable Organics	1/5/2024
5680	Carbazole	EPA 8270E	10242543	Extractable Organics	1/5/2024
4450	Carbon disulfide	EPA 8260D	10307127	Volatile Organics	1/5/2024
4455	Carbon tetrachloride	EPA 8260D	10307127	Volatile Organics	1/5/2024
8540	Chloramben	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
7250	Chlordane (tech.)	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
1575	Chloride	EPA 300.0	10053200	General Chemistry	7/30/2007
1575	Chloride	EPA 9056A	10199607	General Chemistry	1/5/2024
1575	Chloride	EPA 9251	10207406	General Chemistry	12/4/2020
4475	Chlorobenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
7260	Chlorobenzilate	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
4485	Chloroethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4505	Chloroform	EPA 8260D	10307127	Volatile Organics	1/5/2024
4525	Chloroprene	EPA 8260D	10307127	Volatile Organics	1/5/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Solid and Chemical Materials**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
1040	Chromium	EPA 6010D	10155950	Metals	1/5/2024
1040	Chromium	EPA 6020B	10156420	Metals	1/5/2024
1045	Chromium VI	EPA 7199	10163005	General Chemistry	6/16/2023
5855	Chrysene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4645	cis-1,2-Dichloroethylene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4680	cis-1,3-Dichloropropene	EPA 8260D	10307127	Volatile Organics	1/5/2024
1050	Cobalt	EPA 6010D	10155950	Metals	1/5/2024
1050	Cobalt	EPA 6020B	10156420	Metals	1/5/2024
1055	Copper	EPA 6010D	10155950	Metals	1/5/2024
1055	Copper	EPA 6020B	10156420	Metals	1/5/2024
4555	Cyclohexane	EPA 8260D	10307127	Volatile Organics	1/5/2024
8550	Dacthal (DCPA)	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
8555	Dalapon	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
7105	delta-BHC	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
6065	Di(2-ethylhexyl) phthalate (DEHP)	EPA 8270E	10242543	Extractable Organics	1/5/2024
7405	Diallate	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
5895	Dibenz(a,h)anthracene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5905	Dibenzofuran	EPA 8270E	10242543	Extractable Organics	1/5/2024
4575	Dibromochloromethane	EPA 8260	10184404	Volatile Organics	2/6/2002
4575	Dibromochloromethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
4595	Dibromomethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
8595	Dicamba	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
4625	Dichlorodifluoromethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
8605	Dichloroprop (Dichlorprop)	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
7470	Dieldrin	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
9369	Diesel range organics (DRO)	EPA 8015C	10173816	Extractable Organics	1/5/2024
4725	Diethyl ether	EPA 8260D	10307127	Volatile Organics	1/5/2024
6070	Diethyl phthalate	EPA 8270E	10242543	Extractable Organics	1/5/2024
9375	Di-isopropylether (DIPE)	EPA 8260D	10307127	Volatile Organics	1/5/2024
7475	Dimethoate	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
6135	Dimethyl phthalate	EPA 8270E	10242543	Extractable Organics	1/5/2024
5925	Di-n-butyl phthalate	EPA 8270E	10242543	Extractable Organics	1/5/2024
6200	Di-n-octyl phthalate	EPA 8270E	10242543	Extractable Organics	1/5/2024
8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
8620	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Solid and Chemical Materials**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
8625	Disulfoton	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
7510	Endosulfan I	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7515	Endosulfan II	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7520	Endosulfan sulfate	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7540	Endrin	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7530	Endrin aldehyde	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7535	Endrin ketone	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
4750	Ethanol	EPA 8015C	10173816	Volatile Organics	1/5/2024
4750	Ethanol	EPA 8260D	10307127	Volatile Organics	1/5/2024
4755	Ethyl acetate	EPA 8015C	10173816	Volatile Organics	1/5/2024
4755	Ethyl acetate	EPA 8260D	10307127	Volatile Organics	1/5/2024
4760	Ethyl acrylate	EPA 8260D	10307127	Volatile Organics	1/5/2024
4810	Ethyl methacrylate	EPA 8260D	10307127	Volatile Organics	1/5/2024
6260	Ethyl methanesulfonate	EPA 8270E	10242543	Extractable Organics	1/5/2024
4765	Ethylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4785	Ethylene glycol	EPA 8015C	10173816	Volatile Organics	1/5/2024
4770	Ethyl-t-butylether (ETBE)	EPA 8260D	10307127	Volatile Organics	1/5/2024
7580	Famphur	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
6265	Fluoranthene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6270	Fluorene	EPA 8270E	10242543	Extractable Organics	1/5/2024
1730	Fluoride	EPA 300.0	10053200	General Chemistry	7/30/2007
1730	Fluoride	EPA 9056A	10199607	General Chemistry	1/5/2024
7120	gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7245	gamma-Chlordane	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
9408	Gasoline range organics (GRO)	EPA 8015C	10173816	Volatile Organics	1/5/2024
7685	Heptachlor	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
7690	Heptachlor epoxide	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
6275	Hexachlorobenzene	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
4835	Hexachlorobutadiene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4835	Hexachlorobutadiene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6285	Hexachlorocyclopentadiene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4840	Hexachloroethane	EPA 8270E	10242543	Extractable Organics	1/5/2024
6290	Hexachlorophene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6295	Hexachloropropene	EPA 8270E	10242543	Extractable Organics	1/5/2024
9460	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA, GenX)	EPA 1633	10123463	Extractable Organics	1/31/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Solid and Chemical Materials**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
1780	Ignitability	EPA 1010	10116606	General Chemistry	9/15/2022
1780	Ignitability	EPA 1010B	10234830	General Chemistry	1/5/2024
1780	Ignitability	EPA 1030	10117201	General Chemistry	7/30/2007
6315	Indeno(1,2,3-cd)pyrene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4870	Iodomethane (Methyl iodide)	EPA 8260D	10307127	Volatile Organics	1/5/2024
1070	Iron	EPA 6010D	10155950	Metals	1/5/2024
1070	Iron	EPA 6020B	10156420	Metals	1/5/2024
4875	Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8015C	10173816	Volatile Organics	1/5/2024
4875	Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260D	10307127	Volatile Organics	1/5/2024
7725	Isodrin	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
6320	Isophorone	EPA 8270E	10242543	Extractable Organics	1/5/2024
4895	Isopropyl alcohol (2-Propanol)	EPA 8015C	10173816	Volatile Organics	1/5/2024
4895	Isopropyl alcohol (2-Propanol)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4900	Isopropylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
6325	Isosafrole	EPA 8270E	10242543	Extractable Organics	1/5/2024
7740	Kepone	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
1795	Kjeldahl nitrogen - total	EPA 351.2	10065404	General Chemistry	12/2/2005
1075	Lead	EPA 6010D	10155950	Metals	1/5/2024
1075	Lead	EPA 6020B	10156420	Metals	1/5/2024
1080	Lithium	EPA 6010D	10155950	Metals	1/5/2024
5240	m+p-Xylenes	EPA 8260D	10307127	Volatile Organics	1/5/2024
1085	Magnesium	EPA 6010D	10155950	Metals	1/5/2024
1085	Magnesium	EPA 6020B	10156420	Metals	1/5/2024
1090	Manganese	EPA 6010D	10155950	Metals	1/5/2024
1090	Manganese	EPA 6020B	10156420	Metals	1/5/2024
7775	MCPA	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
7780	MCPP	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
1095	Mercury	EPA 6020B	10156420	Metals	1/5/2024
1095	Mercury	EPA 7471B	10166457	Metals	1/5/2024
4925	Methacrylonitrile	EPA 8260D	10307127	Volatile Organics	1/5/2024
4930	Methanol	EPA 8015C	10173816	Volatile Organics	1/5/2024
6345	Methapyrilene	EPA 8270E	10242543	Extractable Organics	1/5/2024
7810	Methoxychlor	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
4940	Methyl acetate	EPA 8260D	10307127	Volatile Organics	1/5/2024
4950	Methyl bromide (Bromomethane)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4960	Methyl chloride (Chloromethane)	EPA 8260D	10307127	Volatile Organics	1/5/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Solid and Chemical Materials**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
4990	Methyl methacrylate	EPA 8260D	10307127	Volatile Organics	1/5/2024
6375	Methyl methanesulfonate	EPA 8270E	10242543	Extractable Organics	1/5/2024
7825	Methyl parathion (Parathion, methyl)	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
5000	Methyl tert-butyl ether (MTBE)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4965	Methylcyclohexane	EPA 8260D	10307127	Volatile Organics	1/5/2024
7870	Mirex	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
1100	Molybdenum	EPA 6010D	10155950	Metals	1/5/2024
1100	Molybdenum	EPA 6020B	10156420	Metals	1/5/2024
5005	Naphthalene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5005	Naphthalene	EPA 8270E	10242543	Extractable Organics	1/5/2024
4403	n-Butyl Acetate	EPA 8260D	10307127	Volatile Organics	1/5/2024
4425	n-Butyl alcohol	EPA 8015C	10173816	Volatile Organics	1/5/2024
4425	n-Butyl alcohol	EPA 8260D	10307127	Volatile Organics	1/5/2024
4435	n-Butylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
9395	N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	EPA 1633	10123463	Extractable Organics	1/31/2024
4846	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	10123463	Extractable Organics	1/31/2024
9431	N-ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	10123463	Extractable Organics	1/31/2024
1105	Nickel	EPA 6010D	10155950	Metals	1/5/2024
1105	Nickel	EPA 6020B	10156420	Metals	1/5/2024
1805	Nitrate	EPA 9056A	10199607	General Chemistry	1/5/2024
1810	Nitrate as N	EPA 300.0	10053200	General Chemistry	7/30/2007
1810	Nitrate as N	EPA 353.2	10067604	General Chemistry	12/2/2005
1835	Nitrite	EPA 9056A	10199607	General Chemistry	1/5/2024
1840	Nitrite as N	EPA 300.0	10053200	General Chemistry	7/30/2007
1840	Nitrite as N	EPA 353.2	10067604	General Chemistry	12/2/2005
5015	Nitrobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
9433	N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	10123463	Extractable Organics	1/31/2024
4847	N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6949	N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	10123463	Extractable Organics	1/31/2024
6525	n-Nitrosodiethylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6530	n-Nitrosodimethylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
5025	n-Nitroso-di-n-butylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6545	n-Nitrosodi-n-propylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6535	n-Nitrosodiphenylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Solid and Chemical Materials**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
6550	n-Nitrosomethylethylamine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6555	n-Nitrosomorpholine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6560	n-Nitrosopiperidine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6565	n-Nitrosopyrrolidine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6956	Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA)	EPA 1633	10123463	Extractable Organics	1/31/2024
5055	n-Propanol (1-Propanol)	EPA 8015C	10173816	Volatile Organics	1/5/2024
5090	n-Propylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
8290	o,o,o-Triethyl phosphorothioate	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
1865	Organic nitrogen	TKN minus AMMONIA	60034437	General Chemistry	7/30/2007
1870	Orthophosphate as P	EPA 365.1	10070005	General Chemistry	11/18/2008
5250	o-Xylene	EPA 8260D	10307127	Volatile Organics	1/5/2024
1434	Paint Filter Liquids	EPA 9095B	10245600	General Chemistry	1/5/2024
7955	Parathion, ethyl	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
6590	Pentachlorobenzene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6600	Pentachloronitrobenzene (Quintozene)	EPA 8270E	10242543	Extractable Organics	1/5/2024
6605	Pentachlorophenol	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
6605	Pentachlorophenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
6957	Perfluoro(2-ethoxyethane) Sulfonic Acid (PFEESA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6965	Perfluoro-3-methoxypropanoic Acid (PFMPA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6966	Perfluoro-4-methoxybutanoic Acid (PFMBA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6918	Perfluorobutane Sulfonic Acid (PFBS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6915	Perfluorobutanoic Acid (PFBA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6920	Perfluorodecane Sulfonic Acid (PFDS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6905	Perfluorodecanoic Acid (PFDA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6923	Perfluorododecane Sulfonic Acid (PFDoS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6903	Perfluorododecanoic Acid (PFDoA)	EPA 1633	10123463	Extractable Organics	1/31/2024
9470	Perfluoroheptane Sulfonic Acid (PFHpS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6908	Perfluoroheptanoic Acid (PFHpA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6927	Perfluorohexane Sulfonic Acid (PFHxS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6913	Perfluorohexanoic Acid (PFHxA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6929	Perfluorononane Sulfonic Acid (PFNS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6906	Perfluorononanoic Acid (PFNA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6917	Perfluorooctane sulfonamide (PFOSA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6931	Perfluorooctane sulfonic acid (PFOS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6912	Perfluorooctanoic Acid (PFOA)	EPA 1633	10123463	Extractable Organics	1/31/2024

Laboratory Scope of Accreditation

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State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Solid and Chemical Materials**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
6934	Perfluoropentane Sulfonic Acid (PFPeS)	EPA 1633	10123463	Extractable Organics	1/31/2024
6914	Perfluoropentanoic Acid (PFPeA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6902	Perfluorotetradecanoic acid (PFTDA)	EPA 1633	10123463	Extractable Organics	1/31/2024
9563	Perfluorotridecanoic acid (PFTrDA)	EPA 1633	10123463	Extractable Organics	1/31/2024
6904	Perfluoroundecanoic acid (PFUnDA)	EPA 1633	10123463	Extractable Organics	1/31/2024
1900	pH	EPA 9045D	10198455	General Chemistry	1/5/2024
6610	Phenacetin	EPA 8270E	10242543	Extractable Organics	1/5/2024
6615	Phenanthrene	EPA 8270E	10242543	Extractable Organics	1/5/2024
6625	Phenol	EPA 8270E	10242543	Extractable Organics	1/5/2024
7985	Phorate	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
1910	Phosphorus, total	EPA 365.4	10071202	General Chemistry	12/2/2005
1910	Phosphorus, total	EPA 6010D	10155950	Metals	1/5/2024
8645	Picloram	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
1125	Potassium	EPA 6010D	10155950	Metals	1/5/2024
1125	Potassium	EPA 6020B	10156420	Metals	1/5/2024
6650	Pronamide (Kerb)	EPA 8270E	10242543	Extractable Organics	1/5/2024
6665	Pyrene	EPA 8270E	10242543	Extractable Organics	1/5/2024
5095	Pyridine	EPA 8270E	10242543	Extractable Organics	1/5/2024
6685	Safrole	EPA 8270E	10242543	Extractable Organics	1/5/2024
1140	Selenium	EPA 6010D	10155950	Metals	1/5/2024
1140	Selenium	EPA 6020B	10156420	Metals	1/5/2024
1150	Silver	EPA 6010D	10155950	Metals	1/5/2024
1150	Silver	EPA 6020B	10156420	Metals	1/5/2024
8650	Silvex (2,4,5-TP)	EPA 8151A	10183207	Pesticides-Herbicides-PCB's	1/5/2024
1155	Sodium	EPA 6010D	10155950	Metals	1/5/2024
1155	Sodium	EPA 6020B	10156420	Metals	1/5/2024
1160	Strontium	EPA 6010D	10155950	Metals	1/5/2024
2000	Sulfate	EPA 300.0	10053200	General Chemistry	7/30/2007
2000	Sulfate	EPA 9038	10196608	General Chemistry	2/6/2002
2000	Sulfate	EPA 9056A	10199607	General Chemistry	1/5/2024
2005	Sulfide	EPA 9030B	10195605	General Chemistry	1/5/2024
2005	Sulfide	EPA 9034	10196006	General Chemistry	2/6/2002
8155	Sulfotepp	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
1460	Synthetic Precipitation Leaching Procedure (SPLP)	EPA 1312	10119003	General Chemistry	2/6/2002
4370	T-amylmethylether (TAME)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4420	tert-Butyl alcohol (2-Methyl-2-propanol)	EPA 8015C	10173816	Volatile Organics	1/5/2024

Laboratory Scope of Accreditation

Attachment to Certificate #: E87052-83, expiration date June 30, 2025. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87052** EPA Lab Code: **GA00006** **(912) 354-7858**

E87052
Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Matrix: **Solid and Chemical Materials**

Analyte#	Analyte	Method/Tech	Method Code	Category	Effective Date
4420	tert-Butyl alcohol (2-Methyl-2-propanol)	EPA 8260D	10307127	Volatile Organics	1/5/2024
4445	tert-Butylbenzene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5115	Tetrachloroethylene (Perchloroethylene)	EPA 8260D	10307127	Volatile Organics	1/5/2024
1165	Thallium	EPA 6010D	10155950	Metals	1/5/2024
1165	Thallium	EPA 6020B	10156420	Metals	1/5/2024
8235	Thionazin (Zinophos)	EPA 8270E	10242543	Pesticides-Herbicides-PCB's	1/5/2024
1175	Tin	EPA 6010D	10155950	Metals	1/5/2024
1180	Titanium	EPA 6010D	10155950	Metals	1/5/2024
5140	Toluene	EPA 8260D	10307127	Volatile Organics	1/5/2024
1645	Total cyanide	EPA 9012B	10243228	General Chemistry	1/5/2024
1825	Total nitrate-nitrite	EPA 353.2	10067604	General Chemistry	12/2/2005
1825	Total nitrate-nitrite	EPA 9056A	10199607	General Chemistry	1/5/2024
1827	Total Nitrogen	TKN + Total Nitrate-Nitrite	60034459	General Chemistry	7/30/2007
2050	Total Petroleum Hydrocarbons (TPH)	FL-PRO	90015808	Extractable Organics	9/15/2022
1905	Total phenolics	EPA 9065	10200405	General Chemistry	2/6/2002
8250	Toxaphene (Chlorinated camphene)	EPA 8081B	10178811	Pesticides-Herbicides-PCB's	1/5/2024
1466	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311	10118806	General Chemistry	2/6/2002
4700	trans-1,2-Dichloroethylene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4685	trans-1,3-Dichloropropene	EPA 8260D	10307127	Volatile Organics	1/5/2024
4605	trans-1,4-Dichloro-2-butene	EPA 8260D	10307127	Volatile Organics	1/5/2024
5170	Trichloroethene (Trichloroethylene)	EPA 8260D	10307127	Volatile Organics	1/5/2024
5175	Trichlorofluoromethane	EPA 8260D	10307127	Volatile Organics	1/5/2024
1185	Vanadium	EPA 6010D	10155950	Metals	1/5/2024
1185	Vanadium	EPA 6020B	10156420	Metals	1/5/2024
5225	Vinyl acetate	EPA 8260D	10307127	Volatile Organics	1/5/2024
5235	Vinyl chloride	EPA 8260D	10307127	Volatile Organics	1/5/2024
5260	Xylene (total)	EPA 8260D	10307127	Volatile Organics	1/5/2024
1190	Zinc	EPA 6010D	10155950	Metals	1/5/2024
1190	Zinc	EPA 6020B	10156420	Metals	1/5/2024

Appendix C
Laboratory MDLs

Test Description	CAS No	Matrix	Test Method	UOM	MDL	MQL	Resident Air
1,1,1-Trichloroethane	71-55-6	Air	TO-15	µg/m3	0.144	2.728	520
1,1,2,2-Tetrachloroethane	79-34-5	Air	TO-15	µg/m3	0.104	3.4323	0.048
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	Air	TO-15	µg/m3	0.561	3.8316	520
1,1,2-Trichloroethane	79-00-5	Air	TO-15	µg/m3	0.0876	2.728	0.021
1,1-Dichloroethane	75-34-3	Air	TO-15	µg/m3	0.101	2.0236	1.8
1,1-Dichloroethene	75-35-4	Air	TO-15	µg/m3	0.107	1.9823	21
1,2,4-Trichlorobenzene	120-82-1	Air	TO-15	µg/m3	0.209	3.7104	0.21
1,2,4-Trimethylbenzene	95-63-6	Air	TO-15	µg/m3	0.11	2.4579	6.3
1,2-Dibromoethane	106-93-4	Air	TO-15	µg/m3	0.151	3.8415	0.0047
1,2-Dichlorobenzene	95-50-1	Air	TO-15	µg/m3	0.0962	3.0059	21
1,2-Dichloroethane	107-06-2	Air	TO-15	µg/m3	0.129	2.0236	0.11
1,2-Dichloropropane	78-87-5	Air	TO-15	µg/m3	0.205	2.3105	0.42
1,2-Dichlorotetrafluoroethane	76-14-2	Air	TO-15	µg/m3	0.6221	3.4951	
1,3,5-Trimethylbenzene	108-67-8	Air	TO-15	µg/m3	0.236	2.4577	6.3
1,3-Butadiene	106-99-0	Air	TO-15	µg/m3	0.327	1.1061	0.094
1,3-Dichlorobenzene	541-73-1	Air	TO-15	µg/m3	0.174	12.04	
1,4-Dichlorobenzene	106-46-7	Air	TO-15	µg/m3	0.186	3.0059	0.26
1,4-Dioxane	123-91-1	Air	TO-15	µg/m3	0.435	1.8017	0.56
2-Hexanone	591-78-6	Air	TO-15	µg/m3	0.285	2.0481	3.1
4-Ethyltoluene	622-96-8	Air	TO-15	µg/m3	0.128	2.4579	
4-Methyl-2-Pentanone	108-10-1	Air	TO-15	µg/m3	0.121	2.0481	310
Acetone	67-64-1	Air	TO-15	µg/m3	0.202	4.75	
Benzene	71-43-2	Air	TO-15	µg/m3	0.0732	1.5972	0.36
Benzyl Chloride	100-44-7	Air	TO-15	µg/m3	0.147	10.36	0.057
Bromodichloromethane	75-27-4	Air	TO-15	µg/m3	0.15	3.3501	0.076
Bromoform	75-25-2	Air	TO-15	µg/m3	0.153	5.1684	2.6
Bromomethane	74-83-9	Air	TO-15	µg/m3	0.115	1.9414	0.52
Carbon Disulfide	75-15-0	Air	TO-15	µg/m3	0.0608	6.2278	73
Carbon Tetrachloride	56-23-5	Air	TO-15	µg/m3	0.155	3.1454	0.47
Chlorobenzene	108-90-7	Air	TO-15	µg/m3	0.107	2.3017	5.2
Chlorodibromomethane	124-48-1	Air	TO-15	µg/m3	0.208	4.2592	
Chloroethane	75-00-3	Air	TO-15	µg/m3	0.164	1.3193	420
Chloroform	67-66-3	Air	TO-15	µg/m3	0.0864	2.4411	0.12
Chloromethane	74-87-3	Air	TO-15	µg/m3	0.0673	1.0324	9.4
cis-1,2-Dichloroethene	156-59-2	Air	TO-15	µg/m3	0.0955	1.9823	4.2
cis-1,3-Dichloropropene	10061-01-5	Air	TO-15	µg/m3	0.178	2.2692	
Cyclohexane	110-82-7	Air	TO-15	µg/m3	0.161	3.4419	630
Dichlorodifluoromethane	75-71-8	Air	TO-15	µg/m3	0.134	2.4724	10
Ethyl Acetate	141-78-6	Air	TO-15	µg/m3	0.136	1.8017	7.3
Ethylbenzene	100-41-4	Air	TO-15	µg/m3	0.106	2.171	1.1
Heptane	142-82-5	Air	TO-15	µg/m3	0.143	2.0491	42
Hexachlorobutadiene	87-68-3	Air	TO-15	µg/m3	0.33	5.3321	0.13
Isopropyl Alcohol	67-63-0	Air	TO-15	µg/m3	0.139	4.9158	21
m,p-Xylene	179601-23-1	Air	TO-15	µg/m3	0.217	5.6487	
Methyl Ethyl Ketone (MEK)	78-93-3	Air	TO-15	µg/m3	0.224	1.4745	520
Methyl tert-butyl ether (MTBE)	1634-04-4	Air	TO-15	µg/m3	0.0336	1.8025	11
Methylene Chloride	75-09-2	Air	TO-15	µg/m3	0.488	1.7367	63
Naphthalene	91-20-3	Air	TO-15	µg/m3	0.183	2.6209	0.083
n-Hexane	110-54-3	Air	TO-15	µg/m3	0.0472	1.7623	73
o-Xylene	95-47-6	Air	TO-15	µg/m3	0.157	2.171	10
Propene	115-07-1	Air	TO-15	µg/m3	0.242	0.8605	310
Styrene	100-42-5	Air	TO-15	µg/m3	0.124	2.1297	100
Tetrachloroethene	127-18-4	Air	TO-15	µg/m3	0.181	3.391	4.2
Tetrahydrofuran	109-99-9	Air	TO-15	µg/m3	0.107	1.4745	210

Toluene	108-88-3	Air	TO-15	µg/m3	0.0901	1.8841	520
trans-1,2-Dichloroethene	156-60-5	Air	TO-15	µg/m3	0.108	1.9823	4.2
trans-1,3-Dichloropropene	10061-02-6	Air	TO-15	µg/m3	0.178	2.2692	
Trichloroethene	79-01-6	Air	TO-15	µg/m3	0.199	2.1494	0.21
Trichlorofluoromethane	75-69-4	Air	TO-15	µg/m3	0.13	2.809	
Vinyl Acetate	108-05-4	Air	TO-15	µg/m3	0.224	1.7604	21
Vinyl Chloride	75-01-4	Air	TO-15	µg/m3	0.127	1.278	0.17
Xylene (Total)	1330-20-7	Air	TO-15	µg/m3		10	10

Test Description	CAS No	Matrix	Test Method	UOM	MDL	MQL	MCL
Arsenic	7440-38-2	Aqueous	6010D	mg/L	0.006	0.01	0.00001
Barium	7440-39-3	Aqueous	6010D	mg/L	0.004	0.01	0.002
Cadmium	7440-43-9	Aqueous	6010D	mg/L	0.001	0.002	
Chromium	7440-47-3	Aqueous	6010D	mg/L	0.004	0.005	0.0001
Lead	7439-92-1	Aqueous	6010D	mg/L	0.003	0.006	0.000015
Selenium	7782-49-2	Aqueous	6010D	mg/L	0.004	0.01	0.00005
Silver	7440-22-4	Aqueous	6010D	mg/L	0.003	0.005	
Mercury	7439-97-6	Aqueous	7470A	mg/L	0.0001	0.0002	0.000002
4,4'-DDD	72-54-8	Aqueous	8081B	mg/L	0.00000216	0.00004	
4,4'-DDE	72-55-9	Aqueous	8081B	mg/L	0.00000215	0.00004	
4,4'-DDT	50-29-3	Aqueous	8081B	mg/L	0.00000351	0.00004	
Aldrin	309-00-2	Aqueous	8081B	mg/L	0.00000213	0.00004	
alpha-BHC	319-84-6	Aqueous	8081B	mg/L	0.0000007	0.00004	
alpha-Chlordane	5103-71-9	Aqueous	8081B	mg/L	0.0000021	0.00004	
beta-BHC	319-85-7	Aqueous	8081B	mg/L	0.0000015	0.00004	
Chlordane	57-74-9	Aqueous	8081B	mg/L	0.0000221	0.0002	
delta-BHC	319-86-8	Aqueous	8081B	mg/L	0.00000157	0.00004	
Dieldrin	60-57-1	Aqueous	8081B	mg/L	0.00000156	0.00004	
Endosulfan I	959-98-8	Aqueous	8081B	mg/L	0.00000155	0.00004	
Endosulfan II	33213-65-9	Aqueous	8081B	mg/L	0.00000285	0.00004	
Endosulfan Sulfate	1031-07-8	Aqueous	8081B	mg/L	0.00000153	0.00004	
Endrin	72-20-8	Aqueous	8081B	mg/L	0.00000153	0.00004	0.000002
Endrin Aldehyde	7421-93-4	Aqueous	8081B	mg/L	0.00000152	0.00004	
Endrin Ketone	53494-70-5	Aqueous	8081B	mg/L	0.00000151	0.00004	
gamma-BHC	58-89-9	Aqueous	8081B	mg/L	0.00000181	0.00004	0.0000002
gamma-Chlordane	5103-74-2	Aqueous	8081B	mg/L	0.00000149	0.00004	
Heptachlor	76-44-8	Aqueous	8081B	mg/L	0.00000149	0.00004	0.0000004
Heptachlor Epoxide	1024-57-3	Aqueous	8081B	mg/L	0.00000148	0.00004	0.0000002
Methoxychlor	72-43-5	Aqueous	8081B	mg/L	0.00000146	0.00004	0.00004
Toxaphene	8001-35-2	Aqueous	8081B	mg/L	0.0000201	0.0003	0.000003
Aroclor 1016	12674-11-2	Aqueous	8082A	mg/L	0.0001296	0.0002	
Aroclor 1221	11104-28-2	Aqueous	8082A	mg/L	0.000067	0.0002	
Aroclor 1232	11141-16-5	Aqueous	8082A	mg/L	0.000067	0.0002	
Aroclor 1242	53469-21-9	Aqueous	8082A	mg/L	0.000067	0.0002	
Aroclor 1248	12672-29-6	Aqueous	8082A	mg/L	0.000067	0.0002	
Aroclor 1254	11097-69-1	Aqueous	8082A	mg/L	0.000067	0.0002	
Aroclor 1260	11096-82-5	Aqueous	8082A	mg/L	0.0001691	0.0002	
2,4,5-T	93-76-5	Aqueous	8151A	mg/L	0.0001002	0.000125	
2,4,5-TP (Silvex)	93-72-1	Aqueous	8151A	mg/L	0.00001634	0.0001	0.00005
2,4-D	94-75-7	Aqueous	8151A	mg/L	0.0002078	0.00025	0.00007
2,4-DB	94-82-6	Aqueous	8151A	mg/L	0.0001364	0.00025	
Dalapon	75-99-0	Aqueous	8151A	mg/L	0.0005149	0.00055	0.0002
Dicamba	1918-00-9	Aqueous	8151A	mg/L	0.000057	0.0001	
Dichlorprop	120-36-5	Aqueous	8151A	mg/L	0.00007959	0.0001	
Dinoseb	88-85-7	Aqueous	8151A	mg/L	0.00002698	0.0001	0.000007
MCPA	94-74-6	Aqueous	8151A	mg/L	0.01898	0.05	
MCPP	93-65-2	Aqueous	8151A	mg/L	0.01175	0.05	
Picloram	1918 - 02 - 1	Aqueous	8151A	mg/L	0.00004528	0.0001	0.0005
1,1,1,2-Tetrachloroethane	630-20-6	Aqueous	8260B	mg/L	0.00069	0.001	
1,1,1-Trichloroethane	71-55-6	Aqueous	8260B	mg/L	0.00059	0.001	0.0002
1,1,2,2-Tetrachloroethane	79-34-5	Aqueous	8260B	mg/L	0.00048	0.001	
1,1,2-Trichloroethane	79-00-5	Aqueous	8260B	mg/L	0.00077	0.001	0.000005

Test Description	CAS No	Matrix	Test Method	UOM	MDL	MQL	MCL
1,1-Dichloroethane	75-34-3	Aqueous	8260B	mg/L	0.00072	0.001	
1,1-Dichloroethene	75-35-4	Aqueous	8260B	mg/L	0.00063	0.001	0.000007
1,1-Dichloropropene	563-58-6	Aqueous	8260B	mg/L	0.00064	0.001	
1,2,3-Trichlorobenzene	87-61-6	Aqueous	8260B	mg/L	0.00139	0.002	
1,2,3-Trichloropropane	96-18-4	Aqueous	8260B	mg/L	0.00081	0.001	
1,2,4-Trichlorobenzene	120-82-1	Aqueous	8260B	mg/L	0.00118	0.002	0.00007
1,2,4-Trimethylbenzene	95-63-6	Aqueous	8260B	mg/L	0.00086	0.001	
1,2-Dibromo-3-Chloropropane	96-12-8	Aqueous	8260B	mg/L	0.00264	0.005	0.0000002
1,2-Dibromoethane	106-93-4	Aqueous	8260B	mg/L	0.00065	0.001	0.00000005
1,2-Dichlorobenzene	95-50-1	Aqueous	8260B	mg/L	0.00096	0.001	0.0006
1,2-Dichloroethane	107-06-2	Aqueous	8260B	mg/L	0.00059	0.001	0.000005
1,2-Dichloroethene (Total)	540-59-0	Aqueous	8260B	mg/L			
1,2-Dichloropropane	78-87-5	Aqueous	8260B	mg/L	0.00087	0.001	0.000005
1,3,5-Trimethylbenzene	108-67-8	Aqueous	8260B	mg/L	0.00076	0.001	
1,3-Dichlorobenzene	541-73-1	Aqueous	8260B	mg/L	0.00097	0.001	
1,3-Dichloropropane	142-28-9	Aqueous	8260B	mg/L	0.00076	0.001	
1,4-Dichlorobenzene	106-46-7	Aqueous	8260B	mg/L	0.00091	0.001	0.000075
2,2-Dichloropropane	594-20-7	Aqueous	8260B	mg/L	0.00061	0.001	
2-Butanone (MEK)	78-93-3	Aqueous	8260B	mg/L	0.00387	0.02	
2-Chloroethylvinyl Ether	110-75-8	Aqueous	8260B	mg/L	0.00436	0.005	
2-Chlorotoluene	95-49-8	Aqueous	8260B	mg/L	0.0007	0.001	
2-Hexanone	591-78-6	Aqueous	8260B	mg/L	0.00366	0.005	
4-Chlorotoluene	106-43-4	Aqueous	8260B	mg/L	0.00075	0.001	
4-Isopropyl toluene	99-87-6	Aqueous	8260B	mg/L	0.00078	0.001	
4-Methyl-2-Pentanone	108-10-1	Aqueous	8260B	mg/L	0.00369	0.005	
Acetone	67-64-1	Aqueous	8260B	mg/L	0.00779	0.02	
Acetonitrile	75-05-8	Aqueous	8260B	mg/L	0.03442	0.05	
Acrolein	107-02-8	Aqueous	8260B	mg/L	0.00501	0.02	
Acrylonitrile	107-13-1	Aqueous	8260B	mg/L	0.00317	0.02	
Benzene	71-43-2	Aqueous	8260B	mg/L	0.00083	0.001	0.000005
Bromobenzene	108-86-1	Aqueous	8260B	mg/L	0.00074	0.001	
Bromochloromethane	74-97-5	Aqueous	8260B	mg/L	0.00087	0.001	
Bromodichloromethane	75-27-4	Aqueous	8260B	mg/L	0.00059	0.001	0.00008
Bromoform	75-25-2	Aqueous	8260B	mg/L	0.00082	0.001	0.00008
Bromomethane	74-83-9	Aqueous	8260B	mg/L	0.0008	0.002	
Carbon Disulfide	75-15-0	Aqueous	8260B	mg/L	0.0006	0.001	
Carbon Tetrachloride	56-23-5	Aqueous	8260B	mg/L	0.00058	0.001	0.000005
Chlorobenzene	108-90-7	Aqueous	8260B	mg/L	0.00065	0.001	0.0001
Chlorodibromomethane	124-48-1	Aqueous	8260B	mg/L	0.00064	0.001	0.00008
Chloroethane	75-00-3	Aqueous	8260B	mg/L	0.00077	0.001	
Chloroform	67-66-3	Aqueous	8260B	mg/L	0.00096	0.001	0.00008
Chloromethane	74-87-3	Aqueous	8260B	mg/L	0.00098	0.001	
cis-1,2-Dichloroethene	156-59-2	Aqueous	8260B	mg/L	0.0008	0.001	0.00007
cis-1,3-Dichloropropene	10061-01-5	Aqueous	8260B	mg/L	0.00069	0.001	
Dibromomethane	74-95-3	Aqueous	8260B	mg/L	0.00074	0.001	
Dichlorodifluoromethane	75-71-8	Aqueous	8260B	mg/L	0.00077	0.001	
Ethyl Acetate	141-78-6	Aqueous	8260B	mg/L	0.00365	0.01	
Ethylbenzene	100-41-4	Aqueous	8260B	mg/L	0.00061	0.001	0.0007
Hexachlorobutadiene	87-68-3	Aqueous	8260B	mg/L	0.00087	0.001	
Iodomethane	74-88-4	Aqueous	8260B	mg/L	0.00255	0.005	
Isopropylbenzene	98-82-8	Aqueous	8260B	mg/L	0.00072	0.001	
m,p-Xylene	179601-23-1	Aqueous	8260B	mg/L	0.00136	0.002	

Test Description	CAS No	Matrix	Test Method	UOM	MDL	MQL	MCL
Methyl tert-butyl ether (MTBE)	1634-04-4	Aqueous	8260B	mg/L	0.73		
Methylene Chloride	75-09-2	Aqueous	8260B	mg/L	0.00274	0.005	0.000005
Naphthalene	91-20-3	Aqueous	8260B	mg/L	0.00367	0.005	
n-Butylbenzene	104-51-8	Aqueous	8260B	mg/L	0.00081	0.001	
n-Propylbenzene	103-65-1	Aqueous	8260B	mg/L	0.00068	0.001	
o-Xylene	95-47-6	Aqueous	8260B	mg/L	0.00077	0.001	
sec-Butyl benzene	135-98-8	Aqueous	8260B	mg/L	0.00072	0.001	
Styrene	100-42-5	Aqueous	8260B	mg/L	0.00073	0.001	0.0001
tert-Butyl benzene	98-06-6	Aqueous	8260B	mg/L	0.00072	0.001	
Tetrachloroethene	127-18-4	Aqueous	8260B	mg/L	0.00066	0.001	0.000005
Toluene	108-88-3	Aqueous	8260B	mg/L	0.00061	0.002	0.001
trans-1,2-Dichloroethene	156-60-5	Aqueous	8260B	mg/L	0.00064	0.001	0.0001
trans-1,3-Dichloropropene	10061-02-6	Aqueous	8260B	mg/L	0.00064	0.001	
Trichloroethene	79-01-6	Aqueous	8260B	mg/L	0.00067	0.001	0.000005
Trichlorofluoromethane	75-69-4	Aqueous	8260B	mg/L	0.00055	0.001	
Vinyl Acetate	108-05-4	Aqueous	8260B	mg/L	0.00326	0.01	
Vinyl Chloride	75-01-4	Aqueous	8260B	mg/L	0.00056	0.001	0.000002
Xylene (Total)	1330-20-7	Aqueous	8260B	mg/L			0.01
1-Methylnaphthalene	90-12-0	Aqueous	8270D SIM	mg/L	0.0000073	0.00002	
2-Fluorobiphenyl	321-60-8	Aqueous	8270D SIM	mg/L			
2-Methylnaphthalene	91-57-6	Aqueous	8270D SIM	mg/L	0.000014	0.00002	
4-Terphenyl-d14	1718-51-0	Aqueous	8270D SIM	mg/L			
Acenaphthene	83-32-9	Aqueous	8270D SIM	mg/L	0.0000066	0.00002	
Acenaphthylene	208-96-8	Aqueous	8270D SIM	mg/L	0.0000054	0.00002	
Anthracene	120-12-7	Aqueous	8270D SIM	mg/L	0.0000037	0.00002	
Benzo(a)anthracene	56-55-3	Aqueous	8270D SIM	mg/L	0.0000129	0.00002	
Benzo(a)pyrene	50-32-8	Aqueous	8270D SIM	mg/L	0.0000152	0.00002	0.0000002
Benzo(b)fluoranthene	205-99-2	Aqueous	8270D SIM	mg/L	0.0000188	0.00002	
Benzo(g,h,i)perylene	191-24-2	Aqueous	8270D SIM	mg/L	0.0000093	0.00002	
Benzo(k)fluoranthene	207-08-9	Aqueous	8270D SIM	mg/L	0.0000139	0.00002	
Chrysene	218-01-9	Aqueous	8270D SIM	mg/L	0.0000116	0.00002	
Dibenz(a,h)anthracene	53-70-3	Aqueous	8270D SIM	mg/L	0.0000108	0.00002	
Fluoranthene	206-44-0	Aqueous	8270D SIM	mg/L	0.0000062	0.00002	
Fluorene	86-73-7	Aqueous	8270D SIM	mg/L	0.0000102	0.00002	
Indeno(1,2,3-cd)pyrene	193-39-5	Aqueous	8270D SIM	mg/L	0.0000171	0.00002	
Naphthalene	91-20-3	Aqueous	8270D SIM	mg/L	0.0000181	0.00002	
Phenanthrene	85-01-8	Aqueous	8270D SIM	mg/L	0.0000183	0.00002	
Pyrene	129-00-0	Aqueous	8270D SIM	mg/L	0.0000049	0.00002	

Test Description	CAS No	Matrix	Test Method	UOM	MDL	MQL	Resident Soil
Arsenic	7440-38-2	Solids	6010D	mg/Kg	0.25	0.5	0.68
Barium	7440-39-3	Solids	6010D	mg/Kg	0.15	0.5	1500
Cadmium	7440-43-9	Solids	6010D	mg/Kg	0.05	0.1	0.71
Chromium	7440-47-3	Solids	6010D	mg/Kg	0.25	0.25	
Lead	7439-92-1	Solids	6010D	mg/Kg	0.2	0.3	200
Selenium	7782-49-2	Solids	6010D	mg/Kg	0.35	0.5	39
Silver	7440-22-4	Solids	6010D	mg/Kg	0.2	0.25	39
Mercury	7439-97-6	Solids	7471A	mg/Kg	0.0193	0.16	1.1
4,4'-DDD	72-54-8	Solids	8081B	mg/Kg	0.000029	0.002	2.3
4,4'-DDE	72-55-9	Solids	8081B	mg/Kg	0.0000716	0.002	2
4,4'-DDT	50-29-3	Solids	8081B	mg/Kg	0.0000617	0.002	1.9
Aldrin	309-00-2	Solids	8081B	mg/Kg	0.0000267	0.002	0.039
alpha-BHC	319-84-6	Solids	8081B	mg/Kg	0.0000245	0.002	0.086
alpha-Chlordane	5103-71-9	Solids	8081B	mg/Kg	0.0000214	0.002	3.6
beta-BHC	319-85-7	Solids	8081B	mg/Kg	0.000032	0.002	0.3
Chlordane	57-74-9	Solids	8081B	mg/Kg	0.00027123	0.02	
delta-BHC	319-86-8	Solids	8081B	mg/Kg	0.000045	0.002	
Dieldrin	60-57-1	Solids	8081B	mg/Kg	0.0000239	0.002	0.034
Endosulfan I	959-98-8	Solids	8081B	mg/Kg	0.0000216	0.002	
Endosulfan II	33213-65-9	Solids	8081B	mg/Kg	0.0000297	0.002	
Endosulfan Sulfate	1031-07-8	Solids	8081B	mg/Kg	0.0000374	0.002	38
Endrin	72-20-8	Solids	8081B	mg/Kg	0.0000536	0.002	1.9
Endrin Aldehyde	7421-93-4	Solids	8081B	mg/Kg	0.0000309	0.002	
Endrin Ketone	53494-70-5	Solids	8081B	mg/Kg	0.0000936	0.002	
gamma-BHC	58-89-9	Solids	8081B	mg/Kg	0.0000341	0.002	0.57
gamma-Chlordane	5103-74-2	Solids	8081B	mg/Kg	0.0000144	0.002	3.6
Heptachlor	76-44-8	Solids	8081B	mg/Kg	0.0000791	0.002	0.13
Heptachlor Epoxide	1024-57-3	Solids	8081B	mg/Kg	0.0000387	0.002	0.07
Methoxychlor	72-43-5	Solids	8081B	mg/Kg	0.0000611	0.002	32
Toxaphene	8001-35-2	Solids	8081B	mg/Kg	0.066	0.2	0.49
Aroclor 1016	12674-11-2	Solids	8082A	mg/Kg	0.001362	0.00667	0.41
Aroclor 1221	11104-28-2	Solids	8082A	mg/Kg	0.00222	0.00667	0.2
Aroclor 1232	11141-16-5	Solids	8082A	mg/Kg	0.00222	0.00667	0.17
Aroclor 1242	53469-21-9	Solids	8082A	mg/Kg	0.00222	0.00667	0.23
Aroclor 1248	12672-29-6	Solids	8082A	mg/Kg	0.00222	0.00667	0.23
Aroclor 1254	11097-69-1	Solids	8082A	mg/Kg	0.00222	0.00667	0.12
Aroclor 1260	11096-82-5	Solids	8082A	mg/Kg	0.002391	0.00667	0.24
2,4,5-T	93-76-5	Solids	8151A	mg/Kg	0.000537	0.00334	63
2,4,5-TP (Silvex)	93-72-1	Solids	8151A	mg/Kg	0.00101	0.005	51
2,4-D	94-75-7	Solids	8151A	mg/Kg	0.00931	0.0133	70
2,4-DB	94-82-6	Solids	8151A	mg/Kg	0.00767	0.0133	
Dalapon	75-99-0	Solids	8151A	mg/Kg	0.0208	0.0334	190
Dicamba	1918-00-9	Solids	8151A	mg/Kg	0.000345	0.00133	190
Dichlorprop	120-36-5	Solids	8151A	mg/Kg	0.00512	0.0133	
Dinoseb	88-85-7	Solids	8151A	mg/Kg	0.00191	0.0133	6.3
MCPA	94-74-6	Solids	8151A	mg/Kg	0.379	3.32	3.2
MCPP	93-65-2	Solids	8151A	mg/Kg	1.03	3.32	6.3
Picloram	2/1/1918	Solids	8151A	mg/Kg	0.000987	0.00334	440

Test Description	CAS No	Matrix	Test Method	UOM	MDL	MQL	Resident Soil
1,1,1,2-Tetrachloroethane	630-20-6	Solids	8260B	mg/Kg	0.0013	0.002	2
1,1,1-Trichloroethane	71-55-6	Solids	8260B	mg/Kg	0.00115	0.002	810
1,1,2,2-Tetrachloroethane	79-34-5	Solids	8260B	mg/Kg	0.00173	0.002	0.6
1,1,2-Trichloroethane	79-00-5	Solids	8260B	mg/Kg	0.00144	0.002	0.15
1,1-Dichloroethane	75-34-3	Solids	8260B	mg/Kg	0.00147	0.002	3.6
1,1-Dichloroethene	75-35-4	Solids	8260B	mg/Kg	0.00193	0.002	23
1,1-Dichloropropene	563-58-6	Solids	8260B	mg/Kg	0.00129	0.002	
1,2,3-Trichlorobenzene	87-61-6	Solids	8260B	mg/Kg	0.00424	0.01	6.3
1,2,3-Trichloropropane	96-18-4	Solids	8260B	mg/Kg	0.00169	0.002	0.0051
1,2,4-Trichlorobenzene	120-82-1	Solids	8260B	mg/Kg	0.00246	0.01	5.8
1,2,4-Trimethylbenzene	95-63-6	Solids	8260B	mg/Kg	0.00172	0.002	30
1,2-Dibromo-3-Chloropropane	96-12-8	Solids	8260B	mg/Kg	0.0063	0.005	0.0053
1,2-Dibromoethane	106-93-4	Solids	8260B	mg/Kg	0.00133	0.002	0.036
1,2-Dichlorobenzene	95-50-1	Solids	8260B	mg/Kg	0.00176	0.002	180
1,2-Dichloroethane	107-06-2	Solids	8260B	mg/Kg	0.00124	0.002	0.46
1,2-Dichloroethene (Total)	540-59-0	Solids	8260B	mg/Kg			
1,2-Dichloropropane	78-87-5	Solids	8260B	mg/Kg	0.00174	0.002	1.6
1,3,5-Trimethylbenzene	108-67-8	Solids	8260B	mg/Kg	0.00151	0.002	27
1,3-Dichlorobenzene	541-73-1	Solids	8260B	mg/Kg	0.00193	0.002	
1,3-Dichloropropane	142-28-9	Solids	8260B	mg/Kg	0.0013	0.002	160
1,4-Dichlorobenzene	106-46-7	Solids	8260B	mg/Kg	0.00182	0.002	2.6
2,2-Dichloropropane	594-20-7	Solids	8260B	mg/Kg	0.00126	0.002	
2-Butanone (MEK)	78-93-3	Solids	8260B	mg/Kg	0.00765	0.04	2700
2-Chloroethylvinyl Ether	110-75-8	Solids	8260B	mg/Kg	0.00912	0.01	
2-Chlorotoluene	95-49-8	Solids	8260B	mg/Kg	0.0014	0.002	160
2-Hexanone	591-78-6	Solids	8260B	mg/Kg	0.00769	0.01	20
4-Chlorotoluene	106-43-4	Solids	8260B	mg/Kg	0.00152	0.002	160
4-Isopropyl toluene	99-87-6	Solids	8260B	mg/Kg	0.00153	0.002	
4-Methyl-2-Pentanone	108-10-1	Solids	8260B	mg/Kg	0.00814	0.01	3300
Acetone	67-64-1	Solids	8260B	mg/Kg	0.0295	0.04	7000
Acetonitrile	75-05-8	Solids	8260B	mg/Kg	0.0725	0.1	81
Acrolein	107-02-8	Solids	8260B	mg/Kg	0.0104	0.04	0.014
Acrylonitrile	107-13-1	Solids	8260B	mg/Kg	0.00683	0.04	0.25
Benzene	71-43-2	Solids	8260B	mg/Kg	0.0017	0.002	1.2
Bromobenzene	108-86-1	Solids	8260B	mg/Kg	0.00148	0.002	29
Bromochloromethane	74-97-5	Solids	8260B	mg/Kg	0.00177	0.002	15
Bromodichloromethane	75-27-4	Solids	8260B	mg/Kg	0.0019	0.002	0.29
Bromoform	75-25-2	Solids	8260B	mg/Kg	0.00173	0.002	19
Bromomethane	74-83-9	Solids	8260B	mg/Kg	0.00164	0.002	0.68
Carbon Disulfide	75-15-0	Solids	8260B	mg/Kg	0.00126	0.002	77
Carbon Tetrachloride	56-23-5	Solids	8260B	mg/Kg	0.00137	0.002	0.65
Chlorobenzene	108-90-7	Solids	8260B	mg/Kg	0.00132	0.002	28
Chlorodibromomethane	124-48-1	Solids	8260B	mg/Kg	0.00196	0.002	8.3
Chloroethane	75-00-3	Solids	8260B	mg/Kg	0.00156	0.002	540
Chloroform	67-66-3	Solids	8260B	mg/Kg	0.00113	0.002	0.32
Chloromethane	74-87-3	Solids	8260B	mg/Kg	0.00117	0.002	11
cis-1,2-Dichloroethene	156-59-2	Solids	8260B	mg/Kg	0.00165	0.002	6.3
cis-1,3-Dichloropropene	10061-01-5	Solids	8260B	mg/Kg	0.00139	0.002	
Dibromomethane	74-95-3	Solids	8260B	mg/Kg	0.00148	0.002	2.4
Dichlorodifluoromethane	75-71-8	Solids	8260B	mg/Kg	0.00159	0.002	8.7
Ethyl Acetate	141-78-6	Solids	8260B	mg/Kg	0.00787	0.04	62
Ethylbenzene	100-41-4	Solids	8260B	mg/Kg	0.00185	0.002	5.8

Test Description	CAS No	Matrix	Test Method	UOM	MDL	MQL	Resident Soil	
Hexachlorobutadiene	87-68-3	Solids	8260B	mg/Kg	0.00183	0.002		1.2
Iodomethane	74-88-4	Solids	8260B	mg/Kg	0.0053	0.01		
Isopropylbenzene	98-82-8	Solids	8260B	mg/Kg	0.00142	0.002		190
m,p-Xylene	179601-23-1	Solids	8260B	mg/Kg	0.00274	0.004		
Methyl tert-butyl ether (MTBE)	1634-04-4	Solids	8260B	mg/Kg	0.00148	0.002		47
Methylene Chloride	75-09-2	Solids	8260B	mg/Kg	0.00565	0.04		35
Naphthalene	91-20-3	Solids	8260B	mg/Kg	0.00799	0.01		2
n-Butylbenzene	104-51-8	Solids	8260B	mg/Kg	0.00162	0.002		390
n-Propylbenzene	103-65-1	Solids	8260B	mg/Kg	0.00135	0.002		380
o-Xylene	95-47-6	Solids	8260B	mg/Kg	0.00153	0.002		64
sec-Butyl benzene	135-98-8	Solids	8260B	mg/Kg	0.00142	0.002		780
Styrene	100-42-5	Solids	8260B	mg/Kg	0.00145	0.002		600
tert-Butyl benzene	98-06-6	Solids	8260B	mg/Kg	0.00144	0.002		780
Tetrachloroethene	127-18-4	Solids	8260B	mg/Kg	0.00132	0.002		8.1
Toluene	108-88-3	Solids	8260B	mg/Kg	0.0085	0.01		490
trans-1,2-Dichloroethene	156-60-5	Solids	8260B	mg/Kg	0.00124	0.002		7
trans-1,3-Dichloropropene	10061-02-6	Solids	8260B	mg/Kg	0.00133	0.002		
Trichloroethene	79-01-6	Solids	8260B	mg/Kg	0.00135	0.002		0.41
Trichlorofluoromethane	75-69-4	Solids	8260B	mg/Kg	0.00117	0.002		2300
Vinyl Acetate	108-05-4	Solids	8260B	mg/Kg	0.00672	0.04		91
Vinyl Chloride	75-01-4	Solids	8260B	mg/Kg	0.00136	0.002		0.059
Xylene (Total)	1330-20-7	Solids	8260B	mg/Kg				58
1-Methylnaphthalene	90-12-0	Solids	8270D SIM	mg/Kg	0.001092	0.00201		18
2-Fluorobiphenyl	321-60-8	Solids	8270D SIM	mg/Kg				
2-Methylnaphthalene	91-57-6	Solids	8270D SIM	mg/Kg	0.001935	0.00201		24
4-Terphenyl-d14	1718-51-0	Solids	8270D SIM	mg/Kg				
Acenaphthene	83-32-9	Solids	8270D SIM	mg/Kg	0.000304	0.00067		360
Acenaphthylene	208-96-8	Solids	8270D SIM	mg/Kg	0.00027	0.00067		
Anthracene	120-12-7	Solids	8270D SIM	mg/Kg	0.000334	0.00067		1800
Benzo(a)anthracene	56-55-3	Solids	8270D SIM	mg/Kg	0.000493	0.00067		1.1
Benzo(a)pyrene	50-32-8	Solids	8270D SIM	mg/Kg	0.000468	0.00067		0.11
Benzo(b)fluoranthene	205-99-2	Solids	8270D SIM	mg/Kg	0.000585	0.00067		1.1
Benzo(g,h,i)perylene	191-24-2	Solids	8270D SIM	mg/Kg	0.000639	0.00067		
Benzo(k)fluoranthene	207-08-9	Solids	8270D SIM	mg/Kg	0.000437	0.00067		11
Chrysene	218-01-9	Solids	8270D SIM	mg/Kg	0.000624	0.00067		110
Dibenz(a,h)anthracene	53-70-3	Solids	8270D SIM	mg/Kg	0.000614	0.00067		0.11
Fluoranthene	206-44-0	Solids	8270D SIM	mg/Kg	0.000394	0.00067		240
Fluorene	86-73-7	Solids	8270D SIM	mg/Kg	0.000286	0.00067		240
Indeno(1,2,3-cd)pyrene	193-39-5	Solids	8270D SIM	mg/Kg	0.000627	0.00067		1.1
Naphthalene	91-20-3	Solids	8270D SIM	mg/Kg	0.001452	0.00201		2
Nitrobenzene-d5	4165-60-0	Solids	8270D SIM	mg/Kg				
Phenanthrene	85-01-8	Solids	8270D SIM	mg/Kg	0.000421	0.00067		
Pyrene	129-00-0	Solids	8270D SIM	mg/Kg	0.000643	0.00067		180

Pace Analytical - Parm List

12065 Lebanon Rd.
Mt. Juliet, TN 37122

created by: Cassandra Foster cassandra.foster@pacelabs.com
on: 5/22/2024 9:4 CST

CAS NO	METHODREF	PARM STORED	UNITS	MDL	RDL	RESIDENT SOIL
7440-38-2	6010B	ARSENIC	mg/kg	0.518	2	0.68
7440-39-3	6010B	BARIUM	mg/kg	0.0852	0.5	1500
7440-43-9	6010B	CADMIUM	mg/kg	0.0471	0.5	0.71
7440-47-3	6010B	CHROMIUM	mg/kg	0.133	1	
7439-92-1	6010B	LEAD	mg/kg	0.208	0.5	200
7782-49-2	6010B	SELENIUM	mg/kg	0.764	2	39
7440-22-4	6010B	SILVER	mg/kg	0.127	1	39
7439-97-6	7471A	MERCURY	mg/kg	0.018	0.04	1.1

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cassandra.foster@pacelabs.com

CAS NO	METHODREF	PARM STORED	UNITS	MDL	RDL	MCL
7440-38-2	6010B	ARSENIC	mg/l	0.0044	0.01	0.01
7440-39-3	6010B	BARIUM	mg/l	0.000736	0.005	2
7440-43-9	6010B	CADMIUM	mg/l	0.000479	0.002	0.005
7440-47-3	6010B	CHROMIUM	mg/l	0.0014	0.01	0.1
7439-92-1	6010B	LEAD	mg/l	0.00299	0.006	0.015
7782-49-2	6010B	SELENIUM	mg/l	0.00735	0.01	0.05
7440-22-4	6010B	SILVER	mg/l	0.00154	0.005	
7439-97-6	7470A	MERCURY	mg/l	0.0001	0.0002	0.002

Pace Analytical - Parm List

12065 Lebanon Rd.
Mt. Juliet, TN 37122

created by: Cassandra Foster
on: 5/22/2024 8:55 CST

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CAS NO	METHODREF	PARM STORED	UNITS	MDL	RDL	SURR LOWER	SURR UPPER	MCL
72-54-8	8081	4,4-DDD	mg/l	0.000017	0.00005			
72-55-9	8081	4,4-DDE	mg/l	0.0000164	0.00005			
50-29-3	8081	4,4-DDT	mg/l	0.0000177	0.00005			
309-00-2	8081	ALDRIN	mg/l	0.00000813	0.00005			
319-84-6	8081	ALPHA BHC	mg/l	0.0000166	0.00005			
319-85-7	8081	BETA BHC	mg/l	0.0000184	0.00005			
57-74-9	8081	CHLORDANE	mg/l	0.0000977	0.0005			
319-86-8	8081	DELTA BHC	mg/l	0.0000197	0.00005			
60-57-1	8081	DIELDRIN	mg/l	0.0000179	0.00005			
959-98-8	8081	ENDOSULFAN I	mg/l	0.0000179	0.00005			
33213-65-9	8081	ENDOSULFAN II	mg/l	0.0000176	0.00005			
1031-07-8	8081	ENDOSULFAN SULFATE	mg/l	0.0000196	0.00005			
72-20-8	8081	ENDRIN	mg/l	0.0000189	0.00005			2
7421-93-4	8081	ENDRIN ALDEHYDE	mg/l	0.0000142	0.00005			
53494-70-5	8081	ENDRIN KETONE	mg/l	0.000017	0.00005			
58-89-9	8081	GAMMA BHC	mg/l	0.0000176	0.00005			0.0002
76-44-8	8081	HEPTACHLOR	mg/l	0.0000108	0.00005			0.0004
1024-57-3	8081	HEPTACHLOR EPOXIDE	mg/l	0.0000175	0.00005			0.0002
118-74-1	8081	HEXACHLOROBENZENE	mg/l	0.0000134	0.00005			0.001
72-43-5	8081	METHOXYCHLOR	mg/l	0.0000193	0.00005			0.04
8001-35-2	8081	TOXAPHENE	mg/l	0.000168	0.0005			0.003
2051-24-3	8081	DECACHLOROBIPHENYL	% Rec.			10	144	
877-09-8	8081	TETRACHLORO-M-XYLENE	% Rec.			10	135	
CAS NO	METHODREF	PARM STORED	UNITS	MDL	RDL	SURR LOWER	SURR UPPER	MCL
93-76-5	8151	2,4,5-T	mg/l	0.000258	0.002			
93-72-1	8151	2,4,5-TP (SILVEX)	mg/l	0.000335	0.002			0.05
94-75-7	8151	2,4-D	mg/l	0.000547	0.002			0.07
94-82-6	8151	2,4-DB	mg/l	0.000302	0.002			
75-99-0	8151	DALAPON	mg/l	0.000344	0.002			0.2
1918-00-9	8151	DICAMBA	mg/l	0.000245	0.002			
120-36-5	8151	DICHLOROPROP	mg/l	0.00104	0.002			
88-85-7	8151	DINOSEB	mg/l	0.00025	0.002			0.007
94-74-6	8151	MCPA	mg/l	0.0131	0.1			
93-65-2	8151	MCPP	mg/l	0.066	0.1			
87-86-5	8151	PENTACHLOROPHENOL	mg/l	0.000111	0.001			0.001
19719-28-9	8151	2,4-DICHLOROPHENYL ACETIC ACID	% Rec.			14	158	

Pace Analytical - Parm List

12065 Lebanon Rd.
Mt. Juliet, TN 37122
created by: Cassandra Foster
on: 5/22/2024 8:55 CST
cassandra.foster@pacelabs.com

CAS NO	METHODREF	PARM STORED	UNITS	MDL	RDL	SURR LOWER	SURR UPPER	RESIDENT SOIL
72-54-8	8081	4,4-DDD	mg/kg	0.003696611	0.02			2.3
72-55-9	8081	4,4-DDE	mg/kg	0.003661986	0.02			2
50-29-3	8081	4,4-DDT	mg/kg	0.006266778	0.02			1.9
309-00-2	8081	ALDRIN	mg/kg	0.003760139	0.02			0.039
319-84-6	8081	ALPHA BHC	mg/kg	0.003683798	0.02			0.086
319-85-7	8081	BETA BHC	mg/kg	0.003788455	0.02			0.3
57-74-9	8081	CHLORDANE	mg/kg	0.102961334	0.3			
319-86-8	8081	DELTA BHC	mg/kg	0.0034578	0.02			
60-57-1	8081	DIELDRIN	mg/kg	0.003441129	0.02			0.034
959-98-8	8081	ENDOSULFAN I	mg/kg	0.003633062	0.02			
33213-65-9	8081	ENDOSULFAN II	mg/kg	0.003347185	0.02			
1031-07-8	8081	ENDOSULFAN SULFATE	mg/kg	0.003637158	0.02			38
72-20-8	8081	ENDRIN	mg/kg	0.003500872	0.02			1.9
7421-93-4	8081	ENDRIN ALDEHYDE	mg/kg	0.003391777	0.02			
53494-70-5	8081	ENDRIN KETONE	mg/kg	0.007113005	0.02			
58-89-9	8081	GAMMA BHC	mg/kg	0.003438972	0.02			0.57
76-44-8	8081	HEPTACHLOR	mg/kg	0.004278437	0.02			0.13
1024-57-3	8081	HEPTACHLOR EPOXIDE	mg/kg	0.003386938	0.02			0.07
118-74-1	8081	HEXACHLOROBENZENE	mg/kg	0.003464475	0.02			0.078
72-43-5	8081	METHOXYCHLOR	mg/kg	0.004838011	0.02			32
8001-35-2	8081	TOXAPHENE	mg/kg	0.123801218	0.4			0.49
2051-24-3	8081	DECACHLOROBIPHENYL	% Rec.			10	148	
877-09-8	8081	TETRACHLORO-M-XYLENE	% Rec.			21	146	
CAS NO	METHODREF	PARM STORED	UNITS	MDL	RDL	SURR LOWER	SURR UPPER	RESIDENT SOIL
93-76-5	8151	2,4,5-T	mg/kg	0.00852	0.07			63
93-72-1	8151	2,4,5-TP (SILVEX)	mg/kg	0.0107	0.07			51
94-75-7	8151	2,4-D	mg/kg	0.00702	0.07			70
94-82-6	8151	2,4-DB	mg/kg	0.0297	0.07			
75-99-0	8151	DALAPON	mg/kg	0.0113	0.07			190
1918-00-9	8151	DICAMBA	mg/kg	0.0157	0.07			190
120-36-5	8151	DICHLOROPROP	mg/kg	0.0245	0.07			
88-85-7	8151	DINOSEB	mg/kg	0.00697	0.07			6.3
94-74-6	8151	MCPA	mg/kg	0.443	6.5			3.2
93-65-2	8151	MCPP	mg/kg	0.367	6.5			6.3
19719-28-9	8151	2,4-DICHLOROPHENYL ACETIC ACID	% Rec.			22	132	

Pace Analytical - Parm List

12065 Lebanon Rd.
Mt. Juliet, TN 37122

created by: Cassandra Foster
on: 5/22/2024 10:52 CST

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CAS NO	METHODREF	PARM STORED	UNITS	MDL	RDL	SURR LOWER	SURR UPPER	MCL
90-12-0	8270C-SIM	1-METHYLNAPHTHALENE	mg/l	0.0000189	0.00025			
91-58-7	8270C-SIM	2-CHLORONAPHTHALENE	mg/l	0.0000165	0.00025			
91-57-6	8270C-SIM	2-METHYLNAPHTHALENE	mg/l	0.0000155	0.00025			
83-32-9	8270C-SIM	ACENAPHTHENE	mg/l	0.00000316	0.00005			
208-96-8	8270C-SIM	ACENAPHTHYLENE	mg/l	0.000007	0.00005			
120-12-7	8270C-SIM	ANTHRACENE	mg/l	0.000008	0.00005			
56-55-3	8270C-SIM	BENZO(A)ANTHRACENE	mg/l	0.0000018	0.00005			
50-32-8	8270C-SIM	BENZO(A)PYRENE	mg/l	0.0000158	0.00005			0.0002
205-99-2	8270C-SIM	BENZO(B)FLUORANTHENE	mg/l	0.00000212	0.00005			
191-24-2	8270C-SIM	BENZO(G,H,I)PERYLENE	mg/l	0.00000227	0.00005			
207-08-9	8270C-SIM	BENZO(K)FLUORANTHENE	mg/l	0.0000255	0.00005			
218-01-9	8270C-SIM	CHRYSENE	mg/l	0.0000144	0.00005			
53-70-3	8270C-SIM	DIBENZ(A,H)ANTHRACENE	mg/l	0.00000454	0.00005			
206-44-0	8270C-SIM	FLUORANTHENE	mg/l	0.0000165	0.00005			
86-73-7	8270C-SIM	FLUORENE	mg/l	0.00000898	0.00005			
193-39-5	8270C-SIM	INDENO(1,2,3-CD)PYRENE	mg/l	0.00000739	0.00005			
91-20-3	8270C-SIM	NAPHTHALENE	mg/l	0.0000104	0.00025			
85-01-8	8270C-SIM	PHENANTHRENE	mg/l	0.0000184	0.00005			
129-00-0	8270C-SIM	PYRENE	mg/l	0.0000155	0.00005			
321-60-8	8270C-SIM	2-FLUOROBIPHENYL	% Rec.			32	120	
4165-60-0	8270C-SIM	NITROBENZENE-D5	% Rec.			11	135	
1718-51-0	8270C-SIM	P-TERPHENYL-D14	% Rec.			23	122	

Pace Analytical - Parm List

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Mt. Juliet, TN 37122

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CAS NO	METHODREF	PARM STORED	UNITS	MDL	RDL	SURR LOWER	SURR UPPER	RESIDENT SOIL
90-12-0	8270C-SIM	1-METHYLNAPHTHALENE	mg/kg	0.00449	0.02			18
91-58-7	8270C-SIM	2-CHLORONAPHTHALENE	mg/kg	0.00466	0.02			480
91-57-6	8270C-SIM	2-METHYLNAPHTHALENE	mg/kg	0.00427	0.02			24
83-32-9	8270C-SIM	ACENAPHTHENE	mg/kg	0.00209	0.006			360
208-96-8	8270C-SIM	ACENAPHTHYLENE	mg/kg	0.00216	0.006			
120-12-7	8270C-SIM	ANTHRACENE	mg/kg	0.0023	0.006			1800
56-55-3	8270C-SIM	BENZO(A)ANTHRACENE	mg/kg	0.00173	0.006			1.1
50-32-8	8270C-SIM	BENZO(A)PYRENE	mg/kg	0.00179	0.006			0.11
205-99-2	8270C-SIM	BENZO(B)FLUORANTHENE	mg/kg	0.00153	0.006			1.1
191-24-2	8270C-SIM	BENZO(G,H,I)PERYLENE	mg/kg	0.00177	0.006			
207-08-9	8270C-SIM	BENZO(K)FLUORANTHENE	mg/kg	0.00215	0.006			11
218-01-9	8270C-SIM	CHRYSENE	mg/kg	0.00232	0.006			110
53-70-3	8270C-SIM	DIBENZ(A,H)ANTHRACENE	mg/kg	0.00172	0.006			0.11
206-44-0	8270C-SIM	FLUORANTHENE	mg/kg	0.00227	0.006			240
86-73-7	8270C-SIM	FLUORENE	mg/kg	0.00205	0.006			240
193-39-5	8270C-SIM	INDENO(1,2,3-CD)PYRENE	mg/kg	0.00181	0.006			1.1
91-20-3	8270C-SIM	NAPHTHALENE	mg/kg	0.00408	0.02			2
85-01-8	8270C-SIM	PHENANTHRENE	mg/kg	0.00231	0.006			
129-00-0	8270C-SIM	PYRENE	mg/kg	0.002	0.006			180
321-60-8	8270C-SIM	2-FLUOROBIPHENYL	% Rec.			34	125	
4165-60-0	8270C-SIM	NITROBENZENE-D5	% Rec.			14	149	
1718-51-0	8270C-SIM	P-TERPHENYL-D14	% Rec.			23	120	

Compound	CAS #	Molecular Weight	MDL (ppbv)	RDL (ppbv)	MDL (ug/m3)	RDL (ug/m3)	Resident Air

TO-15SIM

Compound	CAS #	Molecular Weight	MDL (ppbv)	RDL (ppbv)	MDL (ug/m3)	RDL (ug/m3)	Resident Air (ug/m3)
1,1,1-Trichloroethane	71-55-6	133	0.0065	0.0200	0.0353	0.1088	520.0000
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0087	0.0200	0.0601	0.1374	0.0480
1,1,2-Trichloroethane	79-00-5	133	0.0058	0.0300	0.0317	0.1632	0.0210
1,1-Dichloroethane	75-34-3	98	0.0089	0.0200	0.0358	0.0802	1.8000
1,1-Dichloroethene	75-35-4	96.9	0.0092	0.0200	0.0365	0.0793	21.0000
1,2-Dichloroethane	107-06-2	99	0.0046	0.0200	0.0186	0.0810	0.1100
1,2-Dibromoethane	106-93-4	188	0.0078	0.0200	0.0599	0.1538	0.0047
1,2-Dichloropropane	78-87-5	113	0.0089	0.0300	0.0409	0.1387	0.4200
1,4-Dichlorobenzene	106-46-7	147	0.0069	0.0200	0.0415	0.1202	0.2600
Benzene	71-43-2	78.1	0.0112	0.0200	0.0358	0.0639	0.3600
Carbon Tetrachloride	56-23-5	154	0.0100	0.0200	0.0627	0.1260	0.4700
Chloroethane	75-00-3	64.5	0.0094	0.0400	0.0249	0.1055	420.0000
Chloroform	67-66-3	119	0.0073	0.0200	0.0355	0.0973	0.1200
Chloromethane	74-87-3	50.5	0.0162	0.0300	0.0335	0.0620	9.4000
Cis-1,2-Dichloroethene	156-59-2	96.9	0.0142	0.0200	0.0563	0.0793	4.2000
Cis-1,3-Dichloropropene	10061-01-5	111	0.0074	0.0200	0.0334	0.0908	
Ethylbenzene	100-41-4	106	0.0126	0.0300	0.0546	0.1301	1.1000
Tetrachloroethylene	127-18-4	166	0.0127	0.0200	0.0862	0.1358	4.2000
Trans-1,2-dichloroethene	156-60-5	96.9	0.0050	0.0200	0.0198	0.0793	4.2000
Trans-1,3-Dichloropropene	10061-02-6	111	0.0071	0.0300	0.0323	0.1362	
Trichloroethylene	79-01-6	131	0.0075	0.0200	0.0400	0.1072	0.2100
Vinyl Acetate	108-05-4	86.1	0.0111	0.0200	0.0391	0.0704	21.0000
Vinyl chloride	75-01-4	62.5	0.0077	0.0200	0.0196	0.0511	0.1700
*Naphthalene**	*91-20-3*	*128*	*0.0033*	*0.0200*	*0.0173*	*0.1047*	0.0830
*pending							

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Compound	CAS #	Molecular Weight	MDL (ppbv)	RDL (ppbv)	MDL (ug/m3)	RDL (ug/m3)	Resident Air (ug/m3)
1,1,1-Trichloroethane	71-55-6	133	0.0736	0.2000	0.4004	1.0879	520.0000
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0743	0.2000	0.5105	1.3742	0.0480
1,1,2-Trichloroethane	79-00-5	133	0.0775	0.2000	0.4216	1.0879	0.0210
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.0793	0.2000	0.6078	1.5329	520.0000
1,1-Dichloroethane	75-34-3	98	0.0723	0.2000	0.2898	0.8016	1.8000
1,1-Dichloroethene	75-35-4	96.9	0.0762	0.2000	0.3020	0.7926	21.0000
1,1-DIFLUOROETHANE	75-37-6	66.05	0.1290	1.0000	0.3485	2.7014	4200.0000
1,2,3-TRIMETHYLBENZENE	526-73-8	120.19	0.0805	0.2000	0.3957	0.9831	6.3000
1,2,4-Trichlorobenzene	120-82-1	181	0.1480	0.6300	1.0956	4.6638	0.2100
1,2,4-Trimethyl benzene	95-63-6	120	0.0764	0.2000	0.3750	0.9816	6.3000
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	236.33	0.0667	0.2000	0.6447	1.9332	0.0002
1,2-Dibromoethane	106-93-4	188	0.0721	0.2000	0.5544	1.5378	0.0047
1,2-Dichlorobenzene	95-50-1	147	0.1280	0.2000	0.7696	1.2025	21.0000
1,2-Dichloroethane	107-06-2	99	0.0700	0.2000	0.2834	0.8098	0.1100
1,2-Dichloropropane	78-87-5	113	0.0760	0.2000	0.3512	0.9243	0.4200
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.0890	0.2000	0.6225	1.3988	
1,3,5-Trimethyl benzene	108-67-8	120	0.0779	0.2000	0.3823	0.9816	6.3000
1,3-butadiene	106-99-0	54.1	0.1040	2.0000	0.2301	4.4254	0.0940
1,3-Dichlorobenzene	541-73-1	147	0.1820	0.2000	1.0942	1.2025	
1,4-Dichlorobenzene	106-46-7	147	0.0557	0.2000	0.3349	1.2025	0.2600

1,4-Dioxane	123-91-1	88.1	0.0833	0.2000	0.3002	0.7207	0.5600
2,2,4-Trimethylpentane	540-84-1	114.22	0.1330	0.2000	0.6213	0.9343	
2-Butanone	78-93-3	72.1	0.0814	1.2500	0.2400	3.6861	520.0000
2-Chlorotoluene	95-49-8	126	0.0828	0.2000	0.4267	1.0307	
2-propanol	67-63-0	60.1	0.2640	1.2500	0.6489	3.0726	21.0000
4-Ethyltoluene	622-96-8	120	0.0783	0.2000	0.3843	0.9816	
4-Methyl-2-Pentanone	108-10-1	100.1	0.0765	1.2500	0.3132	5.1176	310.0000
Acetone	67-64-1	58.1	0.5840	1.2500	1.3877	2.9703	
ACETONITRILE	75-05-8	41.05	0.2352	5.0000	0.3949	8.3947	6.3000
ACROLEIN	107-02-8	56.06	0.3140	1.0000	0.7200	2.2928	0.0021
ACRYLONITRILE	107-13-1	53.06	0.2258	5.0000	0.4900	10.8507	0.0410
Allyl Chloride	107-05-1	76.53	0.1140	0.2000	0.3568	0.6260	0.1000
Benzene	71-43-2	78.1	0.0715	0.2000	0.2284	0.6389	0.3600
Benzyl Chloride	100-44-7	127	0.0598	0.2000	0.3106	1.0389	0.0570
Bromodichloromethane	75-27-4	164	0.0702	0.2000	0.4709	1.3415	0.0760
BROMOETHANE	74-96-4	108.97	0.2157	5.0000	0.9613	22.2843	
Bromoform	75-25-2	253	0.0732	0.6000	0.7574	6.2086	2.6000
Bromomethane	74-83-9	94.9	0.0982	0.2000	0.3812	0.7763	0.5200
BUTANE	106-97-8	58.12	0.0522	0.2000	0.1241	0.4754	
Carbon Disulfide	75-15-0	76.1	0.1020	0.2000	0.3175	0.6225	73.0000
Carbon Tetrachloride	56-23-5	154	0.0732	0.2000	0.4611	1.2597	0.4700
Chlorobenzene	108-90-7	113	0.0832	0.2000	0.3845	0.9243	5.2000
CHLORODIBROMOMETHANE	124-48-1	208	0.0727	0.2000	0.6185	1.7014	
CHLORODIFLUOROMETHANE	75-45-6	86.47	0.1310	0.2000	0.4633	0.7073	5200.0000
Chloroethane	75-00-3	64.5	0.0996	0.2000	0.2627	0.5276	420.0000
Chloroform	67-66-3	119	0.0717	0.2000	0.3490	0.9734	0.1200
Chloromethane	74-87-3	50.5	0.1030	0.2000	0.2127	0.4131	9.4000
Cis-1,2-Dichloroethene	156-59-2	96.9	0.0784	0.2000	0.3107	0.7926	4.2000
Cis-1,3-Dichloropropene	10061-01-5	111	0.0689	0.2000	0.3128	0.9080	
Cyclohexane	110-82-7	84.2	0.0753	0.2000	0.2593	0.6888	630.0000
Dichlorodifluoromethane	75-71-8	120.92	0.1370	0.2000	0.6775	0.9891	10.0000
DI-ISOPROPYL ETHER	108-20-3	102.17	0.0839	0.2000	0.3506	0.8357	73.0000
Ethanol	64-17-5	46.1	0.2650	1.2500	0.4997	2.3569	
ETHYL ACETATE	141-78-6	88.11	0.1000	0.2000	0.3604	0.7207	7.3000
ETHYL TERT-BUTYL ETHER	637-92-3	102.17	0.0804	0.2000	0.3360	0.8357	35.0000
Ethylbenzene	100-41-4	106	0.0835	0.2000	0.3620	0.8671	1.1000
Heptane	142-82-5	100	0.1040	0.2000	0.4254	0.8180	42.0000
Hexachloro-1,3-Butadiene	87-68-3	261	0.1050	0.6300	1.1209	6.7252	0.1300
Hexane	110-54-3	86.18	0.2060	0.6300	0.7261	2.2206	73.0000
Isopropylbenzene	98-82-8	120.2	0.0777	0.2000	0.3820	0.9832	42.0000
m&p-Xylene	1330-20-7	106	0.1350	0.4000	0.5853	1.7342	10.0000
METHYL ACETATE	79-20-9	74.08	0.0869	0.2000	0.2633	0.6060	
Methyl Butyl Ketone	591-78-6	100	0.1330	1.2500	0.5440	5.1125	3.1000
METHYL CYCLOHEXANE	108-87-2	98.19	0.0813	0.2000	0.3265	0.8032	9.9000
Methyl Methacrylate	80-62-6	100.12	0.0876	0.2000	0.3587	0.8190	73.0000
MTBE	1634-04-4	88.1	0.0647	0.2000	0.2331	0.7207	11.0000
Methylene chloride	75-09-2	84.9	0.0979	0.2000	0.3399	0.6945	63.0000
Naphthalene	91-20-3	128	0.3500	0.6300	1.8323	3.2982	0.0830
N-BUTYLBENZENE	104-51-8	134.22	0.0817	0.2000	0.4485	1.0979	
N-DECANE	124-18-5	142.28	0.0784	0.2000	0.4562	1.1638	
N-OCTANE	111-65-9	114.23	0.0900	0.2000	0.4205	0.9344	
NONANE	111-84-2	128.25	0.0363	0.2000	0.1904	1.0491	2.1000
N-PROPYLBENZENE	103-65-1	120.19	0.0773	0.2000	0.3800	0.9831	100.0000
o-Xylene	95-47-6	106	0.0828	0.2000	0.3590	0.8671	10.0000
PENTANE	109-66-0	72.15	0.0503	0.2000	0.1484	0.5902	100.0000
P-ISOPROPYLTOLUENE	99-87-6	134.22	0.0684	0.2000	0.3755	1.0979	
Propene	115-07-1	42.1	0.0932	1.2500	0.1605	2.1524	310.0000

SEC-BUTYLBENZENE	135-98-8	134.22	0.0775	0.2000	0.4254	1.0979	
Styrene	100-42-5	104	0.0788	0.2000	0.3352	0.8507	100.0000
TERT-AMYL ETHYL ETHER	919-94-8	116.2	0.0778	0.2000	0.3697	0.9505	
TERT-AMYL METHYL ETHER	994-05-8	102.18	0.0982	0.2000	0.4104	0.8358	
TERT-BUTYL ALCOHOL	75-65-0	74.12	0.0581	0.2000	0.1761	0.6063	520.0000
TERT-BUTYLBENZENE	98.06-6	134.22	0.0738	0.2000	0.4051	1.0979	
Tetrachloroethylene	127-18-4	166	0.0814	0.2000	0.5527	1.3579	4.2000
Tetrahydrofuran	109-99-9	72.1	0.0734	0.2000	0.2164	0.5898	210.0000
Toluene	108-88-3	92.1	0.0870	0.2000	0.3277	0.7534	520.0000
TPH (GC/MS) LOW FRACTION	8006-61-9	101	39.7000	200.0000	163.9959	826.1759	
TPH-GRO (C5-C10)	8006-61-10	101	39.7000	200.0000	163.9959	826.1759	
Trans-1,2-dichloroethene	156-60-5	96.9	0.0673	0.2000	0.2667	0.7926	4.2000
Trans-1,3-Dichloropropene	10061-02-6	111	0.0728	0.2000	0.3305	0.9080	
Trichloroethylene	79-01-6	131	0.0680	0.2000	0.3643	1.0716	0.2100
Trichlorofluoromethane	75-69-4	137.4	0.0819	0.2000	0.4602	1.1239	
Vinyl Acetate	108-05-4	86.1	0.1160	0.2000	0.4085	0.7043	21.0000
Vinyl Bromide	593-60-2	106.96	0.0852	0.2000	0.3727	0.8749	0.1900
Vinyl chloride	75-01-4	62.5	0.0949	0.2000	0.2426	0.5112	0.1700

Pace Analytical - Parm List

12065 Lebanon Rd.
Mt. Juliet, TN 37122

created by: Cassandra Foster
on: 5/22/2024 8:38 CST

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CAS NO	METHODREF	PARM STORED	UNITS	MDL	RDL	SURR LOWER	SURR UPPER	MCL
12674-11-2	8082	PCB 1016	mg/l	0.00001981	0.0005		50	
11104-28-2	8082	PCB 1221	mg/l	0.00002443	0.0005		50	
11141-16-5	8082	PCB 1232	mg/l	0.00002133	0.0005		50	
53469-21-9	8082	PCB 1242	mg/l	0.00002424	0.0005		50	
12672-29-6	8082	PCB 1248	mg/l	0.00001354	0.0005		50	
11097-69-1	8082	PCB 1254	mg/l	0.00001813	0.0005		50	
11096-82-5	8082	PCB 1260	mg/l	0.0000146	0.0005		50	
2051-24-3	8082	DECACHLOROBIPHENYL	% Rec.			10	144	
877-09-8	8082	TETRACHLORO-M-XYLENE	% Rec.			10	135	

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CAS NO	METHODREF	PARM STORED	UNITS	MDL	RDL	SURR LOWER	SURR UPPER	RESIDENT SOIL
12674-11-2	8082	PCB 1016	mg/kg	0.011821651	0.034		50	0.41
11104-28-2	8082	PCB 1221	mg/kg	0.011821651	0.034		50	0.2
11141-16-5	8082	PCB 1232	mg/kg	0.011821651	0.034		50	0.17
53469-21-9	8082	PCB 1242	mg/kg	0.011821651	0.034		50	0.23
12672-29-6	8082	PCB 1248	mg/kg	0.007379	0.017		50	0.23
11097-69-1	8082	PCB 1254	mg/kg	0.007379	0.017		50	0.12
11096-82-5	8082	PCB 1260	mg/kg	0.007379	0.017		50	0.24
2051-24-3	8082	DECACHLOROBIPHENYL	% Rec.			10	148	
877-09-8	8082	TETRACHLORO-M-XYLENE	% Rec.			21	146	

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CAS NO	METHODREF	PARM STORED	UNITS	MDL	RDL	SURR LOWER	SURR UPPER	MCL
630-20-6	8260B	1,1,1,2-TETRACHLOROETHANE	mg/l	0.000147	0.001			
71-55-6	8260B	1,1,1-TRICHLOROETHANE	mg/l	0.000149	0.001			0.2
79-34-5	8260B	1,1,2,2-TETRACHLOROETHANE	mg/l	0.000133	0.001			
79-00-5	8260B	1,1,2-TRICHLOROETHANE	mg/l	0.000158	0.001			0.005
76-13-1	8260B	1,1,2-TRICHLOROTRIFLUOROETHANE	mg/l	0.00018	0.001			
75-34-3	8260B	1,1-DICHLOROETHANE	mg/l	0.0001	0.001			
75-35-4	8260B	1,1-DICHLOROETHENE	mg/l	0.000188	0.001			0.007
563-58-6	8260B	1,1-DICHLOROPROPENE	mg/l	0.000142	0.001			
87-61-6	8260B	1,2,3-TRICHLOROBENZENE	mg/l	0.00023	0.001			
96-18-4	8260B	1,2,3-TRICHLOROPROPANE	mg/l	0.000237	0.0025			
526-73-8	8260B	1,2,3-TRIMETHYLBENZENE	mg/l	0.000104	0.001			
120-82-1	8260B	1,2,4-TRICHLOROBENZENE	mg/l	0.000481	0.001			0.07
95-63-6	8260B	1,2,4-TRIMETHYLBENZENE	mg/l	0.000322	0.001			
96-12-8	8260B	1,2-DIBROMO-3-CHLOROPROPANE	mg/l	0.000276	0.005			0.0002
106-93-4	8260B	1,2-DIBROMOETHANE	mg/l	0.000126	0.001			0.00005
95-50-1	8260B	1,2-DICHLOROBENZENE	mg/l	0.000107	0.001			0.6
107-06-2	8260B	1,2-DICHLOROETHANE	mg/l	0.0000819	0.001			0.005
78-87-5	8260B	1,2-DICHLOROPROPANE	mg/l	0.000149	0.001			0.005
108-67-8	8260B	1,3,5-TRIMETHYLBENZENE	mg/l	0.000104	0.001			
541-73-1	8260B	1,3-DICHLOROBENZENE	mg/l	0.00011	0.001			
142-28-9	8260B	1,3-DICHLOROPROPANE	mg/l	0.00011	0.001			
106-46-7	8260B	1,4-DICHLOROBENZENE	mg/l	0.00012	0.001			0.075
594-20-7	8260B	2,2-DICHLOROPROPANE	mg/l	0.000161	0.001			
78-93-3	8260B	2-BUTANONE (MEK)	mg/l	0.00119	0.01			
95-49-8	8260B	2-CHLOROTOLUENE	mg/l	0.000106	0.001			
106-43-4	8260B	4-CHLOROTOLUENE	mg/l	0.000114	0.001			
108-10-1	8260B	4-METHYL-2-PENTANONE (MIBK)	mg/l	0.000478	0.01			
67-64-1	8260B	ACETONE	mg/l	0.0113	0.05			
107-02-8	8260B	ACROLEIN	mg/l	0.00254	0.05			
107-13-1	8260B	ACRYLONITRILE	mg/l	0.000671	0.01			
71-43-2	8260B	BENZENE	mg/l	0.0000941	0.001			0.005
108-86-1	8260B	BROMOBENZENE	mg/l	0.000118	0.001			
75-27-4	8260B	BROMODICHLOROMETHANE	mg/l	0.000136	0.001			0.08
75-25-2	8260B	BROMOFORM	mg/l	0.000129	0.001			0.08
74-83-9	8260B	BROMOMETHANE	mg/l	0.000605	0.005			
56-23-5	8260B	CARBON TETRACHLORIDE	mg/l	0.000128	0.001			0.005
108-90-7	8260B	CHLOROBENZENE	mg/l	0.000116	0.001			0.1
124-48-1	8260B	CHLORODIBROMOMETHANE	mg/l	0.00014	0.001			0.08
75-00-3	8260B	CHLOROETHANE	mg/l	0.000192	0.005			
67-66-3	8260B	CHLOROFORM	mg/l	0.000111	0.005			0.08
74-87-3	8260B	CHLOROMETHANE	mg/l	0.00096	0.0025			
156-59-2	8260B	CIS-1,2-DICHLOROETHENE	mg/l	0.000126	0.001			0.07
10061-01-5	8260B	CIS-1,3-DICHLOROPROPENE	mg/l	0.000111	0.001			
108-20-3	8260B	DI-ISOPROPYL ETHER	mg/l	0.000105	0.001			
74-95-3	8260B	DIBROMOMETHANE	mg/l	0.000122	0.001			
75-71-8	8260B	DICHLORODIFLUOROMETHANE	mg/l	0.000374	0.005			
100-41-4	8260B	ETHYLBENZENE	mg/l	0.000137	0.001			0.7
87-68-3	8260B	HEXACHLORO-1,3-BUTADIENE	mg/l	0.000337	0.001			
98-82-8	8260B	ISOPROPYLBENZENE	mg/l	0.000105	0.001			
1634-04-4	8260B	METHYL TERT-BUTYL ETHER	mg/l	0.000101	0.001			
75-09-2	8260B	METHYLENE CHLORIDE	mg/l	0.00043	0.005			0.005
104-51-8	8260B	N-BUTYLBENZENE	mg/l	0.000157	0.001			
103-65-1	8260B	N-PROPYLBENZENE	mg/l	0.0000993	0.001			
91-20-3	8260B	NAPHTHALENE	mg/l	0.001	0.005			
99-87-6	8260B	P-ISOPROPYLTOLUENE	mg/l	0.00012	0.001			
135-98-8	8260B	SEC-BUTYLBENZENE	mg/l	0.000125	0.001			

100-42-5	8260B	STYRENE	mg/l	0.000118	0.001			0.1
98-06-6	8260B	TERT-BUTYLBENZENE	mg/l	0.000127	0.001			
127-18-4	8260B	TETRACHLOROETHENE	mg/l	0.0003	0.001			0.005
108-88-3	8260B	TOLUENE	mg/l	0.000278	0.001			1
156-60-5	8260B	TRANS-1,2-DICHLOROETHENE	mg/l	0.000149	0.001			0.1
10061-02-6	8260B	TRANS-1,3-DICHLOROPROPENE	mg/l	0.000118	0.001			
79-01-6	8260B	TRICHLOROETHENE	mg/l	0.00019	0.001			0.005
75-69-4	8260B	TRICHLOROFLUOROMETHANE	mg/l	0.00016	0.005			
75-01-4	8260B	VINYL CHLORIDE	mg/l	0.000234	0.001			0.002
1330-20-7	8260B	XYLENES, TOTAL	mg/l	0.000174	0.003			10
17060-07-0	8260B	1,2-DICHLOROETHANE-D4	% Rec.			70	130	
460-00-4	8260B	4-BROMOFLUOROBENZENE	% Rec.			80	120	
2037-26-5	8260B	TOLUENE-D8	% Rec.			80	120	

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CAS NO	METHODREF	PARM STORED	UNITS	MDL	RDL	SURR LOWER	SURR UPPER	RESIDENT SOIL
630-20-6	8260B	1,1,1,2-TETRACHLOROETHANE	mg/kg	0.000948	0.0025			2
71-55-6	8260B	1,1,1-TRICHLOROETHANE	mg/kg	0.000923	0.0025			810
79-34-5	8260B	1,1,2,2-TETRACHLOROETHANE	mg/kg	0.000695	0.0025			0.6
79-00-5	8260B	1,1,2-TRICHLOROETHANE	mg/kg	0.000597	0.0025			0.15
76-13-1	8260B	1,1,2-TRICHLOROTRIFLUOROETHANE	mg/kg	0.000754	0.0025			670
75-34-3	8260B	1,1-DICHLOROETHANE	mg/kg	0.000491	0.0025			3.6
75-35-4	8260B	1,1-DICHLOROETHENE	mg/kg	0.000606	0.0025			23
563-58-6	8260B	1,1-DICHLOROPROPENE	mg/kg	0.000809	0.0025			
87-61-6	8260B	1,2,3-TRICHLOROBENZENE	mg/kg	0.00733	0.0125			6.3
96-18-4	8260B	1,2,3-TRICHLOROPROPANE	mg/kg	0.00162	0.0125			0.0051
526-73-8	8260B	1,2,3-TRIMETHYLBENZENE	mg/kg	0.00158	0.005			34
120-82-1	8260B	1,2,4-TRICHLOROBENZENE	mg/kg	0.0044	0.0125			5.8
95-63-6	8260B	1,2,4-TRIMETHYLBENZENE	mg/kg	0.00158	0.005			30
96-12-8	8260B	1,2-DIBROMO-3-CHLOROPROPANE	mg/kg	0.0039	0.025			0.0053
106-93-4	8260B	1,2-DIBROMOETHANE	mg/kg	0.000648	0.0025			0.036
95-50-1	8260B	1,2-DICHLOROBENZENE	mg/kg	0.000425	0.005			180
107-06-2	8260B	1,2-DICHLOROETHANE	mg/kg	0.000649	0.0025			0.46
78-87-5	8260B	1,2-DICHLOROPROPANE	mg/kg	0.00142	0.005			1.6
108-67-8	8260B	1,3,5-TRIMETHYLBENZENE	mg/kg	0.002	0.005			27
541-73-1	8260B	1,3-DICHLOROBENZENE	mg/kg	0.0006	0.005			
142-28-9	8260B	1,3-DICHLOROPROPANE	mg/kg	0.000501	0.005			160
106-46-7	8260B	1,4-DICHLOROBENZENE	mg/kg	0.0007	0.005			2.6
594-20-7	8260B	2,2-DICHLOROPROPANE	mg/kg	0.00138	0.0025			2700
78-93-3	8260B	2-BUTANONE (MEK)	mg/kg	0.0635	0.1			2700
95-49-8	8260B	2-CHLOROTOLUENE	mg/kg	0.000865	0.0025			160
106-43-4	8260B	4-CHLOROTOLUENE	mg/kg	0.00045	0.005			160
108-10-1	8260B	4-METHYL-2-PENTANONE (MIBK)	mg/kg	0.00228	0.025			3300
67-64-1	8260B	ACETONE	mg/kg	0.0365	0.05			7000
107-13-1	8260B	ACRYLONITRILE	mg/kg	0.00361	0.0125			0.25
71-43-2	8260B	BENZENE	mg/kg	0.000467	0.001			1.2
108-86-1	8260B	BROMOBENZENE	mg/kg	0.0009	0.0125			29
75-27-4	8260B	BROMODICHLOROMETHANE	mg/kg	0.000725	0.0025			0.29
75-25-2	8260B	BROMOFORM	mg/kg	0.00117	0.025			19
74-83-9	8260B	BROMOMETHANE	mg/kg	0.00197	0.0125			0.68
56-23-5	8260B	CARBON TETRACHLORIDE	mg/kg	0.000898	0.005			0.65
108-90-7	8260B	CHLOROBENZENE	mg/kg	0.00021	0.0025			28
124-48-1	8260B	CHLORODIBROMOMETHANE	mg/kg	0.000612	0.0025			8.3
75-00-3	8260B	CHLOROETHANE	mg/kg	0.0017	0.005			540
67-66-3	8260B	CHLOROFORM	mg/kg	0.00103	0.0025			0.32
74-87-3	8260B	CHLOROMETHANE	mg/kg	0.00435	0.0125			11
156-59-2	8260B	CIS-1,2-DICHLOROETHENE	mg/kg	0.000734	0.0025			6.3
10061-01-5	8260B	CIS-1,3-DICHLOROPROPENE	mg/kg	0.000757	0.0025			
108-20-3	8260B	DI-ISOPROPYL ETHER	mg/kg	0.00041	0.001			220
74-95-3	8260B	DIBROMOMETHANE	mg/kg	0.00075	0.005			2.4
75-71-8	8260B	DICHLORODIFLUOROMETHANE	mg/kg	0.00161	0.005			8.7
100-41-4	8260B	ETHYLBENZENE	mg/kg	0.000737	0.0025			5.8
87-68-3	8260B	HEXACHLORO-1,3-BUTADIENE	mg/kg	0.006	0.025			1.2
98-82-8	8260B	ISOPROPYLBENZENE	mg/kg	0.000425	0.0025			190
1634-04-4	8260B	METHYL TERT-BUTYL ETHER	mg/kg	0.00035	0.001			47
75-09-2	8260B	METHYLENE CHLORIDE	mg/kg	0.00664	0.025			35
104-51-8	8260B	N-BUTYLBENZENE	mg/kg	0.00525	0.0125			390
103-65-1	8260B	N-PROPYLBENZENE	mg/kg	0.00095	0.005			380
91-20-3	8260B	NAPHTHALENE	mg/kg	0.00488	0.0125			2
99-87-6	8260B	P-ISOPROPYLTOLUENE	mg/kg	0.00255	0.005			
135-98-8	8260B	SEC-BUTYLBENZENE	mg/kg	0.00288	0.0125			780
100-42-5	8260B	STYRENE	mg/kg	0.000229	0.0125			600
98-06-6	8260B	TERT-BUTYLBENZENE	mg/kg	0.00195	0.005			780
127-18-4	8260B	TETRACHLOROETHENE	mg/kg	0.000896	0.0025			8.1
108-88-3	8260B	TOLUENE	mg/kg	0.0013	0.005			490

156-60-5	8260B	TRANS-1,2-DICHLOROETHENE	mg/kg	0.00104	0.005			7
10061-02-6	8260B	TRANS-1,3-DICHLOROPROPENE	mg/kg	0.00114	0.005			
79-01-6	8260B	TRICHLOROETHENE	mg/kg	0.000584	0.001			0.41
75-69-4	8260B	TRICHLOROFLUOROMETHANE	mg/kg	0.000827	0.0025			2300
75-01-4	8260B	VINYL CHLORIDE	mg/kg	0.00116	0.0025			0.059
1330-20-7	8260B	XYLENES, TOTAL	mg/kg	0.00088	0.0065			58
17060-07-0	8260B	1,2-DICHLOROETHANE-D4	% Rec.			70	130	
460-00-4	8260B	4-BROMOFLUOROBENZENE	% Rec.			64	132	2.3
2037-26-5	8260B	TOLUENE-D8	% Rec.			80	120	

EUROFINS

Analysis Group	Method Description	Method Code	Prep Method	Analyte Description	CAS Number	RL	MDL	LOD	Units	Resident Soil
Soil	Volatile Organic Compounds by GC/MS	8260D	5035A_FP	Acetone	67-64-1	0.0500	0.0110	0.0250	mg/Kg	7000
				Benzene	71-43-2	0.00500	0.00240	0.00150	mg/Kg	1.2
				Bromoform	75-25-2	0.00500	0.00220	0.00300	mg/Kg	19
				Bromomethane	74-83-9	0.00500	0.00240	0.00300	mg/Kg	0.68
				2-Butanone (MEK)	78-93-3	0.0250	0.00920	0.00750	mg/Kg	2700
				Carbon disulfide	75-15-0	0.00500	0.00210	0.00300	mg/Kg	77
				Carbon tetrachloride	56-23-5	0.00500	0.00210	0.00150	mg/Kg	0.65
				Chlorobenzene	108-90-7	0.00500	0.00140	0.00150	mg/Kg	28
				Chlorodibromomethane	124-48-1	0.00500	0.00210	0.00500	mg/Kg	8.3
				Chloroethane	75-00-3	0.00500	0.00220	0.00500	mg/Kg	540
				Chloroform	67-66-3	0.00500	0.00200	0.00300	mg/Kg	0.32
				Chloromethane	74-87-3	0.00500	0.00240	0.00300	mg/Kg	11
				cis-1,2-Dichloroethene	156-59-2	0.00500	0.00290	0.00300	mg/Kg	6.3
				cis-1,3-Dichloropropene	10061-01-5	0.00500	0.00220	0.00150	mg/Kg	
				Cyclohexane	110-82-7	0.00500	0.00230	0.00300	mg/Kg	650
				1,2-Dibromo-3-Chloropropane	96-12-8	0.0100	0.00160	0.0100	mg/Kg	0.0053
				1,2-Dichlorobenzene	95-50-1	0.00500	0.00170	0.00300	mg/Kg	180
				1,3-Dichlorobenzene	541-73-1	0.00500	0.00200	0.00300	mg/Kg	
				1,4-Dichlorobenzene	106-46-7	0.00500	0.00180	0.00150	mg/Kg	2.6
				Dichlorobromomethane	75-27-4	0.00500	0.00200	0.00150	mg/Kg	0.29
				Dichlorodifluoromethane	75-71-8	0.00500	0.00320	0.00150	mg/Kg	8.7
				1,1-Dichloroethane	75-34-3	0.00500	0.00290	0.00300	mg/Kg	3.6
				1,2-Dichloroethane	107-06-2	0.00500	0.00230	0.00300	mg/Kg	0.46
				1,1-Dichloroethene	75-35-4	0.00500	0.00360	0.00300	mg/Kg	23
				1,2-Dichloropropane	78-87-5	0.00500	0.00260	0.00150	mg/Kg	1.6
				Ethylbenzene	100-41-4	0.00500	0.00210	0.00500	mg/Kg	5.8
				Ethylene Dibromide	106-93-4	0.00500	0.00170	0.00300	mg/Kg	0.036
				2-Hexanone	591-78-6	0.0250	0.0190	0.00750	mg/Kg	20
				Isopropylbenzene	98-82-8	0.00500	0.00220	0.00500	mg/Kg	190
				Methyl acetate	79-20-9	0.0250	0.00810	0.0150	mg/Kg	7800
				Methylcyclohexane	108-87-2	0.00500	0.00200	0.00150	mg/Kg	9.8
				Methylene Chloride	75-09-2	0.0100	0.00800	0.00150	mg/Kg	35
				4-Methyl-2-pentanone (MIBK)	108-10-1	0.0250	0.0180	0.00750	mg/Kg	3300
				Methyl tert-butyl ether	1634-04-4	0.00500	0.00220	0.00300	mg/Kg	47
				Styrene	100-42-5	0.00500	0.00190	0.00150	mg/Kg	600
				1,1,2,2-Tetrachloroethane	79-34-5	0.00500	0.00210	0.00300	mg/Kg	0.6
				Tetrachloroethene	127-18-4	0.00500	0.00260	0.00500	mg/Kg	8.1
				Toluene	108-88-3	0.00500	0.00260	0.00150	mg/Kg	490
				trans-1,2-Dichloroethene	156-60-5	0.00500	0.00230	0.00150	mg/Kg	7
				trans-1,3-Dichloropropene	10061-02-6	0.00500	0.00260	0.00150	mg/Kg	
				1,2,4-Trichlorobenzene	120-82-1	0.00500	0.00250	0.00150	mg/Kg	5.8
				1,1,1-Trichloroethane	71-55-6	0.00500	0.00260	0.00150	mg/Kg	810
				1,1,2-Trichloroethane	79-00-5	0.00500	0.00150	0.00300	mg/Kg	0.15
				Trichloroethene	79-01-6	0.00500	0.00180	0.00300	mg/Kg	0.41
				Trichlorofluoromethane	75-69-4	0.00500	0.00310	0.00300	mg/Kg	2300
				1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.00500	0.00290	0.00300	mg/Kg	670
				Vinyl chloride	75-01-4	0.00500	0.00280	0.00300	mg/Kg	0.059
				Xylenes, Total	1330-20-7	0.0100	0.00360	0.00300	mg/Kg	58
Soil	Semivolatile Organic Compounds (GC/MS SIM)	8270E_SIM	3546	Acenaphthene	83-32-9	0.00670	0.00140	0.00330	mg/Kg	360
				Acenaphthylene	208-96-8	0.00670	0.00140	0.00330	mg/Kg	
				Anthracene	120-12-7	0.00670	0.00130	0.00330	mg/Kg	1800
				Benzo[a]anthracene	56-55-3	0.00670	0.00190	0.00670	mg/Kg	1.1
				Benzo[a]pyrene	50-32-8	0.00670	0.00210	0.00670	mg/Kg	0.11
				Benzo[b]fluoranthene	205-99-2	0.00670	0.00220	0.00670	mg/Kg	1.1
				Benzo[g,h,i]perylene	191-24-2	0.00670	0.00250	0.00670	mg/Kg	
				Benzo[k]fluoranthene	207-08-9	0.00670	0.00190	0.00670	mg/Kg	11
				Chrysene	218-01-9	0.00670	0.00180	0.00670	mg/Kg	110
				Dibenz(a,h)anthracene	53-70-3	0.00670	0.00190	0.00670	mg/Kg	0.11
				Fluoranthene	206-44-0	0.00670	0.00170	0.00670	mg/Kg	240
				Fluorene	86-73-7	0.00670	0.00120	0.00330	mg/Kg	240
				Indeno[1,2,3-cd]pyrene	193-39-5	0.00670	0.00210	0.00670	mg/Kg	1.1
				1-Methylnaphthalene	90-12-0	0.00670	0.00150	0.00330	mg/Kg	18
				2-Methylnaphthalene	91-57-6	0.00670	0.00150	0.00330	mg/Kg	24
				Naphthalene	91-20-3	0.00670	0.00150	0.00330	mg/Kg	2
				Phenanthrene	85-01-8	0.00670	0.00140	0.00330	mg/Kg	
				Pyrene	129-00-0	0.00670	0.00180	0.00670	mg/Kg	180
Soil	Metals (ICP)	6010D	3050B	Arsenic	7440-38-2	2.00	1.20	2.00	mg/Kg	0.68
				Barium	7440-39-3	1.00	0.410	1.00	mg/Kg	1500
				Cadmium	7440-43-9	0.500	0.100	0.500	mg/Kg	0.71
				Chromium	7440-47-3	1.00	0.170	1.00	mg/Kg	
				Silver	7440-22-4	1.00	0.320	1.00	mg/Kg	39
				Lead	7439-92-1	1.00	0.610	1.00	mg/Kg	400
				Selenium	7782-49-2	2.50	1.10	2.50	mg/Kg	39
Soil	Mercury (CVAA)	7471B	7471B_Prep	Mercury	7439-97-6	0.0250	0.00800	0.0200	mg/Kg	1.1
Soil	Organochlorine Pesticides (GC)	8081B	3546	4,4'-DDD	72-54-8	0.000850	0.0000900	0.000230	mg/Kg	2.3
				4,4'-DDE	72-55-9	0.000850	0.0000900	0.000230	mg/Kg	2
				4,4'-DDT	50-29-3	0.000850	0.000110	0.000230	mg/Kg	1.9
				Aldrin	309-00-2	0.000850	0.0000750	0.000170	mg/Kg	0.039
				alpha-BHC	319-84-6	0.000850	0.0000700	0.000170	mg/Kg	0.086
				cis-Chlordane	5103-71-9	0.000850	0.0000900	0.000230	mg/Kg	3.6
				beta-BHC	319-85-7	0.000850	0.000170	0.000500	mg/Kg	0.3
				delta-BHC	319-86-8	0.000850	0.0000950	0.000230	mg/Kg	
				Dieldrin	60-57-1	0.000850	0.0000850	0.000230	mg/Kg	0.034
				Endosulfan I	959-98-8	0.000850	0.0000850	0.000230	mg/Kg	
				Endosulfan II	33213-65-9	0.000850	0.0000750	0.000170	mg/Kg	
				Endosulfan sulfate	1031-07-8	0.000850	0.000110	0.000230	mg/Kg	38
				Endrin	72-20-8	0.000850	0.000110	0.000230	mg/Kg	1.9
				Endrin aldehyde	7421-93-4	0.000850	0.000110	0.000230	mg/Kg	
				Endrin ketone	53494-70-5	0.000850	0.000100	0.000230	mg/Kg	
				gamma-BHC (Lindane)	58-89-9	0.000850	0.0000700	0.000170	mg/Kg	0.57
				trans-Chlordane	5103-74-2	0.000850	0.0000900	0.000230	mg/Kg	3.6
				Heptachlor	76-44-8	0.000850	0.0000950	0.000230	mg/Kg	0.13
				Heptachlor epoxide	1024-57-3	0.000850	0.0000800	0.000230	mg/Kg	0.07
				Methoxychlor	72-43-5	0.000850	0.000140	0.000330	mg/Kg	32
				Toxaphene	8001-35-2	0.0850	0.00280	0.0110	mg/Kg	0.49
Soil	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	8082A	3546	PCB-1016	12674-11-2	0.0200	0.00550	0.0200	mg/Kg	0.41
				PCB-1221	11104-28-2	0.0170	0.00550	0.0100	mg/Kg	0.2
				PCB-1232	11141-16-5	0.0170	0.00550	0.0100	mg/Kg	0.17
				PCB-1242	53469-21-9	0.0170	0.00550	0.0100	mg/Kg	0.23
				PCB-1248	12672-29-6	0.0170	0.00550	0.0100	mg/Kg	0.23
				PCB-1254	11097-69-1	0.0170	0.00550	0.0100	mg/Kg	0.12
				PCB-1260	11096-82-5	0.0170	0.00480	0.0100	mg/Kg	0.24

Soil	Herbicides (GC)	8151A	8151A_SP	2,4-D	94-75-7	20.0	7.60	16.0	ug/Kg	70000
				2,4-DB	94-82-6	50.0	15.0	40.0	ug/Kg	
				2,4,5-T	93-76-5	16.0	4.00	8.00	ug/Kg	63000
				Silvex (2,4,5-TP)	93-72-1	8.30	2.00	4.00	ug/Kg	51000
				Dalapon	75-99-0	100	20.0	48.0	ug/Kg	190000
				Dicamba	1918-00-9	20.0	6.00	16.0	ug/Kg	190000
				Dichlorprop	120-36-5	20.0	7.60	16.0	ug/Kg	
				Dinoseb	88-85-7	50.0	6.00	16.0	ug/Kg	6300
				MCPA	94-74-6	5000	1400	4000	ug/Kg	3200
				Mecoprop	93-65-2	5000	1400	4000	ug/Kg	6300
				Pentachlorophenol	87-86-5	8.30	2.00	4.00	ug/Kg	1000

EUROFINS

Analysis Group	Method Description	Method Code	Prep Method	Analyte Description	CAS Number	RL	MDL	LOD	Units	MCL
Water	Volatile Organic Compounds by GC/MS	8260D	5030B	Acetone	67-64-1	10.0	3.70	10.0	ug/L	
				Benzene	71-43-2	1.00	0.270	1.00	ug/L	5
				Bromoform	75-25-2	1.00	0.590	1.00	ug/L	80
				Bromomethane	74-83-9	5.00	3.70	5.00	ug/L	
				2-Butanone (MEK)	78-93-3	10.0	6.40	10.0	ug/L	
				Carbon disulfide	75-15-0	2.00	0.430	2.00	ug/L	
				Carbon tetrachloride	56-23-5	1.00	0.300	0.500	ug/L	5
				Chlorobenzene	108-90-7	1.00	0.150	0.500	ug/L	100
				Chlorodibromomethane	124-48-1	1.00	0.390	0.500	ug/L	80
				Chloroethane	75-00-3	5.00	4.60	5.00	ug/L	
				Chloroform	67-66-3	1.00	0.270	1.00	ug/L	80
				Chloromethane	74-87-3	1.00	0.540	1.00	ug/L	
				cis-1,2-Dichloroethene	156-59-2	1.00	0.250	1.00	ug/L	70
				cis-1,3-Dichloropropene	10061-01-5	1.00	0.260	1.00	ug/L	
				Cyclohexane	110-82-7	1.00	0.280	1.00	ug/L	
				1,2-Dibromo-3-Chloropropane	96-12-8	5.00	1.80	2.00	ug/L	0.2
				1,2-Dichlorobenzene	95-50-1	1.00	0.310	1.00	ug/L	600
				1,3-Dichlorobenzene	541-73-1	1.00	0.310	1.00	ug/L	
				1,4-Dichlorobenzene	106-46-7	1.00	0.310	1.00	ug/L	75
				Dichlorobromomethane	75-27-4	1.00	0.250	1.00	ug/L	80
				Dichlorodifluoromethane	75-71-8	1.00	0.360	1.00	ug/L	
				1,1-Dichloroethane	75-34-3	1.00	0.330	1.00	ug/L	
				1,2-Dichloroethane	107-06-2	1.00	0.250	1.00	ug/L	5
				1,1-Dichloroethene	75-35-4	1.00	0.330	1.00	ug/L	7
				1,2-Dichloropropane	78-87-5	1.00	0.220	1.00	ug/L	5
				Ethylbenzene	100-41-4	1.00	0.200	0.500	ug/L	700
				Ethylene Dibromide	106-93-4	1.00	0.330	1.00	ug/L	0.05
				2-Hexanone	591-78-6	10.0	3.20	5.00	ug/L	
				Isopropylbenzene	98-82-8	1.00	0.260	1.00	ug/L	
				Methyl acetate	79-20-9	5.00	3.20	5.00	ug/L	
				Methylcyclohexane	108-87-2	1.00	0.330	1.00	ug/L	
				Methylene Chloride	75-09-2	5.00	3.20	5.00	ug/L	5
				4-Methyl-2-pentanone (MIBK)	108-10-1	10.0	2.70	5.00	ug/L	
				Methyl tert-butyl ether	1634-04-4	5.00	0.810	2.00	ug/L	
				Styrene	100-42-5	1.00	0.270	0.500	ug/L	100
				1,1,2,2-Tetrachloroethane	79-34-5	1.00	0.400	1.00	ug/L	
				Tetrachloroethene	127-18-4	1.00	0.350	0.500	ug/L	5
				Toluene	108-88-3	1.00	0.250	1.00	ug/L	1000
				trans-1,2-Dichloroethene	156-60-5	1.00	0.340	1.00	ug/L	100
				trans-1,3-Dichloropropene	10061-02-6	1.00	0.230	1.00	ug/L	
				1,2,4-Trichlorobenzene	120-82-1	5.00	0.530	5.00	ug/L	70
				1,1,1-Trichloroethane	71-55-6	1.00	0.210	1.00	ug/L	200
				1,1,2-Trichloroethane	79-00-5	1.00	0.320	0.500	ug/L	5
				Trichloroethene	79-01-6	1.00	0.200	1.00	ug/L	5
				Trichlorofluoromethane	75-69-4	1.00	0.330	1.00	ug/L	
				1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	1.00	0.230	1.00	ug/L	
				Vinyl chloride	75-01-4	1.00	0.400	1.00	ug/L	2
				Xylenes, Total	1330-20-7	1.00	0.230	0.500	ug/L	10000
Water	Semivolatile Organic Compounds (GC/MS SIM)	8270E_SIM	3510C_LVI	Acenaphthene	83-32-9	0.200	0.0420	0.100	ug/L	
				Acenaphthylene	208-96-8	0.200	0.0170	0.0500	ug/L	
				Anthracene	120-12-7	0.200	0.0180	0.0500	ug/L	
				Benzo[a]anthracene	56-55-3	0.200	0.0260	0.100	ug/L	
				Benzo[a]pyrene	50-32-8	0.200	0.0260	0.100	ug/L	0.2
				Benzo[b]fluoranthene	205-99-2	0.200	0.0260	0.100	ug/L	
				Benzo[g,h,i]perylene	191-24-2	0.200	0.0260	0.100	ug/L	
				Benzo[k]fluoranthene	207-08-9	0.200	0.0290	0.100	ug/L	
				Chrysene	218-01-9	0.200	0.0230	0.0500	ug/L	
				Dibenz(a,h)anthracene	53-70-3	0.200	0.0240	0.0500	ug/L	
				Fluoranthene	206-44-0	0.200	0.0270	0.100	ug/L	
				Fluorene	86-73-7	0.200	0.0250	0.100	ug/L	
				Indeno[1,2,3-cd]pyrene	193-39-5	0.200	0.0280	0.100	ug/L	
				1-Methylnaphthalene	90-12-0	0.200	0.0180	0.0500	ug/L	
				2-Methylnaphthalene	91-57-6	0.200	0.0110	0.0400	ug/L	
				Naphthalene	91-20-3	0.200	0.0140	0.0500	ug/L	
				Phenanthrene	85-01-8	0.200	0.0550	0.200	ug/L	
				Pyrene	129-00-0	0.200	0.0270	0.100	ug/L	
Water	Herbicides (GC)	8151A	8151A_AP_LVI	2,4-D	94-75-7	1.10	0.180	0.540	ug/L	70
				2,4-DB	94-82-6	2.60	0.630	1.30	ug/L	
				2,4,5-T	93-76-5	0.850	0.140	0.420	ug/L	
				Silvex (2,4,5-TP)	93-72-1	0.850	0.0960	0.200	ug/L	50
				Dalapon	75-99-0	5.50	0.990	2.60	ug/L	200
				Dicamba	1918-00-9	0.500	0.0460	0.100	ug/L	
				Dichlorprop	120-36-5	0.850	0.120	0.360	ug/L	
				Dinoseb	88-85-7	0.500	0.100	0.200	ug/L	7
				MCPA	94-74-6	600	90.0	290	ug/L	
				Mecoprop	93-65-2	200	32.0	90.0	ug/L	
				Pentachlorophenol	87-86-5	0.250	0.0230	0.0500	ug/L	1
Water	Metals (ICP)	6010D	3005A	Arsenic	7440-38-2	20.0	6.40	20.0	ug/L	10
				Barium	7440-39-3	10.0	4.40	10.0	ug/L	2000
				Cadmium	7440-43-9	5.00	0.440	5.00	ug/L	
				Chromium	7440-47-3	10.0	1.10	10.0	ug/L	100
				Silver	7440-22-4	10.0	1.50	10.0	ug/L	
				Lead	7439-92-1	10.0	6.60	10.0	ug/L	15
				Selenium	7782-49-2	20.0	10.0	20.0	ug/L	50
Water	Mercury (CVAA)	7470A	7470A_Prep	Mercury	7439-97-6	0.200	0.0800	0.200	ug/L	2
Water	Organochlorine Pesticides (GC)	8081B	3510C_LVI	4,4'-DDD	72-54-8	0.0500	0.00200	0.00400	ug/L	
				4,4'-DDE	72-55-9	0.0500	0.00100	0.00400	ug/L	
				4,4'-DDT	50-29-3	0.0500	0.00100	0.00400	ug/L	
				Aldrin	309-00-2	0.0500	0.00200	0.00400	ug/L	
				alpha-BHC	319-84-6	0.0500	0.00100	0.00400	ug/L	
				cis-Chlordane	5103-71-9	0.0500	0.00500	0.00800	ug/L	

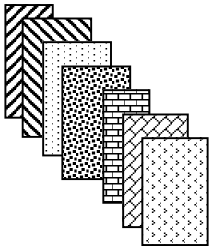
				beta-BHC	319-85-7	0.0500	0.00200	0.00400	ug/L	
				delta-BHC	319-86-8	0.0500	0.00200	0.00400	ug/L	
				Dieldrin	60-57-1	0.0500	0.00200	0.00400	ug/L	
				Endosulfan I	959-98-8	0.0500	0.00200	0.00400	ug/L	
				Endosulfan II	33213-65-9	0.0500	0.00200	0.00400	ug/L	
				Endosulfan sulfate	1031-07-8	0.0500	0.00200	0.00400	ug/L	
				Endrin	72-20-8	0.0500	0.00100	0.00400	ug/L	2
				Endrin aldehyde	7421-93-4	0.0500	0.00400	0.00800	ug/L	
				Endrin ketone	53494-70-5	0.0500	0.00400	0.00800	ug/L	
				gamma-BHC (Lindane)	58-89-9	0.0500	0.00100	0.00400	ug/L	0.2
				trans-Chlordane	5103-74-2	0.0500	0.00600	0.00800	ug/L	
				Heptachlor	76-44-8	0.0500	0.00100	0.00400	ug/L	0.4
				Heptachlor epoxide	1024-57-3	0.0500	0.00200	0.00400	ug/L	0.2
				Methoxychlor	72-43-5	0.0500	0.00200	0.00400	ug/L	40
				Toxaphene	8001-35-2	5.00	0.310	0.800	ug/L	3

Water	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	8082A	3510C_LVI_1YR	PCB-1016	12674-11-2	0.500	0.100	0.240	ug/L	
				PCB-1221	11104-28-2	0.500	0.100	0.240	ug/L	
				PCB-1232	11141-16-5	0.500	0.100	0.240	ug/L	
				PCB-1242	53469-21-9	0.500	0.100	0.240	ug/L	
				PCB-1248	12672-29-6	0.500	0.100	0.240	ug/L	
				PCB-1254	11097-69-1	0.500	0.100	0.240	ug/L	
				PCB-1260	11096-82-5	0.500	0.100	0.240	ug/L	

Water	Per- and Polyfluoroalkyl Substances by LC/MS/MS	1633	1633_SPE	Perfluorooctanoic acid (PFOA)	335-67-1	2.00	0.500		ng/L	
				Perfluorononanoic acid (PFNA)	375-95-1	2.00	0.100		ng/L	
				Perfluorohexanesulfonic acid (PFHxS)	355-46-4	2.00	0.500		ng/L	
				Perfluorooctanesulfonic acid (PFOS)	1763-23-1	2.00	0.500		ng/L	
				HFPO-DA (GenX)	13252-13-6	2.00	0.500		ng/L	

Appendix D
Field and Laboratory SOPs

Project:	Project Number:	Client:	Boring No.
Address, City, State		Drilling Contractor:	Drill Rig Type:
Logged By:	Date Started:	Diameter:	
Drill Crew:	Date Completed:		
	Groundwater Depth:	Total Depth of Boring:	



Depth (feet)	Sample Number	Recovery (in inches)	Graphic Log	Lithology **Soil Group Name:** modifier, color, moisture, density/consistency, grain size, other descriptors **Rock Description:** modifierm color, hardness/degree of concentration, bedding and joint characteristics, solutions, void conditions.	Comments		
1						ppm	
5						ppm	
10							
15							
20							
25							
30							▼
35				End of Boring		ppm	▽

Notes:

▼ Stabllized Ground water

▽ Groundwater At time of Drilling

				Well ID.:
Project:		**Project Number:**	**Client:**	**Logged By:**
Address:			**Drilling Contractor:**	**Drill Rig Type:**
DTW	Initial:	**Date** Start:	**Driller:**	**Diameter/Method:**
	Stabilized:	Complete:	**End of Boring:**	**Ground Elevation:**

Depth (feet)	PID (ppm)	Recovery (in inches)	Lithology **Soil Group Name:** modifier, color, moisture, density/consistency, grain size, other descriptors **Rock Description:** modifier, color, hardness/degree of concentration, bedding/joint characteristics, solutions, void conditions	Graphic Log	Sample No. and Notes
0	0				
	0				Solid riser PVC
	0				
	0				
	0				
5	0				
	0				Slotted Screen
	0				
	0				
	0				
10	0				
					Solid riser PVC
15					
20					
25					
30			End of boring		
35					
40					

STANDARD OPERATING PROCEDURE

TASK: Field Documentation

AUTHOR: James Charles

DATE: May 2020

Bound field books will be used for logging all pertinent data collected during sampling operations. Each page will be numbered, dated, and signed by the person making the entry. All entries will be made in waterproof, indelible blue or black ink. Errors will be crossed out with a single strike line, initialed, and dated. No erasures will be allowed. At the completion of the day, if a page is not complete, a diagonal line will be drawn through the remainder of the page with the signature at the bottom.

Each entry will be dated. Entries will be legible and contain accurate and complete documentation of the individual or sampling team's activities or observations made. The level of detail will be sufficient to explain and reconstruct the activity conducted. Each entry will be signed by the person(s) making the entry.

The information to be recorded in the field book will include, but not necessarily limited to the following:

- Project name and number.
- Reasons for being on site or taking the sample such as quarterly sampling, re-sampling to confirm previous analysis, initial site assessment, etc.
- Date and time of activity.
- Date and time of personnel arrival to and departure from the Site.
- Sample identification number.
- Any factors that could affect sample integrity.
- Geographical location of the sampling point with reference to site (or other) facilities or a map coordinate system. Sketches will be made in the field logbook when appropriate.
- Physical location of the sampling point such as a depth below ground surface or water surface.
- Description of the method of sampling including procedures followed, equipment used, and any departure from the specified procedures.
- Volume of water purged and water levels will be included for ground water samples.
- Description of the sample such as physical characteristics, odor, etc.

- Results of field measurements such as temperature, specific conductivity, pH, dissolved oxygen, organic vapors, etc.
- Readings obtained from health and safety equipment.
- Weather conditions at the time of sampling and previous meteorological events that may affect the representative nature of a sample.
- Photographic information including a brief description of what was photographed, the date and time, and the compass direction of the picture. (Each photographic print should be serialized corresponding to its notebook entry and labeled with the time and date of the photograph, and site location.)
- Reference numbers from all serialized forms on which the sample is listed or labels which are attached to the sample, i.e., chain of custody forms, airbill numbers, etc.
- Other pertinent observations such as the presence of other persons on the site (those associated with the job or members of the press, special interest groups, or passers-by), actions by others that may affect performance of site tasks, etc.
- Names of sampling personnel and signature of persons making entries.

In addition, formatted field data sheets may be utilized to collect field data during standard operations such as logging soil borings, test pits, ground water sampling, equipment calibration, etc. The use of these field data sheets helps to ensure that all critical information is documented by field personnel.

Following returning to the office, all field notes should be ***SCANNED AND SAVED IN THE PROJECT FILE.***

References

EPA, 1984. Characterization of hazardous waste sites -- A methods manual, Volume II, Available sampling methods. Second edition. Section 3.4, Groundwater pp. 3-25 to 3-31. Section 3.4.3, Method lll-9: Sampling monitor wells with a bucket type bailer, pp 3-35 to 3-37. Environment Monitoring Systems Laboratory, Office of Research and Development. U.S. Environmental Protection Agency, Las Vegas, Nevada. EPA-600/4-84-076. December 1984.

EPA, 1987. A compendium of Superfund field operations methods. Section 8.5.6.9: Groundwater sampling considerations, pp 8.5-42 to 8.5-43. Section 8.5.6.8.9: Evaluation of sample collection materials, pp 8.5-41 to 8.5-42. Section 8.5.6.4.1: Bailers p. 8.5-8. Office of Emergency and Remedial Response, Office of Waste Programs Enforcement. U.S. Environmental Protection Agency, Washington, D.C. EPA/540/P-87/001. December 1987.

NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010 (DER-10).

STANDARD OPERATING PROCEDURE

TASK: Field Decontamination

AUTHOR: Kathleen Nolan

DATE: May 2020

This document describes general and specific procedures, methods and considerations to be used and observed when cleaning and decontaminating field equipment during the course of field investigations such as PIDs, pumps, etc. that are reused. Quality Assurance/Quality Control (QA/QC) samples that document decontamination effectiveness can be used to modify or enhance decontamination techniques. Sample Collection Equipment will be Dedicated to each Sampling Location.

The procedures contained in this document are to be followed when cleaning field equipment, for both re-use in the field, as well as used equipment being returned to the Field Equipment Center (FEC). Any variances will be documented in the field logbook, along with a description of the circumstances requiring its use.

PROCEDURES

Handling Practices and Containers for Cleaning Solutions

Improperly handled cleaning solutions may easily become contaminated. Storage and application containers must be constructed of the proper materials to ensure their integrity. Following are acceptable materials used for containing the specified cleaning solutions:

- Detergent must be kept in clean plastic, metal, or glass containers until used. It should be poured directly from the container during use.
- Tap water may be kept in tanks, hand pressure sprayers, squeeze bottles, or applied directly from a hose.
- Deionized water must be stored in clean, glass or plastic containers that can be closed prior to use. It can be applied from plastic squeeze bottles.
- Organic-free water must be stored in clean glass or Teflon® containers prior to use. It may be applied using Teflon® squeeze bottles, or with the portable system.

Field Equipment Decontamination Procedures

Sufficient equipment should be transported to the field so that an entire study can be conducted without the need for decontamination. When equipment must be decontaminated in the field, the following procedures are to be utilized.

STANDARD OPERATING PROCEDURE

Specifications for Decontamination Pads

Decontamination pads constructed for field cleaning of sampling and drilling equipment should meet the following minimum specifications:

- The pad should be constructed in an area known or believed to be free of surface contamination.
- The pad should not leak.
- If possible, the pad should be constructed on a level, paved surface and should facilitate the removal of wastewater. This may be accomplished by either constructing the pad with one corner lower than the rest, or by creating a sump or pit in one corner or along one side. Any sump or pit should also be lined.
- Sawhorses or racks constructed to hold equipment while being cleaned should be high enough above ground to prevent equipment from being splashed.
- Water should be removed from the decontamination pad frequently.
- A temporary pad should be lined with a water impermeable material with no seams within the pad. This material should be either easily replaced (disposable) or repairable.

At the completion of site activities, the decontamination pad should be deactivated. The pit or sump should be backfilled with the appropriate material designated by the site project leader, but only after all waste/rinse water has been pumped into containers for disposal. If the decontamination pad has leaked excessively, soil sampling may be required.

Redi-Flo2® Pump

The Redi-Flo2® pump and any associated connected hardware (e.g., check valve) should be disconnected and decontaminated between each monitoring well. The following procedures are required, depending on whether the pump is used solely for purging or used for purging and sampling.

Purge Only (Pump and Wetted Portion of Tubing or Hose)

- Disconnect power and wash exterior of pump and wetted portion of the power lead and tubing or hose with Liquinox® detergent and water solution.
- Rinse with tap water.
- Final rinse with deionized water.
- Place pump and reel in a clean plastic bag and keep tubing or hose contained in clean plastic or galvanized tub between uses.

Purge And Sample

Grundfos Redi-Flo2® pumps are extensively decontaminated and tested at the FEC to prevent contamination from being transmitted between sites. The relevant sections of SESDPROC-206, Field Equipment Cleaning and Decontamination (EPA 2015), should be

implemented in the field where a high risk of cross- contamination exists, such as where NAPL or high-concentration contaminants occur. In most cases, the abbreviated cleaning procedure described below will suffice, provided that sampling proceeds from least to most contaminated areas.

- Disconnect and discard the previously used sample tubing from the pump. Remove the check valve and tubing adapters and clean separately. Wash the pump exterior with detergent and water.
- Prepare and fill three containers with decontamination solutions, consisting of Container #1, a tap water/detergent washing solution. Luminox® is commonly used. An additional pre-wash container of Liquinox® may be used; Container #2, a tap water rinsing solution; and Container #3, a deionized or organic-free water final rinsing solution. Choice of detergent and final rinsing solution for all steps in this procedure is dependent upon project objectives (analytes and compounds of interest). The containers should be large enough to hold the pump and one to two liters of solution. An array of 2′ long 2″ PVC pipes with bottom caps is a common arrangement. The solutions should be changed at least daily.
- Place the pump in Container #1. Turn the pump on and circulate the detergent and water solution through the pump and then turn the pump off.
- Place the pump in Container #2. Turn the pump on and circulate the tap water through the pump and then turn the pump off.
- Place the pump in Container #3. Turn the pump on and circulate deionized or organic-free water through the pump and then turn the pump off.
- Disconnect power and remove pump from Container #3. Rinse exterior and interior of pump with fresh deionized or organic-free water.
- Decontaminate the power lead by washing with detergent and water, followed by tap water and deionized water rinses. This step may be performed before washing the pump if desired.
- Reassemble check valve and tubing adapters to pump. ALWAYS use Teflon® tape to prevent galling of threads. Firm hand-tightening of fittings or light wrench torque is generally adequate.
- Place the pump and reel in a clean plastic bag.

Bladder Pumps

Bladder pumps are presumed to be intended for use as purge-and-sample pumps. The Geotech® bladder pump and Geoprobe Systems® mechanical bladder pump can be cleaned similarly.

- Discard any tubing returned with the pump.
- Completely disassemble the pump, being careful to note the initial position of and retain any springs and loose ball checks.
- Discard pump bladder.
- Clean all parts as per the standard cleaning procedure in SESDPROC-206 (EPA 2015).
- Install a new Teflon® bladder and reassemble pump.

STANDARD OPERATING PROCEDURE

Downhole Drilling Equipment

These procedures are to be used for drilling activities involving the collection of soil samples for trace organic and inorganic constituent analyses and for the construction of monitoring wells to be used for the collection of groundwater samples for trace organic and inorganic constituent analyses.

Cleaning and decontamination of all equipment should occur at a designated area (decontamination pad) on the site.

Tap water brought on the site for drilling and cleaning purposes should be contained in a pre-cleaned tank.

A steam cleaner and/or high pressure hot water washer capable of generating a pressure of at least 2500 PSI and producing hot water and/or steam, with a detergent compartment, should be obtained.

Preliminary Cleaning and Inspection

Drilling equipment should be clean of any contaminants that may have been transported from off-site to minimize the potential for cross-contamination. The drilling equipment should not serve as a source of contaminants. Associated drilling and decontamination equipment, well construction materials, and equipment handling procedures should meet these minimum specified criteria:

- All downhole auguring, drilling, and sampling equipment should be sandblasted before use if painted, and/or there is a buildup of rust, hard or caked matter, etc., that cannot be removed by steam cleaning (detergent and high pressure hot water), or wire brushing. Sandblasting should be performed prior to arrival on site, or well away from the decontamination pad and areas to be sampled.
- Any portion of the drilling equipment that is over the borehole (kelly bar or mast, backhoe buckets, drilling platform, hoist or chain pulldowns, spindles, cathead, etc.) should be steam cleaned (detergent and high pressure hot water) and wire brushed (as needed) to remove all rust, soil, and other material which may have come from other sites before being brought on site.
- Printing and/or writing on well casing, tremie tubing, etc., should be removed before use. Emery cloth or sand paper can be used to remove the printing and/or writing. Most well material suppliers can provide materials without the printing and/or writing if specified when ordered. Items that cannot be cleaned are not acceptable and should be discarded.
- Equipment associated with the drilling and sampling activities should be inspected to insure that all oils, greases, hydraulic fluids, etc., have been removed, and all seals and gaskets are intact with no fluid leaks.

References

ASTM D5088-15a, Standard Practice for Decontamination of Field Equipment Used at Waste Sites, ASTM International, West Conshohocken, PA, 2015.

EPA 2015. SESDPROC-205-R3, Field Equipment Cleaning and Decontamination. US EPA Region 4 Science and Ecosystem. December 18, 2015.

STANDARD OPERATING PROCEDURE

TASK: Location Logging

AUTHOR: James Charles

DATE: May 2020

To permit proper evaluation of the sample analysis results, the actual location of the samples will be properly documented. If possible, sample locations will be marked in the field with stakes, flagging, or spray paint. The location of each sampling point will be determined using a Global Positioning System (GPS) unit. All sample locations will be accurately identified on the base map. Photographs of sample locations may be taken to document site conditions. In addition, sample depths will be recorded for each sample and will be integrated, if possible in the sample name.

Horizontal locational information will be reported in state plane coordinates using the North American Datum of 1983 (NAD 1983). The vertical data, if applicable, will be reported as depth below ground surface, and in mean sea level using the North American Vertical Datum of 1988 (NAVD 1988).

References

EPA, 1987. A compendium of Superfund field operations methods.
Office of Emergency and Remedial Response, Office of Waste Programs Enforcement.
U.S. Environmental Protection Agency, Washington, D.C. EPA/540/P-87/001.
December 1987.

NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010 (DER-10).

STANDARD OPERATING PROCEDURE

TASK: Non Aqueous Sample Handling

AUTHOR: James Charles

DATE: May 2020

When placing the glassware order, a laboratory communication sheet will be sent to the laboratory to ensure clear analytical parameters for the matrices to be sampled.

Field and trip blank samples must travel with sample containers and must arrive on-site within one day of their preparation in the lab. Blanks and their associated samples may be held on-site for no longer than two calendar days, and must arrive back in the lab within one day of shipment from the field. This constitutes the maximum 4-day handling time. Without exception, blanks and all samples must be maintained at 4°C while stored on-site and during shipment. Sample bottles and blanks must be handled in the same manner prior to their return to the laboratory.

The NYS-certified analytical laboratory will provide pre-cleaned and prepared sample containers. The laboratory will also prepare and supply the required field blank sample containers, reagent preservatives, and trip blank sample containers. Sample bottle containers, including the field blank and trip blank sample containers, will be placed into metal or plastic coolers. These coolers will be received by the field sampling team within 24 hours of their preparation in the laboratory. Coolers containing field blanks and/or trip blanks received from the laboratory will be held on site for no longer than two calendar days.

Samples collected in the field for laboratory analysis will be placed directly into the laboratory-supplied sample containers. Individual sample containers will be sealed by hand-tightening container lids. The coolers will be filled with frozen "blue ice" packs or ice in Ziploc® bags (or equivalent) to maintain a temperature of 4 degrees Centigrade (^{o}C).

Coolers containing the sample containers and associated field and trip blanks will be received at the laboratory within 24 hours of their shipment from the field. The temperature in the coolers containing samples and associated field and trip blanks will be maintained at a temperature of 4^{o}C while onsite and during shipment.

Possession of samples collected in the field will be traceable from the time of collection until they are analyzed by an analytical laboratory or disposed. To maintain and document sample possession, chain of custody procedures will be followed.

STANDARD OPERATING PROCEDURE

PRESERVATION

Measures to minimize decomposition by degradation, biological transformation, chemical interactions, and other factors during the time between sample collection and analysis will be employed. Steps taken to maintain *in situ* characteristics will include refrigeration (cooling chest with ice or ice pack) of samples at 4°C, freezing, pH adjustment, and/or chemical fixation. Samples are preserved according to the requirements of the specific NYS-certified analytical lab-approved method selected.

Soil Samples

VOC samples will be collected in Encore® sampler or in methanol as preservative. All other samples will be collected and sealed in the sampling bottles and preserved with ice at 4°C.

Ground Water Samples

VOC samples will be collected in glass bottles containing hydrochloric acid (HCl) as preservative and filled to the top of the container and sealed with zero headspace.

Metals samples will be collected in plastic bottles containing nitric acid (HNO_3) as preservative.

All samples will also be preserved at 4°C using ice.

LABELING AND IDENTIFICATION

Sample identification procedures will include the following:

1. Each container will be labeled by the sampler to avoid any possibility of sample misidentification.

2. At a minimum, each label will contain the following information:

    - Site name;
    - Sample designation number (field ID);
    - Date sampled;
    - Time sampled;
    - Sampler name(s) or initials;
    - Preservative used; and
    - Analysis requested.

Please refer to the Site-specific sampling plan and field notes for sample nomenclature.

References

EPA, 1984. Characterization of hazardous waste sites -- A methods manual, Volume II, Available sampling methods. Second edition. Environment Monitoring Systems Laboratory, Office of Research and Development. U.S. Environmental Protection Agency, Las Vegas, Nevada. EPA-600/4-84-076. December 1984.

EPA, 1987. A compendium of Superfund field operations methods. Section 8.5.6.9: Groundwater sampling considerations, pp 8.5-42 to 8.5-43. Section 8.5.6.8.9: Evaluation of sample collection materials, pp 8.5-41 to 8.5-42. Section 8.5.6.4.1: Bailers p. 8.5-8. Office of Emergency and Remedial Response, Office of Waste Programs Enforcement. U.S. Environmental Protection Agency, Washington, D.C. EPA/540/P-87/001. December 1987.

EPA, 1991. Description and Sampling of Contaminated Soils, A Field Pocket Guide. November 1991.

NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010 (DER-10).

STANDARD OPERATING PROCEDURE

TASK: Soil Sampling

AUTHOR: James Charles

DATE: May 2020

Soil samples shall be collected in accordance with the EPA *Description and Sampling of Contaminated Soils, A Field Pocket Guide* (November 1991) along with referenced EPA and ASTM Standards. The following provides a brief overview of key aspects of the soil sampling program.

Collection of Traditional Soil Samples

- Based on Site geology and the data quality objectives, soil samples will be obtained in the field using trowels, hand augers, or Geoprobe® rig.
- Soil cores will be screened continuously and logged in six (6) inch intervals for the following:
    - Soil texture in accordance with the Burmister Soil Classification Naming System or equivalent;
    - Color in accordance with the Munsel system of classification;
    - If volatile organic compounds are a concern, photoionization detector (PID) readings will be collected and recorded for each six (6) inch interval of soil core;
    - Evidence of impact including staining, odor, or fill material will be recorded.
- Field apparatus (e.g. hand augers, trowels, and mixing pans) to be reused during sample collection will be decontaminated in accordance with the Non-Aqeuous Matrix Decontamination Standard Operating Procedure (SOP).

Guidelines

Soil types at a hazardous waste site can vary considerably, both at the site surface and in the underlying strata. Soil variations affect the rate of contaminant migration via surface runoff and windblown transport of particulates, and affect the rate of contaminant migration downward through the soil. Sampling of the soil horizons above the ground water table can detect contaminants before they have migrated into the groundwater,

and can help to quantify the amount of contaminants contained in the soil that have the potential to contribute to groundwater contamination.

The physical properties of soil (e.g., grain size, cohesiveness, and moisture content) and the depth to groundwater may limit the depth from which soil samples can be collected and dictate the required methods for sample collection. In order to predetermine the suitability of a chosen sampling method to soil conditions, information pertaining to regional soil properties should be obtained from either the U.S. Department of Agriculture, Soil Conservation Service or from published soil surveys by the U.S. Geological Survey (USGS). One of several applicable soil sampling techniques should then be selected to collect on-site samples.

Most of the methods employed for soil sampling at hazardous waste sites are adaptations of techniques long employed by foundation engineers and geologists. Collection of samples from near the soil surface can be accomplished by using a trowel, thin-walled tube sampler, or hand auger.

Shallow subsurface soils can be sampled using hand augers. However, the collection of soil samples from the deeper subsurface strata normally requires heavy equipment, such as a truck or track- mounted drill rig employing split-spoon sampling.

The following method may be employed for the recovery of soil materials at hazardous waste sites:

1. Stainless steel trowel and/or scoop
2. Hand auger
3. Split-barrel sampler, soil core, or similar device

The preferred order of sample collection is:

1. Volatile Organic Compounds (VOCs)
2. Semi-Volatile Organic Compounds (SVOCs)
3. Metals
4. Other Inorganics
5. Radionuclides

Homogenization Procedure for the Collection of Non-VOC Surface Soil Samples
Note: This procedure should be followed for all types of soil sampling (i.e., grab and composite).

1. Thoroughly mix the sample using the same stainless steel trowel or scoop used during the sample collection. The soil in the bowl should be scraped from the

sides, corner, and bottom, rolled to the middle of the bowl and mixed.

Procedure For Surface Soil Grab Sampling Using A Stainless Steel Trowel and/or Scoop

1. For VOC samples, dig a hole to the desired depth with the trowel or scoopula. Remove surface vegetation, debris or large stones. Use the EnCore or Terra Core samplers to collect the soil sample (from an undisturbed area) for VOC analysis.
2. For non-VOC sample fractions, insert the stainless steel trowel or scoop into the soil at a depth of 0 - 2 inches and remove the sample, avoiding the collection of surface vegetation, debris and large stones. Place the sample volume collected in a stainless steel bowl and homogenize the soil.
3. Transfer the homogenized non-VOC fraction into the appropriate sample containers using the same stainless steel trowel or scoop used throughout this entire procedure.
4. Restore the void created by sample collection prior to leaving the sampling location (if necessary commercially available potting soil or top soil may be used to fill the void).

Procedure For Surface Soil Composite Sampling Using A Stainless Steel Trowel and/or Scoop

1. There will be no composite samples collected for VOC analysis.
2. For non-VOC sample fractions, insert the stainless steel trowel or scoop into the soil at a depth of 0 - 2 inches and remove the sample, avoiding the collection of surface vegetation, debris and large stones. Place the sample volume collected in a stainless steel bowl, follow this procedure for each aliquot collected at the various locations or at different points in time (whichever is applicable).
3. Composite the non-VOC soil sample aliquots in the stainless steel bowl. Then follow the procedure for homogenization (refer to page 3 of this SOP).
4. Transfer the homogenized non-VOC fraction into the appropriate sample containers using the same stainless steel trowel or scoop used throughout this entire procedure.
5. Restore the void created by sample collection prior to leaving the sampling location (if necessary commercially available potting soil or top soil may be used to fill the void).
6. Decontaminate the exterior of the sample container. Refer to the Field Decontamination SOP.

STANDARD OPERATING PROCEDURE

Procedure for Sub-Surface Soil Sampling Using A Hand Auger

Hand augers are ideal for collecting shallow subsurface soils in cohesive soils such as silts and clays. In cohesive soils, a hand auger can be used to collect samples generally up to a depth of 3 feet. However, in rocky soils auger refusal is experienced almost immediately, as small stones will block and jam the cutting edge on the auger bucket. Procedures for use of the hand auger are as follows.

1. Hand augers should not be used to collect soil samples for VOC analysis.
2. Clean the stainless steel hand auger according to the requirements for the analytical parameters being measured.
3. Clear the area to be sampled, removing any surface vegetation, debris, or large stones prior to auguring.
4. Begin auguring. When the auger is filled, carefully withdraw it from the borehole and remove the soil from the auger by lightly tapping the side of the bucket with a stainless steel trowel.
5. Continue auguring following the above procedure, until you have reached the desired sampling depth.
6. Place the soil to be sampled in a stainless steel mixing bowl. Repeat the sampling procedure until sufficient sample quantity has been collected. Homogenize the soil sample.
7. Transfer the homogenized soil into the appropriate sample containers using the same stainless steel trowel or scoop used throughout this entire procedure.
8. Restore the void created by sample collection prior to leaving the sampling location (if necessary commercially available potting soil or top soil may be used to fill the void).

Procedure for Soil Boring Sampling Using a Split-Spoon or Core

The collection of split-spoon samples or cores normally requires the use of a drilling rig or hydraulic rig (e.g., geoprobe). To collect a split-spoon (or split-barrel) sample, a boring is advanced to the sampling point, drill tools are removed and a 2-inch I.D. steel split-spoon is threaded onto the drill rods and lowered to the bottom of the borehole. In accordance with the standard penetration test (ASTM D1586), the split-spoon is driven downward into the soil beneath the lead flight of augers by a 140-lb hammer falling 30 inches. The number of blows that are required to drive the split spoon each 6-inch interval is counted and recorded. The density of the soil material is determined by the number of blows per foot. The split-spoon is then withdrawn from the borehole, dismantled, and given to the field geologist for sampling and analysis.

To collect a continuous core sample, the drilling rig (or earthprobe rig) will hydraulically

push a core barrel through the soil column. With most standard Geoprobe® rigs, the soil will collect in a plastic sleeve, typically 5-feet long, though other sizes are available, which is then retrieved for logging, screening, and/or sampling.

Whether the sample device is a split-spoon, thin-wall, core barrel, or plastic sleeve, the procedures for sampling are basically the same once the sampler is opened:

1. Remove the head and carefully open the halves of the split-spoon. If sampling with a core from a hydraulic (geoprobe) rig, carefully cut the plastic sleeve open using the manufacturer's specialized cutting tool or box cutter.
2. Immediately collect the soil VOC fraction from an undisturbed portion of the soil using the EnCore□□or Terra Core□□samplers. (To determine which portion of the core to collect, consult the site specific SAP and QAPP.)
3. Log the soil core using Unified Soil Classification System or other classification system as required.
4. Place the remaining soil (for non-VOC sample fractions) in a stainless steel mixing bowl.
5. Homogenize the remaining soil, and place the homogenized non-VOC fraction soils into the appropriate sample containers using the same stainless steel trowel or scoop used throughout this entire procedure.

References

EPA, 1984. Characterization of hazardous waste sites -- A methods manual, Volume II, Available sampling methods. Second edition. Environment Monitoring Systems Laboratory, Office of Research and Development. U.S. Environmental Protection Agency, Las Vegas, Nevada. EPA-600/4-84-076. December 1984.

EPA, 1987. A compendium of Superfund field operations methods. Section 8.5.6.9: Groundwater sampling considerations, pp 8.5-42 to 8.5-43. Section 8.5.6.8.9: Evaluation of sample collection materials, pp 8.5-41 to 8.5-42. Section 8.5.6.4.1: Bailers p. 8.5-8. Office of Emergency and Remedial Response, Office of Waste Programs Enforcement. U.S. Environmental Protection Agency, Washington, D.C. EPA/540/P-87/001. December 1987.

EPA, 1991. Description and Sampling of Contaminated Soils, A Field Pocket Guide. November 1991.

Sample collection, documentation, and decontamination procedures will be conducted in accordance with referenced EPA and ASTM Standards.

This procedure is to provide general reference information on groundwater sampling.

Procedures

Collection of groundwater samples from monitoring wells may be required to document whether a release of hazardous substance or petroleum has or may have occurred on, underlying or emanating from the property. To properly document groundwater contamination for Identified Areas at a Property, a minimum of three well sampling points are typically required (i.e., one upgradient well to identify ambient groundwater quality and two downgradient wells to document contamination of the aquifer). The selection of monitoring wells for groundwater sampling is determined by the hydraulic gradient within the local aquifer. The locations of soil borings and monitoring wells should be selected in compliance with EPA and ASTM standards.

Depending on the needs of the assessment and site-specific conditions such as sources of contamination, groundwater elevation, and goal of assessment, temporary or permanent groundwater monitoring wells may be installed.

Temporary Monitoring Wells

Collection of groundwater samples from temporary monitoring wells often differs from that of permanent wells due to the installation of temporary monitoring wells for immediate sample collection as opposed to long-term monitoring. Installation of temporary monitoring wells generally occurs through use of Geoprobe direct push technology or other methods to physically push the well screen and casing into the subsurface and are generally sampled immediately after installation. As such, static water within the well is not present and the need to purge several well volumes to ensure collection of samples from formation water is not necessary. In this scenario, the purpose of purging the temporary monitoring well is primarily to remove turbidity. For shallow temporary monitoring wells, purging may be conducted with a peristaltic pump. To purge a temporary well in this manner, tubing is lowered to the bottom of the temporary well and slowly raised to remove sediments from the water column to the extent practical. Depending on the methods used for installation, size, and depth of the temporary well, removal of turbidity using a peristaltic pump may not be achievable. In these cases, bailers or high-flow pumps may be used to the extent practical. Samples from temporary wells should always be designated as such with the understanding that samples may not be entirely representative of actual groundwater characteristics due to the increased turbidity within the samples. This is especially true in certain instances when metals analysis is being conducted. If possible, when temporary monitoring wells are installed for assessments where contamination by metals is expected, pre-screened temporary wells should be used whenever possible.

Permanent Monitoring Wells

Collection of groundwater samples from permanent groundwater monitoring wells installed for long-term monitoring shall be performed in accordance with EPA low-flow sampling procedures. EPA low-flow sampling procedures are designed to limit investigation derived waste produced

during sample collection and ensure groundwater samples are collected from formation water as opposed to stagnant water within the wells. Prior to purging the monitoring well, water level measurements should be recorded to the nearest 0.01 feet. A variety of pumps for low-flow sample collection are available and must be capable of sustaining flow rates of less that 0.5 L/min, have the ability to adjust the flow rate of purging, limit degassing of the water sample (primarily an issue with peristaltic pumps) and does not allow outside sources such as gas/atmosphere to interfere with the sample. If the length of the screened interval within the well is known, the low-flow pump should be placed in the center of the screened interval. If the screened interval is unknown, the low-flow pump should be placed approximately two to three feet above the bottom of the well. After the start of purging, flow rate should be determined using a measuring cup or graduated bucket to ensure a flow rate of 0.5 L/min is not exceeded. During purging, continuous monitoring of groundwater elevation is conducted to ensure that the allowable 0.33 feet of drawdown is not exceeded. The rate of purging may need to be adjusted to ensure drawdown does not exceed 0.33 feet. During purging, the following parameters are monitored continuously: pH, oxidation-reduction potential, temperature, dissolved oxygen, specific conductivity, and turbidity. It is recommended that turbidity is measured with a dedicated device from samples collected prior to the flow-through cell which measures the remaining stabilization parameters as turbidity can build up within the cell and cause incorrect readings. Stabilization of parameters is considered complete when three successive readings during purging reach the following ranges:

- pH +/- 0.1 s.u.
- specific conductivity +/- 3%
- oxidation-reduction potential +/- 10 mv
- dissolved oxygen +/- 10% or three readings below 0.5 mg/L.
- turbidity +/- 10% or three readings below 5 NTU
- temperature +/- 3%

Stabilization parameters should be recorded at consistent intervals depending on either time or volume purged as applicable for the well, required purge rates, and time for stabilization. After stabilization is reached based on the above parameters, samples may be collected. Prior to sample collection, the flow through cell used for monitoring stabilization parameters should be removed with samples collected directly from the tubing as it exits the well.

Decontamination of all non-disposable downhole equipment is required between individual wells. Replacement of disposable components such as bladders and tubing is required between individual wells.

Generally, the following considerations should be taken into account during groundwater sampling activities.

- All equipment entering the well should be clean.
- Do not allow bailers or pumps to drop freely into the well.
- New outer gloves must be donned before sampling or handling clean equipment.
- Verify that the laboratory has provided appropriate, pre-preserved sample bottles/containers.

- The list of chemicals of concern and the required lab analyses will be established by the Certified Professional, and will be included in the Sampling and Analysis Plan (SAP). The bottle order from the laboratory will reflect the necessary laboratory analyses, and the order of sample collection should be as follows, unless an alternate order is specified in the SAP.
    - Volatile Organic Compounds (VOCs)
    - Semi-Volatile Organic Compounds (SVOCs)
    - VAP Metals/Inorganics
    - Dissolved Metals/Inorganics
    - Sulfate, Chloride, TDS, Alkalinity, Turbidity (if not measured in the field)
    - Nitrate/Nitrite and Ammonia
    - Cyanide
    - Turbidity
    - Radionuclides

Filling VOC Vials

Vials for the VOC analyses must be filled carefully to avoid trapping air bubbles. This is best accomplished by tilting the vial slightly so that sample water flows in slowly down the inner edge of the vial. The vial should be filled until there is a positive meniscus above the rim and the cap then carefully screwed on. Invert the vial to verify that there are no air bubbles present. If air bubbles are trapped, attempt to eliminate by gently tapping the upright vial to force the bubbles to the top, remove the cap, and carefully top of the sample. If bubbles persist, then either re-collect the sample in a new (pre-preserved) vial or, in extreme cases where the preservative may be reacting and contributing to bubble formation, collect an unpreserved sample and note this on the label and chain-of-custody (unpreserved VOC samples have a 7-day holding time).

Field Filtering

If the SAP requires or allows for field filtering groundwater samples and filtering is deemed necessary, field personnel should use the following procedure:

- If possible, use a positive-pressure, in-line filtering method with the sampling pump (or bailer if it is equipped with a bottom-loading valve and can be pressurized with a hand pump).
- If an “open” filtering system must be used, care should be taken to minimize sample disturbance as it is transferred to an intermediate container before being passed through the filter. Open filtering should also be conducted as soon as possible after retrieval of the sample and before preservation to minimize potential precipitation or degassing.
- Use a disposable, inert filter with a minimum pore size of 0.45 microns (e.g., QED Quickfilter). Alternate pore sizes can be determined on a site-specific basis, but the filter pore size should not be finer than the largest mobile fraction of particulates anticipated in the formation.
- Pre-rinse the filter to remove potential residue from the manufacturer. Flush with sample water to create a uniform wetting front.
- Decontaminate or dispose filtration equipment (filter, tubing, etc.), as appropriate

References

ASTM D4448. Standard guide for sampling groundwater monitoring wells. American Society for Testing and Materials, Philadelphia, Pennsylvania. October 1985.

ASTM D4750. Stand test method for determining subsurface liquid levels in a borehole or monitoring well. American Society for Testing and Materials, Philadelphia, Pennsylvania. November 27, 1987.

United States Environmental Protection Agency. EQASOP-GW4 Low-Stress (Low-Flow) Groundwater Sampling Procedures. Finalized July 30, 1996, Updated September 20, 2017.

United States Environmental Protection Agency. SESDPROC-301-R3 Groundwater Sampling. Finalized February 5, 2007 Updated March 6, 2013.

STANDARD OPERATING PROCEDURE

TASK: Investigation Derived Waste Management

AUTHOR: James Charles

DATE: May 2020

Residuals Management and Classification Sampling

Debris (e.g., wood, paper, plastic, polyethylene tubing and personnel protective equipment) will be collected in plastic garbage bags and disposed of as non-hazardous industrial waste. It is anticipated that debris will be transported to a local municipal landfill for disposal.

Residual solids such as drill cuttings and residual fluids such as decontamination water, monitoring well development water, monitoring well purge water, and drilling mud will be collected and stored in DOT-approved (or equivalent) 55-gallon drums in a designated onsite storage area.

If large volumes of a given type of residual material are generated, the drums may be emptied into dumpsters (for solids) or tank trucks (for liquids) for storage. Alternatively, large volumes of a given type of residual material may be placed directly into dumpsters (for solids) or tanks (for liquids) for storage, if practicable. These residual materials will be analyzed to determine waste classification and obtain waste stream approval. The residual materials will be disposed of in accordance with applicable federal and state regulations. The procedures to be used for collecting samples of residual materials are provided below.

Residual Solids

Composite samples of drill cuttings will be collected from the Department of Transportation (DOT)-approved (or equivalent) 55-gallon drums in which they are stored using the following procedures:

- Open drum(s) containing drill cuttings to be sampled. The number of drums to be sampled to generate each composite sample will be determined based on the volume and/or uniformity of the drummed cuttings and requirements of the treatment/disposal facility.
- Using decontaminated, stainless steel grain sampler or other appropriate sampling device, remove portions of the drill cuttings from each drum to be sampled and place in a decontaminated, stainless steel bowl or other appropriate decontaminated container.

- Once portions of the drill cuttings from each selected drum have been placed in the decontaminated, stainless steel bowl or other appropriate decontaminated container, homogenize the sample.
- Fill sample containers with composited cuttings. Cap containers.
- All containers must have a start date noted.
- All containers must have a label indicating that the container holds IDW.
- Record sampling information in field notebook.
- Complete chain of custody forms.
- Package and ship samples.
- If appropriate, sampling these containers for toxicity characteristic leachate procedures (TCLP) in order to establish the hazardous nature of the IDW and how it can be transported and how and where it can be disposed, should be provided by the selected analytical lab.
- Close drum(s). All containers holding IDW must remain closed unless material is being added or removed.

Residual Fluids

- Samples of residual fluids will be collected from the DOT-approved (or equivalent) 55-gallon drums in which they are stored using the following procedures:
- Open drum(s) containing residual fluid to be sampled. The number of drums to be sampled to generate each composite sample will be determined in the field based on the volume and uniformity of residual fluids and requirements of the treatment/disposal facility.
- Insert clean, dedicated glass tube into residual fluid. Seal end of glass tube and remove glass tube containing sample from drum.
- Inspect glass tube for stratified layers and record presence or absence of stratified layers in field notebook. If present, record descriptions of layers.
- Fill sample containers with residual fluids obtained from one or more drums by repeating Steps 2 and 3. Cap containers.
- Close drum(s).
- Record sampling information in field notebook.
- Complete chain of custody forms.
- Package and ship samples.

References

ASTM D4448. Standard guide for sampling groundwater monitoring wells. American Society for Testing and Materials, Philadelphia, Pennsylvania. October 1985.

ASTM D4750. Stand test method for determining subsurface liquid levels in a borehole or monitoring well. American Society for Testing and Materials, Philadelphia, Pennsylvania.
November 27, 1987.

EPA, 1984. Characterization of hazardous waste sites -- A methods manual, Volume II, Available sampling methods. Second edition. Section 3.4, Groundwater pp. 3-25 to 3-31. Section 3.4.3, Method lll-9: Sampling monitor wells with a bucket type bailer, pp 3-35 to 3-37. Environment Monitoring Systems Laboratory, Office of Research and Development. U.S. Environmental Protection Agency, Las Vegas, Nevada. EPA-600/4-84-076. December 1984.

EPA, 1987. A compendium of Superfund field operations methods. Section 8.5.6.9: Groundwater sampling considerations, pp 8.5-42 to 8.5-43. Section 8.5.6.8.9: Evaluation of sample collection materials, pp 8.5-41 to 8.5-42. Section 8.5.6.4.1: Bailers p. 8.5-8. Office of Emergency and Remedial Response, Office of Waste Programs Enforcement. U.S. Environmental Protection Agency, Washington, D.C. EPA/540/P-87/001. December 1987.

NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010 (DER-10).

Per- and Polyfluoroalkyl Substances (PFAS) Field Sample Collection Guidance

The purpose of this document is to provide guidance on sampling protocols when collecting sample(s) for analysis for PFAS for waste sites. Because of the potential presence of PFAS in common consumer products and in equipment often used to collect groundwater samples, special handling and care must be taken when collecting PFAS samples. There is the potential that detection of these compounds at very low levels might be influenced by materials present at the sampling site, materials used by the sampling agent, or sample container handling practices. For more detailed information, please refer to Standard Operating Procedures (SOPs) in the NHDES HWRB Master Quality Assurance Project Plan, prepared for sites investigated through contracts administered by the HWRB.

NHDES recommends appropriate quality assurance and quality control sampling to assess the potential for PFAS contamination from the sampling process. NHDES recognizes that studies are ongoing to identify the potential for cross-contamination from PFAS-containing items during sampling, and that some studies have found that the referenced guidance may be conservative. Other studies have identified that PFAS content in materials may vary with time and lots.

In developing sampling approaches, consultants are encouraged to review information available from multiple sources, including, but not limited to:

- ITRC Technical and Regulatory Guidance Document – Section 11, Sampling and Analysis (and Fact Sheet "Sampling Precautions and Laboratory Analytical Methods for PFAS."

- New York State Department of Environmental Conservation Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs dated June 2021.

- Michigan PFAS Sampling Guidance.

Refer to analytical methods for bottle selection and other sampling considerations.

Consider QA/QC sampling to support the validity of the data. Confirm if samples are required by the analytical method. Consider one set of the following QA/QC samples per 20 field samples as part of initial screening efforts, although not required:

- Equipment rinseate blank (if potential PFAS-containing equipment is used and/or if non-dedicated equipment is used).
- Blind field duplicate (if more than 10 samples collected).
- Field blank (using PFAS-free water typically supplied by the analytical laboratory).

Additional QA/QC samples may be warranted in future monitoring rounds and site investigations.

The following table provides a summary of items that may and may not contain PFAS. Items that contain PFAS should not be used by the sampling agent at the sampling site. However, if potential PFAS-containing items will be used, complete QA/QC testing to evaluate the potential influence on the data.

Category	**Prohibited Items**	**Allowable Items**
Pumps and Tubing	Fluoropolymer-containing materials (trademarks may include, but are not limited to: Teflon®, Hostaflon®, Kynar®, Neoflon®, and Tefzel®)	High-density polyethylene (HDPE), low density polyethylene (LDPE), or silicone tubing, peristaltic pump or stainless steel submersible pump
Decontamination	Decon 90	Alconox® or Liquinox®, potable water followed by deionized rinse.
Sample Storage and Preservation	LDPE or glass bottles, PTFE-or Teflon®-lined caps, chemical ice packs	Laboratory-provided sample container - *preferred*; or, HDPE or polypropylene bottles, regular ice
Field Documentation	Waterproof/treated paper or field books, plastic clipboards, non-Sharpie® markers, Post-It® and other adhesive paper products	Plain Paper, metal clipboard, Sharpies®, pens
Clothing	Clothing or boots waterproofed or treated for stain-resistance with fluoropolymer-containing materials (e.g., Gore-Tex™, Tyvek® material)	Synthetic or cotton material, previously laundered clothing (preferably previously washed greater than six times) without the use of fabric softeners
Personal Care Products (for day of sample collection)	Cosmetics, moisturizers, hand cream and other related products	Suncreens (examples below, confirm with vendor): Alba Organics Natural Yes to Cucumbers Aubrey Organics Jason Natural Sun Block Kiss My Face Baby-safe sunscreens ('free' or 'natural) Insect Repellents: Jason Natural Quit Bugging Me Repel Lemon Eucalyptus Herbal Armor California Baby Natural Bug Spray BabyGanics Sunscreen and Insect Repellents: Avon Skin So Soft Bug Guard-SPF 30
Food and Beverage	Pre-packaged food, fast food wrappers or containers	Bottled water or hydration drinks

For samples collected from monitoring wells

- When feasible, use single-use, disposable polyethylene or silicone materials (tubing, bailers, etc.) for monitoring well purging and sampling equipment.
- When reuse of materials or sampling equipment across multiple sampling locations is necessary, follow project decontamination protocols with allowed materials identified in the table above, and incorporate collection of equipment rinsate blanks into sampling program, as appropriate.
- When using positive displacement/submersible pump sampling equipment, familiarize yourself with the sampling pump/accessory equipment specifications to confirm that device components are not made of nor contain Teflon® or PTFE.

For samples collected during production well pumping tests

- If feasible, do not use Teflon® tape or pipe thread paste on pipe fittings or sampling tap threads on the pump discharge pipe.
- As with all other sample parameters, the sample for PFAS should be collected at the last hour (or hours) of the pumping portion of the testing program.
- Discharge water should be purged through the sampling tap on the discharge pipe for a minimum of 20 minutes prior to collection of samples.

For samples collected from active production wells

- If feasible, avoid contact with any Teflon® tape or pipe thread paste on pipe fittings or sampling tap threads on the water supply discharge pipe.
- The sample for PFAS should be collected while the production well pump is operating, and, preferably, has been operating for at least one hour.
- Discharge water should be purged through the sampling tap on the discharge pipe for a minimum of 20 minutes prior to collection of samples.

Sample collection method/sequence

- Using new nitrile gloves collect the sample for PFAS ***first***, prior to collecting samples for any other parameters into any other containers; this avoids contact with any other type of sample container, bottles or package materials.
- As with all other samples, do not place the sample bottle cap on any surface when collecting the sample, and avoid all contact with the inside of the sample bottle or its cap.
- When sample is collected and capped, place the sample bottle(s) in an individual sealed plastic bag (e.g., Ziploc®) separate from all other sample parameter bottles, and place in shipping container packed only with ice.

Sampling Precautions and Laboratory Analytical Methods for Per- and Polyfluoroalkyl Substances (PFAS)

1 Introduction

Due to the widespread distribution of many PFAS and the low parts per trillion screening levels, a sampling and analysis protocol requires a heightened level of rigor to avoid cross-contamination and achieve the level of accuracy and precision required to support defensible project decisions.

This fact sheet summarizes information and describes tools to help develop a site-specific sampling and analysis program to satisfy the project data quality objectives (DQOs). Accurate, representative data support the development of a defensible conceptual site model (CSM), and ultimately the final remedy. Additional information is available in the Guidance Document.

ITRC has developed a series of fact sheets that summarizes recent science and emerging technologies regarding PFAS. The information in this and other PFAS fact sheets is more fully described in the ***ITRC PFAS Technical and Regulatory Guidance Document (Guidance Document)*** (*https://pfas-1.itrcweb.org/*).

This fact sheet describes methods for evaluating PFAS in the environment, including:

- sampling precautions
- laboratory analytical methods
- data evaluation

2 Sampling

Sampling conducted to determine PFAS concentrations in water, soil, sediment, air, biota, and other media is similar to that for other chemicals; however, unusually low screening/regulatory criteria and concentration levels can make samples susceptible to cross-contamination from PFAS in sampling materials and incidental contact with PFAS during sampling. Specific considerations and protocols are required to minimize sample bias from PFAS by using stainless steel, silicone, and high density polyethylene (HDPE) in sampling equipment, field supplies, and bottle selection.

PFAS-specific sampling protocols should be followed for sampling and decontamination procedures and sampling precautions. Ensure that materials that will come into contact with the samples do not have PFAS-containing, water-resistant coatings. Many programs have developed guidance and procedures—for example USEPA (2019 Ref#1653), MA DEP (2022), and MI EGLE (2021 Ref#1873). Sample protocols, preservation, shipping, storage, and holding times should meet the requirements contained in the analytical methods that are to be used.

Some matrix-specific considerations include:

- For drinking water sampling, allow tap to run for 3–5 minutes before taking a sample. Take care not to flush preservative out of the sample bottle.
- For groundwater sampling, the most inert material (for example, stainless steel, silicone, and HDPE) should be used in wells whenever possible. Sample with a method that minimizes turbidity but does not filter the sample. Dedicated sampling equipment installed in existing wells prior to investigation should be thoroughly checked to ensure that the equipment is PFAS-free.
- For surface water sampling, stratification within the water column should be considered (refer to Sections 5.2, and 16.4 of the Guidance Document for more), and if possible, the container should be lowered below the water surface but above the bottom sediments.
- Before utilizing a passive sampler device, ensure use of the sampler has been validated with respect to the evaluation of the site-specific analytes of interest and is acceptable by the applicable regulatory agency.
- For sediment porewater sampling, peristaltic pumps with silicone and HDPE tubing are typically used, along with push point samplers, porewater observation devices (PODs), or drive-point piezometers. Lysimeters have been used to aid in the characterization of soil porewater.
- For fish sampling, studies have shown the majority of the PFAS in fish are stored in the organs, not the flesh (Martin et al. 2004 Ref#313; Yamada et al. 2014). Communicating project objectives to the laboratory is important prior to field work in order to determine the necessary quantity and quality of tissue, fish handling requirements, laboratory sample preparation (including single fish or composite fish samples, and whole or fillet preparation), and packing and shipping requirements.

- For air sampling, multiple measurement approaches are available. Draft USEPA OTM-45 was released as an "Other Test Method (OTM)" by USEPA's Emission Measurements Center to promote consistency and is considered by USEPA to represent the current best practices to sample and analyze PFAS from stationary sources. Some sampling and analysis of ambient air have been performed using modified toxic organic (TO) methods, such as TO-13A and TO-9 (USEPA 2020 Ref#2138).

Equipment and Supplies

Many materials (for example, bailers, tubing, tape, labels, gloves) used in the course of environmental investigations can potentially contain PFAS. There is limited published research or guidance on how certain materials used by field staff affect sample results (Denly et al. 2019; Rodowa et al. 2020). There are two subcategories of materials used at a site; those materials that come into direct contact with the sample and those that do not. It is recommended, when possible, to exclude materials known to contain PFAS, such as those containing polytetrafluoroethylene (PTFE), perfluorinated ethylene-propylene (FEP), ethylene fluoroethylene (ETFE), low-density polyethylene (LDPE), polyvinylidene fluoride (PVDF), pipe thread compound and tape, and waterproof coatings. The Safety Data Sheets (SDSs) of materials should be reviewed before considering materials for use. If PFAS are not listed on the SDS, PFAS may still be present since PFAS may have been used not as a component of the material, but in the manufacturing process itself. When PFAS-containing equipment and supplies cannot be eliminated, materials in question can be sampled and analyzed for PFAS, or equipment rinse blanks can provide sufficient quality assurance. Collection and analysis of QC samples, such as field reagent blanks, equipment rinse blanks, and field duplicates, are important for PFAS analyses because of very low detection limits and widespread commercial use (historical and current) of PFAS-containing products.

Bottle Selection, Sample Preservation, Shipping, Storage, and Holding Time

Sample container, preservation, shipping, storage, and holding time requirements are included in USEPA Methods 537.1 (USEPA 2020 Ref#1732), 533 (USEPA 2019 Ref#1468), SW-846 Method 3512/8327, USEPA Draft 1633 (USEPA 2023 Ref#2762), OTM 45 (USEPA 2021 Ref#2133), and DOD AFFF01 (Willey 2021). Depending on the analytical method used or program (for example, state or DOD), requirements for sample matrix may vary.

Decontamination Procedures

When possible, it is recommended that dedicated or single-use field sampling equipment be utilized. When non-dedicated equipment is used at multiple sampling locations thorough cleaning between uses is required. The SDSs of detergents or soaps used in decontamination procedures should be reviewed to ensure fluorosurfactants are not listed as ingredients. Laboratory-verified PFAS-free water, supplied by the laboratory that will perform the analysis, should be used for the final rinse during decontamination of sampling equipment. The term "PFAS-free" is a method or project-defined concentration level (for example, less than half the limit of quantitation for the specific compound of interest). Due to the extremely low PFAS screening/regulatory levels, the increased potential for PFAS to be at concentrations in the sample at higher than these levels, and the high affinity of PFAS for surfaces, decontamination procedures associated with PFAS sampling are typically more extensive than those used when sampling for other contaminants. The CSM or previous sampling may indicate areas of high concentrations of PFAS for which single-use, disposable equipment is recommended. If single-use is not possible, take additional precautions such as implementing a greater frequency of equipment rinse blanks and not reusing equipment to sample potentially low PFAS concentration samples. High concentration samples, such as aqueous film-forming foam (AFFF), should be segregated during shipping to the laboratory, and be clearly identified on the *Sample Chain of Custody.*

3 Quantitative Analysis

As the need for testing PFAS increases with respect to the list of PFAS of interest and range of sample matrices for evaluation, the need for additional analytical methods increases. Currently, there are few finalized, multi-laboratory validated, published PFAS methods (Table 11-2 and Table 11-3, see the External Data Tables on https://pfas-1.itrcweb.org). These methods vary in their sample preparation and quantitation techniques employed, achievable limits of detection and quantitation, sampling, preservation, and holding time requirements, and applicable sample media and analytes (Table 11-4, see the External Data Tables on https://pfas-1.itrcweb.org). In addition, other methods have been published as draft (Table 11-5, see the External Data Tables on https://pfas-1.itrcweb.org).

Sample Preparation

The sample preparation procedure should be specified in the sample analysis procedure and should be included as part of the sampling and analysis plan (SAP) or QAPP. This procedure should demonstrate that extreme care is taken to

prevent sample contamination during preparation and extraction. All supplies must be checked and confirmed as PFAS-free prior to sample preparation. There are some significant ways in which methods differ that need to be considered when selecting a method. They include:

- Amount of sample prepared (whole sample, whole sample plus container rinse, or aliquot of sample collected),
- Solid-phase extraction or solvent dilution, and
- Inclusion of clean-up processes and types of clean-up processes utilized.

Sample filtration is not recommended for samples with high particulate content because retention of PFAS onto filters has been noted. Centrifuging is often used to reduce sample particulates. For aqueous samples, the entire sample collected and solvent rinsate of the sample container received in the laboratory must be extracted by solid-phase extraction (SPE) in order to recover any PFAS that adhered to the sample container. Due to limitations in SPE catridge capacity, increased likelihood of cross-contamination during the extraction process, and quantitation limitations, for samples containing high concentrations of PFAS (for example, AFFF formulations) an aliquot of the sample may be used to prepare a dilution of the sample prior to SPE. It is recommended that for solid samples, the entire sample collected is homogenized in the laboratory prior to subsampling. Cleanup procedures (for example, graphitized carbon) should be used on sample extracts and all associated batch QC samples (for example, method blanks, and laboratory control samples) when matrix interferences (for example, bile salts and gasoline range organics) could be present. The analytical procedure should describe what batch QC samples are prepared with each sample matrix type. Batch QC samples might include method blank (MB), laboratory control sample (LCS), laboratory control sample duplicate (LCSD), sample duplicate (SD), matrix spike (MS), and matrix spike duplicate (MSD).

Sample Analysis

Currently, all analytical methods published by USEPA for PFAS analysis use liquid chromatography-tandem mass spectrometry (LC/MS/MS). Gas chromatography-mass spectrometry (GC/MS) can also be used for PFAS analysis; however, GC/MS analysis has limited commercial availability for PFAS analysis and there is not a published GC/MS method available. While most analytical methods used for PFAS use LC/MS/MS, just as with sample preparation, there are significant ways in which the methods differ that need to be considered when selecting a method. They include:

- The type of analytical standards used for quantitation (purity, isomeric profile),
- Analyte identification scheme used (confirmation ion transitions, ion transition ratios, and signal to noise ratio),
- Quantitation scheme used (external, internal standard, isotope dilution), and
- Instrument verification scheme used (instrument cleanliness checks (instrument blanks), calibration verifications, and limit of quantitation verifications).

Certified analytical standards for PFAS vary in their purity (known percent of impurities) or isomeric profiles (linear isomer only, linear and branched isomers), which may compromise the accuracy, precision, and reproducibility of the data generated. Currently, standards of the purity needed for quantitation, containing the branched and linear isomers of the analyte, are commercially available for perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorononanoic acid (PFNA), perfluorohexane sulfonic acid (PFHxS), perflurooctanesulfonamide (PFOSA), N-methyl perfluorooctanesulfonamide (NMeFOSA), N-ethyl perfluorooctanesulfonamide (NEtFOSA), 2-(N-methylperfluorooctanesulfonamido) acetic acid (N-MeFOSAA), 2-(N-ethylperfluorooctanesulfonamido) acetic acid (N-EtFOSAA), N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE), and N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE).

In addition to retention time, other parameters such as confirmation ion transitions and ion transition ratios can be used to distinguish analytes from sample matrix interferences. For complex matrices (matrices other than drinking water), it is recommended that two ion transitions be monitored for each analyte, when possible. Ion transition ratios in the sample should be compared to that of standards in order to detect possible bias in the sample results.

Quantification by LC/MS/MS may be accomplished by external standard, internal standard, or isotope dilution schemes. The quantitation scheme used determines whether bias associated with sample preparation, instrumentation, and matrix interference are accounted for in the sample result. Isotope dilution should be used whenever possible for quantitation since it is the only quantitation scheme that accounts for biases resulting from sample preparation steps and accounts for instrumentation and matrix interference in the most accurate and precise manner of the three quantitation schemes.

A robust instrument verification scheme is needed to ensure the data are fit for the intended use. The instrument blanks, calibration curve, spiked blanks (LCS, Ongoing Precision and Recovery [OPR]), instrument sensitivity checks, and initial and continuing calibration verification requirements should be consistent with those published for other LC/MS/MS methods, such as USEPA Methods 537.1 (USEPA 2020 Ref#1732), 533 (USEPA 2019 Ref#1468), and Draft 1633 (USEPA 2023 Ref#2762).

4 Qualitative Techniques

In addition to the quantitative methods above, some qualitative techniques have been developed to help provide a more comprehensive assessment of the range of PFAS contamination at a site and aid in remediation efforts. These techniques are not multi-laboratory validated or promulgated methods. Depending on the technique, they can provide information on the presence of PFAS other than those identified by quantitative methods. The following four primary techniques have been developed to characterize these unknown PFAS in a sample.

- Total oxidizable precursor (TOP) assay measures the mass of perfluoroalkyl acid (PFAA) precursors or polyfluorinated compounds that can be converted to PFAAs.
- Particle-induced gamma-ray emissions (PIGE) spectroscopy measures elemental fluorine isolated on a thin surface.
- Adsorbable organic fluorine (AOF) or extractable organic fluorine (EOF), paired with combustion ion chromatography (CIC), measures the organofluorine content of a sample as fluoride on an ion chromatograph. Recently, the AOF method was published by USEPA as Draft Method 1621 (USEPA 2022 Ref#2299).
- High-resolution mass spectrometry techniques, such as quadrupole time-of-flight (qTOF) MS/MS, can tentatively identify PFAS structures through library matching or in-depth data analysis.

5 Data Evaluation

The most important goal of data validation is to evaluate the PFAS data generated with respect to the stated data needs of the project by evaluating the quality of the results compared to the DQOs of the project and identify any limitations in the use of the data due to potential uncertainty or bias. The resulting data validation report, in conjunction with the QAPP, is used by the project team to determine the overall usability of data. The USEPA (2018 Ref#1475) has guidance to aid in evaluating PFAS drinking water data generated in accordance with USEPA 537, as well as a technical bulletin to aid in the review of PFAS data generated for all other sample matrices (USEPA 2020 Ref# 1734). The USDOD EDQW has published PFAS Data Validation Guidelines for evaluation of PFAS data (USDOD 2021). A summary of key points from these data validation guidance documents, and others as noted in the table, has been compiled as Table 11-6, PFAS Analytical Data Usability Table, see Section 11.3 of the Guidance Document.

6 References and Acronyms

The references cited in this fact sheet and further references can be found at https://pfas-1.itrcweb.org/references/. Reference numbers are included in this fact sheet for non-unique citations in the Guidance Document reference list.

The acronyms used in this fact sheet and in the Guidance Document can be found at https://pfas-1.itrcweb.org/acronyms/.

Per- and Polyfluoroalkyl Substances (PFAS) Team Contacts

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September 2023

Appendix E

Site-Specific
Quality Assurance Project Plan
Addendum

Community Wide Brownfields

for

City of Memphis and Shelby County Community Redevelopment Agency
850 N Manassas
Memphis, TN 38107-2516

Prepared by:
BRS, Inc.
P.O. Box 2293
Medford Lakes, NJ 08055

INTRODUCTION

A Programmatic Quality Assurance Project Plan (QAPP) was prepared by Brownfield Redevelopment Solutions, Inc. (BRS) for the City of Memphis and Shelby County Community Redevelopment Agency as part of the Brownfields Community Wide Assessment Grant(s). This Site-Specific QAPP Addendum has been prepared to include the specific methods for sampling and analysis to address the unique technical issues of performing a site assessment for one of the selected sites where ASTM-E1903-97(2019)-compliant Phase II Environmental Site Investigations will be performed.

The United States Environmental Protection Agency (EPA) requires that all environmental monitoring and measurement efforts participate in a centrally managed quality assurance (QA) program. The team generating data under this QA program has the responsibility to implement minimum procedures to ensure that the precision, accuracy, completeness, and representativeness of its data are known and documented.

All project reporting will be completed by the BRS, Inc., Terracon, Fisher Arnold, and EnSafe. For the purposes of this document these firms will be referred to as the "Consultant". The Consultant has been selected as a result of a documented competitive process which complies with local, state and federal procurement procedures.

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FIGURES

APPENDICES

(If variations from the approved Programmatic QAPP are needed on a site-by-site bases Sections may be added to the Table of Contents)

Section 1. City of Memphis and Shelby County CRA Brownfields QAPP Title and Approval Page

Title: City of Memphis and Shelby County CRA Site-Specific Quality Assurance Project Plan (QAPP) Addendum
Property/Site Location: *Memphis, TN*
Revision Number: 0
Revision Date: *June 19, 2024*

Brownfields Cooperative Agreement Number(s):__ BF-02D64223

City of Memphis and Shelby County Community Redevelopment Agency
Brownfields Recipient

Alicia Flammia, Project Manager - Brownfield Redevelopment Solutions, Inc.
PO Box 2293, Medford Lakes, NJ 08055
856-964-6456 Ext. 6865 / AFlammia@BRSInc.com
Preparer's Name and Organizational Affiliation
Preparer's Address, Telephone Number, and E-mail Address

June 19, 2024
Preparation Date (Day/Month/Year)

BROWNFIELDS RECIPIENT PROGRAM MANAGER:

Signature

Emma Turri, City of Memphis and Shelby County Community Redevelopment Agency
emma.turri@cramemphis.org
Printed Name/Organization/Date

ENVIRONMENTAL CONSULTANT QUALITY ASSURANCE OFFICER: (QAO)

Signature

To Be Determined
Printed Name/Organization/Date

EPA REGION 4 BROWNFIELDS PROJECT OFFICER:

Signature

Olga Perry, USEPA Region 4
Printed Name/Organization/Date

EPA REGION 4 BROWNFIELDS QUALITY ASSURANCE OFFICER:

Signature

Aditi Chakravarty, USEPA Region 4
Printed Name/Organization/Date

Section 2b. Personnel Responsibilities

Name	Title	Telephone Number/Email	Organizational Affiliation	Responsibilities[1]
Jennifer Taylor	Project Engineer	856-964-6456	Brownfield Redevelopment Solutions, Inc. (BRS)	Oversight of Assessment and Remediation contractor scope for Brownfields Recipient
Alicia Flammia	Environmental Scientist	856-964-6456	Brownfield Redevelopment Solutions, Inc. (BRS)	Preparation of Programmatic QAPP for Brownfields Recipient
TBD	Project Manager	TBD	TBD	Preparation of Site Specific QAPP Addendum, Direct investigation activities, Review/approve activities, certify reports, close regulatory case
TBD	Field Technician	TBD	TBD	Collection of environmental media samples, reporting
Emma Turri	Brownfields Recipient Program Manager (RPM)	emma.turri@cramemphis.org	City of Memphis and Shelby County CRA	Community Builder: Project Manager
Paula Middlebrooks	State Brownfields Project Officer	(615) 532-0926 Paula.Middlebrooks@tn.gov	TDEC, Division of Remediation	Approve QAPP for compliance with TDEC regulations
TBD	EPA Brownfields Quality Assurance Officer (QAO)		EPA Region 4	Approve QAPP for compliance with EPA Region 4 QA/QC policy
Olga Perry	EPA Brownfields Project Officer (BPO)	street.derek@epa.gov	EPA Region 4	Ensure investigation is in compliance with QAPP and EPA regulation
Aditi Chakravarty	Environmental Laboratory Contact	TBD	Waypoint Analytical, Pace Analytical National, Analytical Environmental Services, Inc., Moody Labs, and Eurofins Environment Testing	Laboratory analysis of environmental media samples
TBD	Third Party Data Validator[1]	TBD	TBD	Data Quality Review

[1] Data validation to be performed by third party – independent to project (can be within Environmental Consulting firm or subcontracted to a data validation firm).

The EPA QAO will approve this Site Specific QAPP Addendum. *The Consultant* will perform all sampling, and as may be applicable will oversee collection of all environmental samples by other subcontractors. *The Consultant* will be responsible for oversight of investigative tasks including surveying, drilling and disposal of investigation-derived waste, and site restoration performed by others.

This QAPP will govern the operation of the project at all times. Each responsible party listed in the above shall adhere to the procedural requirements of the QAPP and ensure that subordinate personnel do likewise. It is expected that from time to time modifications will need to be made to the project. Memphis and Shelby County CRA shall be responsible for implementation of changes to the project and shall document the effective date of all changes made. Any significant changes made by the Memphis and Shelby County CRA need to be approved by the EPA Project Officer before being implemented.

The Consultant Quality Assurance Manager is responsible for determining that data are of adequate quality to support this project.

Distribution List

1. Emma Turri –Memphis CRA (Project Manager)
2. Paula Middlebrooks – TDEC (Brownfields Project Officer)
3. Olga Perry – EPA Region 4 (Project Officer)
4. Jennifer Taylor, PE – Program Manager, BRS, Inc. (Consultant Team Lead for preparation of the Programmatic QAPP)

PROBLEM DEFINITION

Phase I Environmental Site Assessments (ESA) will be completed for various priority sites (to be vetted) and approved by Memphis and Shelby County CRA and EPA) by the consultant on behalf of Memphis and Shelby County. As part of the Phase I assessment, it is assumed that recognized environmental conditions (RECs) related to historical use of the subject properties will be identified. The intent of the subsequent Phase II Site Investigations is to establish if RECs have impacted environmental media and, in this case, whether remedial actions may be necessary to advance redevelopment at the sites.

PROJECT DESCRIPTION

Site Location and Description

As part of Phase II Site Investigation (SI) activities, *the Consultant* will collect approximately *[number and type]* of samples from *[location]*. Samples will be analyzed by Waypoint, Pace, Moody, and/or Eurofins laboratory staff at their TN facility.

[Include a detailed map showing sampling locations. Discuss the Quality Assurance/Quality Control (QA/QC) samples to be collected; the sampling methods to be used along with the referenced sampling methods Standard Operating Procedures (SOPs).]

Should additional analysis be required for a site-specific Phase II, these will be included in a QAPP Addendum.

Field quality control samples will be collected as detailed in Section 10. Samples will be collected using disposable sampling equipment and placed directly into laboratory provided glassware. Samples will be stored on ice and transported to the laboratory under chain of custody. Please refer to Section 6 of the Programmatic QAPP for Standard Operating Procedures (SOP) information.

Laboratory results will be compared to EPA's Regional Screening Levels (RSLs), the federal Maximum Contaminant Levels (MCLs) and, if applicable the Tennessee water quality standards (GWQC)a. Soil vapor contaminant concentrations will be compared to EPA's Vapor Intrusion Screening Levels (VISL), as no State standards currently exist. The RSL tables provide comparison values for residential and commercial/industrial exposures to soil, air, and tap water (drinking water).

Site History

[a] TDEC Rule General Water Quality Criteria and the Antidegradation Statement found in Chapter 0400-40-03, and the Use Classifications for Surface Waters found in Chapter 0400-40-04.

PROJECT DECISION STATEMENTS

Future use of the sites where Phase II Site Investigations are planned is currently unknown. Investigative drilling and completion of soil borings and temporary and/or permanent monitoring wells with concurrent sampling of environmental media will likely be proposed in order to evaluate if contamination has come to be located on or under the property. If sampling results are found to be below the most stringent applicable EPA RSLs as determined by the targeted site reuse, then it can be concluded that the Site does not pose a risk to public health and the environment and no further action would be recommended.

However, if sampling results are found to be above the EPA SRS or GWQC, then remedial investigations will be completed at sites to determine the nature and extent of contamination confirmed to be present during the Phase II SI. Ultimately, the full nature and extent of contamination will be evaluated and once remedial investigations are complete, an Analysis of Brownfields Cleanup Alternatives (ABCA) may also be prepared. The purpose of the ABCA is to memorialize the steps to be taken to select a recommended cleanup alternative for the site.

All environmental media analysis will be performed by a Tennessee State-certified laboratory such as Waypoint, Pace, Analytical, Moody, and/or Eurofins. The accreditation certificate and annual certified parameter lists for Waypoint, Pace, Moody, and Eurofins are provided in Appendix B of the Programmatic QAPP.

Section 3b. Project Quality Objectives/Systematic Planning Process Statements

Overall Project Objectives:

- The field and laboratory Project Quality Objectives (PQOs) for this investigation are designed to determine the presence or absence of contamination to soil, soil vapor and groundwater.
- Upon completion of field work, samples will be submitted to a TN-certified analytical testing laboratory. Laboratory analysis will meet holding time requirements, and laboratory reporting will be scheduled for standard turn-around time (TAT).
- Analytical data generated will be reviewed by the laboratory QA/QC officer for the established criteria for performance measures that include precision, accuracy/bias, sensitivity (quantitation limit), data comparability, representativeness, and completeness.
- Soil and groundwater contaminant concentrations will be compared to EPA RSLs, the federal Maximum Contaminant Levels (MCLs) and the TN GWQC standards.
- Soil vapor contaminant concentrations will be compared to EPA's Vapor Intrusion Screening Levels (VISL), as no State standards currently exist. Target concentrations for initial assessment are prescribed as calculated using a target hazard quotient (THQ) of 0.1 and a target carcinogen of 1E-6.

How much data are needed?
[Number of samples, matrix and analysis]

Where, when, and how should the data be collected/generated?
Specific boring installation and sampling collection points will be based on the site-specific QAPP addendum and workplan.

The Baseline Asbestos Inspections will consist of the following items:

- Identification, damage-assessment, categorization and inventory of all suspect Asbestos Containing Materials (ACM) of the subject property buildings.
- Limited sampling of suspect ACMs to avoid damage to finishes.
- Sampling and lab analysis of suspect ACMs categorized as friable by the inspector.
- Sampling and lab analysis of suspect ACMs categorized as non-friable and significantly damaged or having a high probability of significant damage.

The Baseline Asbestos inspection sampling of friable and damaged non-friable ACM will follow the applicable asbestos sampling protocol outlined in AHERA (Asbestos Hazard Emergency Response Act) and TDEC Division of Air Pollution Control's Hazardous Air Contaminant Rule requirements. Sample collection would generally follow the protocol outlined in AHERA (Asbestos Hazard Emergency Response Act).

For surfacing materials, the inspector would apply the 3-5-7 Rule which requires that a minimum of three samples be collected for homogenous materials encompassing less than 1,000 square feet, a minimum of five samples be collected for materials encompassing between 1,000 and 5,000 square feet, and a minimum of seven samples be collected for materials encompassing greater than 5,000 square feet. A "homogenous" material is determined by the same color, texture, size, and boundary of the building.

In conjunction with the asbestos survey, a lead paint survey may be conducted by collecting one sample of each paint color or substrate. Samples will be submitted under chain of custody documentation to a National Lead Laboratory Accreditation Program (NLLAP) certified laboratory for analysis of lead using U.S. EPA Method SW846 3050B/7420-M Flame Atomic Absorption (Flame AA).

How will the data be archived?

Analytical data will be archived by the laboratory. The Consultant will archive deliverables in its cloud-based company server for a minimum of three years per the US EPA Brownfields Coalition Assessment Grant.

Section 4. Project Schedule/Timeline

The anticipated start and completion dates are provided below.

Activities	Organization	Dates (MM/DD/YY)		Deliverable	Deliverable Due Date
		Anticipated Date(s) of Initiation	Anticipated Date of Completion		
Preparation of QAPP	BRS, Inc. for City of Memphis and Shelby County CRA	5/14/24	7/14/24	QAPP	7/21/24
Review of QAPP	EPA Region 4 BPO and Brownfields QA Officer	6/21/24	7/14/24	Approved QAPP by EPA Region BPO	7/21/24
Preparation of Health and Safety Plan	Consultant	Fall 2024- 2025	TBD	HASP	TBD
Preparation of QAPP Addendums	Consultant	Fall 2024- 2025	TBD	QAPP Addendums	TBD
Procurement of Equipment	EPA Region 4 BPO and Brownfields QA Officer	Fall 2024- 2025	TBD	N/A	TBD
Laboratory Request	Consultant	Fall 2024- 2025	TBD	N/A	
Field Reconnaissance/Access	Consultant	Fall 2024- 2025	TBD	N/A	
Collection of Field Samples	Consultant	Fall 2024- 2025	TBD	Filed Notes, Boring Logs	
Laboratory Package Received	Consultant	2024 - 2025	TBD	Lab Report	TBD
Validation of Laboratory Results	Consultant	2024 - 2025	TBD	Validated data Packages	TBD
Data Evaluation/ Preparation of Final Report	Consultant	2024 - 2025	TBD	Final Report	TBD

Section 5a. Sampling Methods and Locations

Matrix	**Sampling Location(s)**	**Depth (*units*)**	**Analytical Group**	**No. of Samples (*identify field duplicates*)**	**Sampling SOP Reference**	**Rationale for Sampling Location**
Soil	TBD	TBD	volatile and semivolatile organics, EPH, pesticides, PCBs, metals, asbestos	TBD	Field SOPs	TBD
Groundwater	TBD	TBD	volatile and semivolatile organics, pesticides, PCBs, metals, and Per- and Polyfluoroalkyl Substances (PFAS)	TBD	EPA Low-flow Sampling Guide	
Soil Vapor	TBD	TBD	Volatile organics	TBD	Field SOPs	TBD
Paint chips	TBD	TBD	Lead	TBD	Field SOPs	Observed potential lead-based paint
Building materials	TBD	TBD	Asbestos	TBD	OSHA, NESHAP, AHERA	Observed potential ACM

The following procedures will be performed during collection of soil samples:
1. Grab samples will be transferred as soon as possible into the appropriate laboratory supplied containers.
2. Sample jars will be labeled with the following information: project name, project number, location identification, sample depth interval, date and requested analysis. This information will also be recorded in the field logbook.
3. All laboratory samples will be stored in a cooler to maintain samples at 4oC.
4. Duplicate soil and groundwater samples for will be collected at a rate of 5 percent (%) per sample batch or one minimum per day, whichever is larger. Equipment blanks will be collected at a rate of 5% per sample batch or one minimum per day, whichever is smaller. (Insert Firm) will also provide the laboratory with sufficient aliquots of soil at a rate of 5% per sample batch or one minimum per day (whichever is larger) to serve as laboratory matrix spike/matrix spike duplicate

(MS/MSD) samples for site-specific matrix interference assessment. All sample spiking will be performed by the laboratory.