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Quality Assurance Project Plan

for

Site Investigation Reliable Tire Co 1115 Chestnut Street Block 1302, Lot 1 Camden, New Jersey, 08103

Prepared for:

Olivette Simpson, Executive Director Camden Redevelopment Agency The City of Camden 520 Market Street, Suite 1300 City Hall Camden, New Jersey

Cooperative Agreement No. BF 96286914; RLF 96236900-0

Submitted to:

Quality Assurance Officer US EPA Region 2

Prepared by:

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

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^a The SOPs and the QMP for Pace Analytical, which are protected files and cannot be included in this document, are provided at this link, https://spaces.hightail.com/space/tKeic7zIkq.

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Brownfields QAPP Template #1 - Title and Approval Page

Title: Reliable Tire Quality Assurance Project Plan (QAPP)
Project Name/Property Name: Former Reliable Tire site

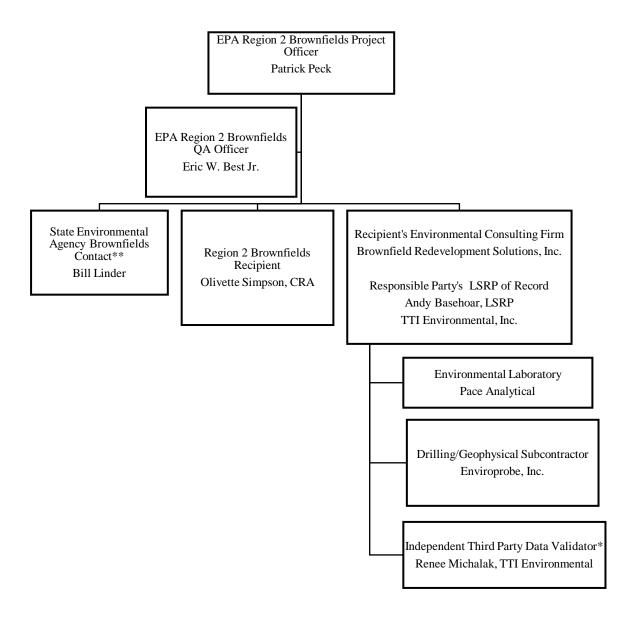
Property/Site Location: 1115 Chestnut Street, Block 1302, Lot 1, Camden, New Jersey

Revision Number: 1 Revision Date: 2/28/2024

Brownfields Cooperative Agreement Number: BF 96286914; RLF 96236900-0

Camden Redevelopment Agency (CRA)	
Brownfields Recipient	
Alicia Flammia, Environmental Scientist - BRS, Inc.	
PO Box 2293, Medford Lakes, NJ 08055	
856-964-6456 / aflammia@BRSInc.com	
Preparer's Name and Organizational Affiliation	
Preparer's Address, Telephone Number, and E-mail Address	SS
Shared	
10/2/2023	
Preparation Date (Day/Month/Year)	
	(A)
Brownfields Recipient Program Manager:	XY
Brownifelds Recipient Program Manager.	Signature
Olivetta Simmon Err Director	Signature
Olivette Simpson, Ex. Director OlSimpso@ci.camden.nj.us	3/19/2024
	3/17/2024
Printed Name/Organization/Date	
Environmental Consultant Quality Assurance Officer:	Rance Michalok
(QAO)	
1	Signature
Renee Michalak, Environmental Scientist / TTI Environmental	3/18/2024
Printed Name/Organization/Date	
EPA Region 2 Brownfields Project Officer:	
	Signature
Patrick Peck - USEPA Region II	
Printed Name/Organization/Date	

Brownfields QAPP Template #2a Project Organizational Chart



^{*}Data validation to be performed by third party – independent to project (can be within Environmental Consulting firm or subcontracted to a data validation firm).

^{**}As of May 7, 2012, with limited exceptions, all remediation in the state of New Jersey, without regard to when remediation was initiated, no longer proceed through the NJDEP Voluntary Cleanup Program but are to proceed under the supervision of a Licensed Site Remediation Professional (LSRP), without NJDEP pre-approval. The rules

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and regulations governing the LSRP oversight of remediation projects are provided in the New Jersey Site Remediation Reform Act, N.J.S.A. 58:10C-1 et seq. (SRRA).

Brownfields QAPP Template #2b Personnel Responsibilities

Name	Title	Telephone Number	Organizational Affiliation	Responsibilities ¹
Alicia Flammia	Environmental Scientist	856-964-6456	Brownfield Redevelopment Solutions, Inc. (BRS)	Oversight of Assessment and Remediation contractor scope for Brownfields Recipient
Andy Basehoar, LSRP	LSRP of Record, Project Manager	610-334-4414	TTI Environmental Inc.	Direct investigation activities, Review/approve activities, certify reports, close regulatory case
To Be Determined	Field Technician		TTI Environmental Inc.	Collection of soil samples
Olivette Simpson	Brownfields Recipient Program Manager	856-757-6891	Camden Redevelopment Agency	Program management, authorize project activities
Patrick Peck	EPA Brownfields Project Officer (BPO)		EPA Region 2	Ensure investigation is in compliance with QAPP and EPA regulation
Eric W. Best Jr.	EPA Brownfields Quality Assurance Officer (QAO)	732-321-4388	EPA Region 2	Approve QAPP for compliance with EPA Region 2 QA/QC policy
Alan Harvill	Project Manager II	615-773-9787	Pace Analytical	Coordinate analytical and field services
Renee Michalak	Third Party Data Validator ²	856- 964-6456	TTI Environmental Inc.	Data quality review

¹Include resumes as an appendix to the Site-Specific QAPP

 $^{^{2}}$ Data validation to be performed by third party – independent to project (can be within Environmental Consulting firm or subcontracted to a data validation firm).

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Brownfields QAPP Template #3a Problem Definition/Project Description

PROBLEM DEFINITION

The site consists of approximately 1.98 acres. The site is currently an unimproved lot covered with grass. The site formerly operated as the Camden Pottery Company, a pottery manufacturing operation, from approximately 1906 until 1964 and as Reliable Tire Company from 1964 until 1999. The site included vacant buildings from 1999 until 2011. A fire consumed the onsite buildings in June 2011, and the site has been vacant, unimproved land since 2011. A total of ten Areas of Concern (AOCs) were identified in the Preliminary Assessment; three require remediation and one requires further investigation and is the subject of this QAPP. Camden Redevelopment Agency (CRA) wishes to investigate AOC 1A through AOC 1E, which includes 2 unregulated underground storage tanks (USTs) and 3 regulated USTs to advance future redevelopment of the site.

PROJECT DESCRIPTION

Site Location

The site is located at 1115 Chestnut Street, Camden, Camden County, New Jersey. The site is identified by the City of Asbury Park Tax Assessor Block 1302, Lot 1, and contains approximately 1.98 acres in total land area.

The site is located in a mixed commercial, industrial, and residential area.

Site History

Review of the historical documentation indicates that the site formerly operated as the Camden Pottery Company, a pottery manufacturing operation, from approximately 1906 until 1964 and as Reliable Tire Company from 1964 until 1999. The site included vacant buildings from 1999 until 2011. A fire consumed the onsite buildings in June 2011, and the site has been vacant unimproved land since 2011.

TTI conducted Site Investigation activities during April 2021. Samples were collected surrounding five USTs that were identified during the geophysical survey (AOCs 1A-1E). No evidence of a release was detected in soil or groundwater sampled adjacent to the USTs. TTI recommended proper removal and closure of the USTs. Proposed investigation activities will include collection of soil samples from beneath the USTs upon their removal.

Project Description

CRA's environmental consultant, TTI, recommended further investigation for the AOC related to the USTs. TTI will conduct additional assessment of the USTs by collecting soil samples from underneath AOC 1A, 1B, and 1C. These areas are assumed to have historically contained No. 2 Heating oils. Soils from below the heating oil USTs shall be analyzed for Extractable Petroleum Hydrocarbons (EPH) Category 1 with contingent analysis for naphthalene and 2-methylnaphthalene if EPH is detected above 1,000 mg/kg. AOCs 1D and 1E contained unknown petroleum products. Soils from below UST located at AOC 1D and 1E shall be analyzed for EPH

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Category 2 with contingent analysis for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenols (PCBs), and target analyte list (TAL) metals if EPH is detected.

TTI's LSRP and designated environmental associates shall conduct oversight of UST removal activities. Documentation of UST closures shall be summarized in a UST Closure Report for submission to NJDEP. The reporting will include documentation for tank disposal, waste disposal manifests, and clean fill receipts and data from samples collected.

Remediation is planned for AOC 3 (potential historic fill material), AOC 4 (potential buried debris material), and AOC 9 (former coal pile) for future redevelopment of the site. No sampling will occur during remediation of AOCs 3, 4, and 9 as impacts to soil have been fully delineated in accordance with NJDEP regulations. TTI's LSRP and designated environmental associates shall conduct oversight of the planned remediation. Field oversight shall be conducted to verify impacted soil is excavated to the clean delineation points and document disposal of impacted soils. TTI will require manifests and tonnage for soil disposal and clean fill receipts from the selected remediation contractor. TTI shall prepare a Remedial Action Report (RAR) documenting completion of remediation for all AOCs at the site in support of an Entire Site Response Action Outcome (RAO).

PROJECT DECISION STATEMENT

The goal for soil is to confirm the absence of contamination underneath the USTs and if confirmed, close out the tanks and the associated AOCs.

If the above goals are not met, then additional investigation will be proposed.

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Brownfields QAPP Template #3b Project Quality Objectives/Systematic Planning Process Statements

Overall project objectives include:

The goal for soil is to determine if contaminants of concern are below the NJDEP Residential/Non-Residential Soil Remediation Standards at the site. At a minimum, samples will be collected and evaluated in accordance with the following documents:

- NJ Technical Requirements for Site Remediation (NJAC 7:26E)
- NJ Remediation Standards (NJAC 7:26D)
- NJDEP Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria
- NJDEP Data Quality Assessment and Data Usability Evaluation Technical Guidance
- NJDEP Technical Guidance for Investigation of Underground Storage Tank Systems

Who will use the data?

Data will be used by CRA and TTI

What will the data be used for?

Analytical data for the soil samples will be evaluated to assess the compounds present in the UST contents relative to those detected in soil. Soil will be evaluated for the presence of regulated compounds above applicable NJDEP standards:

- NJ Residential/Non-Residential Soil Remediation Standards for the Ingestion-Dermal;
- NJ Residential/Non-Residential Soil Remediation Standards for Inhalation; and
- NJ Soil Remediation Standards Migration to Groundwater Exposure Pathways.

What types of data are needed?

- Laboratory Data
 - o TCL VOCs
 - o TCL SVOCs
 - o PCBs
 - o EPH
 - o Naphthalene
 - o 2-methylnaphthalene
- Field screening
 - o Photoionization Detector (PID)
 - Visual observations
 - Olfactory observations

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• Sampling techniques – per NJDEP Field Sampling Procedures Manual

How "good" do the data need to be in order to support the environmental decision?

The data will be provided in a Reduced Laboratory Data Deliverable meeting all requirements of NJAC 7:26E. Data usability will be performed to ensure that data quality objectives are met and data can reliably be compared to the NJDEP SRS. 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. See Template 5d of this QAPP.

How much data are needed?

Enough data must be collected to determine if additional investigation is required, or no further investigation is needed. It's anticipated that 25 soil samples, will initially be analyzed in accordance with the analytical requirements outlined above ("What types of data are needed?").

Where, when, and how should the data be collected/generated?

Soil sample locations will be collected beneath the tanks, the locations of which are included in **Attachment 1**. It's anticipated that sampling will be undertaken in early 2024. Upon tank removal, samples will be collected from the tank grave base via hand collection.

Who will collect and generate the data?

TTI will collect soil samples and generate field data. Pace Analytical will analyze samples.

How will the data be reported?

TTI will summarize and present the data as components of the final reports. All data will be reported in laboratory reports generated by Pace Analytical and tables generated by TTI Environmental. Electronic data deliverables shall also be generated by Pace Analytical and submitted to NJDEP.

How will the data be archived?

Data will be archived on Pace Analytical's online data servers, on TTI Environmental's servers, in electronic deliverable to CRA, and NJDEP's records.

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Brownfields QAPP Template #4 Project Schedule/Timeline

		Dates (M	M/DD/YY)		Deliverable Due Date	
Activities	Organization	Anticipated Date(s) of Initiation	Anticipated Date of Completion	Deliverable		
Preparation of QAPP	BRS, Inc	September 2023	October 2023	QAPP	February 2024	
Review of QAPP	EPA Region 2: Patrick Peck, BPO, and QAO	October 2023	January 2024	Approved QAPP by EPA Region BPO	February 2024	
Preparation of Health and Safety Plan	TTI	October 2023	November 2023	HASP	November 2023	
Procurement of Equipment	TTI	January 2024	February 2024	N/A	N/A	
Laboratory Request	TTI	January 2024	February 2024	N/A	N/A	
Public Utility Markout	TTI	January 2024	January 2024	N/A	N/A	
Collection of Field Samples	TTI	February 2024	February 2024	N/A	N/A	
Laboratory Package Received	TTI	March 2024	March 2024	Unvalidated data package	March 2024	
Data Usability Analysis	TTI	March 2024	April 2024	Validated data Packages / Data Quality Assessment	April 2024	
Data Evaluation/ Preparation of Site Investigation Report	TTI	April 2024	April 2024	Final Report	April 2024	

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

TBD = To Be Determined

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Brownfields QAPP Template #5a Sampling Methods and Locations

Matrix	Sampling Location(s)	Depth ¹ (units)	Analytical Group	No. of Samples (identify field duplicates)	Sampling SOP Reference	Rationale for Sampling Location
Soil	AOC-1A	8-10'	EPH Cat. 1, Nap, PAHs	5	N.J.A.C 7:14B and N.J.A.C. 7:26E	Evaluation of potential contamination associated with heating oil UST (AOC/REC-1)
Soil	AOC-1B	8-10'	EPH Cat. 1, Nap, PAHs	5	N.J.A.C 7:14B and N.J.A.C. 7:26E	Evaluation of potential contamination associated with heating oil UST (AOC/REC-1
Soil	AOC-1C	8-10'	EPH Cat. 1, Nap, PAHs	5	N.J.A.C 7:14B and N.J.A.C. 7:26E	Evaluation of potential contamination associated with heating oil UST (AOC/REC-1
Soil	AOC-1D	8-10'	EPH Cat. 2, VOCS, SVOCs, PCBs, TAL	5 + DUP	N.J.A.C 7:14B and N.J.A.C. 7:26E	Evaluation of potential contamination associated with unknown UST (AOC/REC-1
Soil	AOC-1E	8-10'	EPH Cat. 2, VOCS, SVOCs, PCBs, TAL	5	N.J.A.C 7:14B and N.J.A.C. 7:26E	Evaluation of potential contamination associated with unknown UST (AOC/REC-1

Depths shown are primary. Other depths may be selected based on field observations.
 Additional duplicates will be collected as necessary to ensure 5% frequency.
 FSMP = Field Sampling Procedures Manual
 N/A = Not Applicable

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Brownfields QAPP Template #5b Analytical Methods and Requirements

All analytical services will be performed by:

Pace Analytical 12065 Lebanon Road Mt. Juliet, TN 37122

Matrix	Analytical Group	Concentration Level ¹	Analytical & Preparation Method/ SOP Reference 2	Sample Volume	Containers (number, size, type)	Preservation Requirements (chemical, temperature, light protected)	Maximum Holding Time (preparation/ analysis)
Soil	VOCs	Low	SW 846 8260D	120 ml	3x 40 ml vials	Cool to ≤6° C	14 Days
Soil	SVOCs	Low	SW 846 8270E	250 ml	250 ml jar	Cool to ≤6° C	7 days to extract/ 40 days to analyze
Soil	PCBs	Low	SW 846- 8082A	250 ml	250 ml jar	Cool to ≤6° C	1 year to extract/40 days to analyze
Soil	Metals	Low	SW 846 6010D	60 ml	60 ml jar	Cool to ≤6° C	6 months
Soil	ЕРН	High	SW 846 8270E	4 oz	4 oz amber jar	Cool to ≤6° C	14 days to extract/ 40 days to analyze

¹Concentration Level refers to Trace; Low; Medium; High of the sample.

Copies of laboratory certificates for the specific analyses pertaining to this project are included as **Attachment 2.**

² See Template #6 for laboratory Analytical SOPs for each Method listed above.

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Brownfields QAPP Template #5c Reference Limits and Evaluation Table

Abbreviations used in the tables included as **Attachment 3** are provided below:

NJDEP – NJ Department of Environmental Protection

RL – Reporting Limit

MDL – Method Detection Limit

mg/kg – milligram per kilogram

ug/L – microgram per liter

"-" – Not Applicable / No Standard

NJDEP SRS - NJDEP Soil Remediation Standards

Migration to GW SRS = Migration to Groundwater

Inhal-NonRes SRS = Non Residential Inhalation

Inhal- Res SRS = Residential Inhalation

Ingestion-Res SRS = Residential Ingestion/Dermal

Ingestion- NonRes SRS = Non Residential Ingestion/Dermal

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Brownfields QAPP Template #5d Analytical Laboratory Sensitivity and Project Criteria

Laboratory Standard Operating Procedures are provided in **Attachment 4**.

Matrix Soil Analytical Group Vo Concentration Leve	-			
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/Laboratory SOP 0100	Precision	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				
Analytical Group Ser	ni-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/Laboratory SOP 081	Precision	RPD ≤50% (analyte specific)	Laboratory Control Sample (LCS) Duplicate	(A)
	Precision	RPD ≤50% (analyte specific)	Matrix Spike (MS) Duplicate	(A), (S)

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Precision	RPD ≤50% (analyte	Field Duplicates	(A), (S)
	specific)		
	Generally, 40-140%R		
	for		
Accuracy/Bias	Base Neutrals; 30-	LCS	(A)
	130% for Acids		
	(analyte specific)		
	Generally, 40-140%R		
	for		
Accuracy/Precision	Base Neutrals; 30-	MS	(A), (S)
-	130% for Acids		
	(analyte specific)		
Accuracy/Extraction	30-130%R	Surrogates	(A)
Efficiency			
Accuracy/Bias	No Target	Method Blank &	(A), (S)
(Contamination)	Compounds	Field Equipment	, , , , ,
,	>Reporting Limit	Blank	
	(RL)		
Sensitivity	Level of Detection	LOD Sample (spiked	(A)
	(LOD) Verification	at 1 to 4 times the	` /
	, , , , , , , , , , , , , , , , , , , ,	detection limit)	

Matrix Soil	
Analytical Group PCBs	
Concentration Level Low/Medium	

Concentration Level	Low/Mealum			
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/Laboratory SOP 077	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)

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Matrix Soil	
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 /Laboratory SOP 212,213,215	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)

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Brownfields QAPP Template #5e Secondary Data Criteria and Limitations Table

Secondary Data	Data Source (Originating Organization, Report Title, and Date)	Data Generator(s) (Originating Org., Data Types, Data Generation/ Collection Dates)	How Data Will Be Used	Limitations on Data Use
Previous Investigation Sampling Results	TTI, Site/Remedial Investigation Report, Camden Redevelopment	Soil and ground water sampling conducted in 2022.	Understand the contaminants of concern and whether impacts	Results are a year old
	Agency. March 24,2023		remain.	

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Brownfields QAPP Template #6 Project Specific Method and Standard Operating Procedures (SOPs) Reference Table

Copies of the Laboratory and Field Sampling SOPs are provided as Attachment 4.

Analytical Method Reference

1a	Volatile Organic Compounds by GC/MS (EPA8260B,8260C, 624, 624.1 And SM6200B)
	Determination of Metals and Trace Elements in Various Matrices by ICP-AES (EPA Methods 6010B,
	6010C, 6010D, [ICP-OES], and 200.7) Including Hardness (EPA Methods 200.7 and 6010B/C/D and
2a	SM2340 B)
3a	Semi-Volatile Organic Compounds by GC/MS (EPA Methods 8270C, 8270D 625, 625.1 and SM6410B)
	Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Soil, Water & Oil) (EPA Methods 608,
4a	608.3, 8082 & 8082 A) SM 6431B)
	Methods for the Determination of Extractable Petroleum Hydrocarbons by GC/MS (EPH)(Based on MA
5a	EPH for NC, LA, MT, CT, NJ, and WA

Analytical Laboratory SOPs

	VOCs by EPA 624, 624.1, SW-846 8260B, C, D SM 6200 B Document No. ENV-SOP-MTJL-0100, date
1b	May 15, 2023
	Metals EPA 200.7, SW-846 6010B, C, D, Document No. ENV-SOP-MTJL-0215, Document ENV-SOP-
2b	MTJL-0215 v12, date December 6, 2022
	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, Document No. ENV-SOP-
3b	MTJL-0081 date January 20,2022
	Polychlorinated Biphenyls (PCBS) by Gas Chromatography (Soil, Water & Oil) (EPA Methods 608, 8082,
4b	& 8082A, SM 6431B), Document No. ENV-SOP-MTJL-0077, date January 8, 2021
	Methods for the Determination of Extractable Petroleum Hydrocarbons by GC/MS (EPH)(Based on MA
5b	EPH for NC, LA, MT, CT, NJ, and WA), Document No. ENV-SOP-MTJL-0090, date July 7, 2020

Field Sampling SOPs

1c	1c. NJDEP Field Sampling Procedures Manual, August 2005, Last revision 2022
2c	Soil Sampling SOP, TTI October 2023

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Brownfields QAPP Template #7 Field Equipment Calibration, Maintenance, Testing, and Inspection

The following table includes the field instrumentation anticipated for use at this site.

Field Equipment	Calibration Activity	Maintenance Activity	Testing/ Inspection Activity	Frequency	Acceptance Criteria	Corrective Action	SOP Reference
RAE Systems MiniRAE PID	Zero Gas and Span Gas	Recharge Battery Clean exterior of gross contamination; Replace moisture/debris trap Clean lamp	Bump test with span gas	Daily or if calibration drift is suspected	±3 ppm of cal gasses	Re-calibrate	Manufacturer manual

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Brownfields QAPP Template #8 Analytical Laboratory Instrument and Equipment Maintenance, Testing, and Inspection

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 Pace Analytical SOP Attachment 6	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory GC/MS Technician	Pace Analytical SOP ENV- SOP-MTJL- 0100 v08in Attachment 3
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 Pace Analytical SOP Attachment 6	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory GC/MS Technician	Pace Analytical SOP ENV- SOP-MTJL- 0081 v05in Attachment 3
GC/MS (EPH)	As per instrument manufacturer's recommendations	As per instrument manufacturer's recommendations; check connections	As per instrument manufacturer's recommendations	Acceptable recalibration; see Pace Analytical SOP Attachment 6	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory GC/MS Technician	Pace Analytical SOP ENV- SOP-MTJL- 0090 v06 in Attachment 3
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 Pace Analytical SOP Attachment 6	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory GC/ECD Technician	Pace Analytical SOP ENV- SOP-MTJL- 0077 v03in Attachment 3
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 Pace Analytical SOP Attachment 6	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory ICP-SS Technician	Pace Analytical SOP ENV- SOP-MTJL- 0215 v11in Attachment 3
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 Pace Analytical SOP Attachment 6	Inspect the system, correct problem, recalibrate and/or reanalyze samples.	Laboratory Mercury Cold Vapor Technician	Pace Analytical SOP ENV- SOP-MTJL- 0212 v07 & SOP ENV- SOP-MTJL- 0213 v10 in Attachment 3

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Analytical Laboratory Instrument Calibration

Instrument/Equipment	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action	Responsible Person	Analytical SOP Reference
GC/MS (VOCs + 30 TICS) (SVOCs + 30 TICS)	See SOP	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. Calibration verification: daily, not to exceed 12 hours.	≤20%	GC/MS: inspect the system, correct problem, re- calibrate.	Laboratory GC/MS Technician	Pace Analytical SOP ENV- SOP-MTJL- 0100 v08 and SOP ENV-SOP- MTJL-0081 v05 in Attachment 3
GC/ECD (PCBs)	See SOP	GC/ECD Initial calibration: Whenever major instrument maintenance or modification is performed (e.g., column 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.	<20%	GC/ECD: inspect the system, correct problem, re- calibrate, re-analyze samples.	Laboratory GC/ECD Technician	Pace Analytical SOP ENV- SOP-MTJL- 0077 v03in Attachment 3
ICP/ICP-SS (Metals)	See SOP	ICP/ICP-SS Initial calibration: Daily, prior to the analysis of samples. Continuing calibration: Daily after calibration, every ten samples and at the end of the analytical run.	≤10%	ICP/ICP- SS: inspect the system, correct problem, re- calibrate, re-analyze samples.	Laboratory ICP-SS Technician	Pace Analytical SOP ENV- SOP-MTJL- 0215 v11in Attachment 3
CV (Mercury)	See SOP	CV Initial calibration: Daily, prior to the analysis of samples. Continuing calibration: Daily after calibration, every ten samples and at the end of the analytical run.	≤10%	CV: inspect the system, correct problem, re- calibrate, re- analyze samples.	Laboratory Mercury Cold Vapor Technician	Pace Analytical SOP ENV- SOP-MTJL- 0212 v07 & SOP ENV- SOP-MTJL- 0213 v10 in Attachment 3

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Brownfields QAPP Template #9a Sample Handling System

SAMPLE COLLECTION, PACKAGING, AND SHIPMENT

Sample Collection (Personnel/Organization): TTI Environmental Inc.

Sample Packaging (Personnel/Organization): TTI Environmental Inc.

Coordination of Shipment (Personnel/Organization): TTI Environmental Inc.

Type of Shipment/Carrier: Pace Analytical courier

SAMPLE RECEIPT AND ANALYSIS

Sample Receipt (Personnel/Organization): Pace Analytical

Sample Custody and Storage (Personnel/Organization): Pace Analytical

Sample Preparation (Personnel/Organization): Pace Analytical

Sample Determinative Analysis (Personnel/Organization): Pace Analytical

SAMPLE ARCHIVING

Field Sample Storage (No. of days from sample collection): Two days total between date of sample shipment and receipt in the laboratory.

Sample Extract/Digestate Storage (No. of days from extraction/digestion): As per analytical methodology

SAMPLE DISPOSAL

Personnel/Organization: Pace Analytical

Number of Days from Analysis: Until analysis and QA/QC checks are completed; as per analytical methodology

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Brownfields QAPP Template #9b Sample Custody Requirements

Sample Identification Procedures:

Samples shall be labeled by AOC number, boring number and depth of sample collection.

Example: AOC 1 – 1 @ 5-5.5

Field Sample Custody/Tracking Procedures (sample collection, packaging, shipment, and delivery to laboratory): Following collection, sample jars will be cleaned, labeled, logged on the chain of custody, and packed into a cooler with ice. The cooler will be picked up by the courier. If samples are retained overnight before delivery to the lab, they will remain in the secure possession of the sampler. Any change in possession will be documented on the chain of custody. Sampling information shall be recorded in field books to include sample identification, sample depth and sample collection time. Example: AOC 1 - 1 @ 5-5.5 collected at 900.

Laboratory Sample Custody/Tracking Procedures (receipt of samples, archiving, and disposal): Samples shall be logged in to the laboratory and given a lab specific tracking number. Example: L123456-1

Chain-of-Custody Procedures: All samples (sample name, time of sample collection, date, time and sample depth) shall be logged on chain of custody documents. All samples shall be handled and transferred from sampling technicians to laboratory personnel under signature of release and acceptance of samples including date and time of release and acceptance of samples.

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Brownfields QAPP Template #10 Analytical Laboratory Quality Control Summary

QC samples will be collected in accordance with the NJDEP Field Sampling Procedures Manual and Data of Known Quality Protocols Technical Guidance.

Matrix	Soil
Analytical Group	Volatiles
Concentration Level	Reported as ug/kg
Sampling SOP(s)	Soil Sampling, October 2023
Analytical Method/SOP Reference	EPA Method SW 846 8260D / See Template #6
Sampler's Name	TBD
Field Sampling Organization	TTI
Analytical Organization	Pace
No. of Sample Locations	10

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)
BFB	Beginning of analytical shift	Mass 50: 15-40% of mass 95; Mass 75: 30-60% of mass 95 Mass 95: Base peak, 100% relative abundance Mass 96: 5-9% of mass 95 Mass 173: < 2% of mass 174 Mass 174: > 50% of mass 95 175: 5-9% of mass 174 Mass 176: >95% and <101% of mass 174 Mass 177: 5-9% of mass 174 Mass 177: 5-9% of mass 174	Re-tune MS & re- analyze	Laboratory Manager, GC/MS Analyst	Instrument Performance Check
ICAL	As-needed	<20 % RSD	Re-prepare standards and re- calibrate	Laboratory GC/MS Analyst	Accuracy
ICV	Every initial calibration	<u>≤</u> 30% D	Re-analyze affected sample, re-prepare ICV	Laboratory GC/MS Analyst	Accuracy/Bias
CCV	Every 12 hours or 1 per ≤ 20 samples	≤20% D	Analyze second CCV, auto-tuning, routine system cleaning and routine system maintenance.	Laboratory GC/MS Analyst	Accuracy/ Bias (ICV Verification)

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)
Method Blank	Every 12 hours or 1 per < 20 samples	<rl< td=""><td>Re-analyze affected sample, qualify analytical data</td><td>Lab Analyst</td><td>Accuracy/ Bias (Laboratory Contamination)</td></rl<>	Re-analyze affected sample, qualify analytical data	Lab Analyst	Accuracy/ Bias (Laboratory Contamination)
Blank Spike	1 per < 20 samples	Average Recovery 70- 130% for Target Compounds	Re-analyze Blank Spike & associated samples or flag outliers	Laboratory GC/MS Analyst	Accuracy/Bias
Matrix Spike	1 per < 20 samples	Average Recovery 70- 130% for Target Compounds	Flag Outliers	Laboratory GC/MS Analyst	Accuracy/ Bias/ (Matrix Interference)
Matrix Spike Duplicate	1 per < 20 samples	<30% RPD	Flag outliers	Laboratory GC/MS Analyst	Precision
Surrogate	Added to all samples prior to extraction.	Dibromofluoromethane (70-130%) 1,2-Dichloroethane-d4 (70-130%) Toluene-d8 (70-130%) 4-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	Accuracy/ Bias
Internal Standard	Added to all samples prior to analysis.	IS response is within 50 - 200% of the response of the same IS in the midpoint ICAL standard (or average of ICAL) or most recent CCV	Check calculations and/or internal standard solutions; check instrument performance, correct any problems and reanalyze the sample to confirm	Laboratory GC/MS Analyst	Precision
Trip Blank	1 per shipment	<rl< td=""><td>Verify TB results (reanalyze TB), qualify data as needed</td><td>Sampling Technician and Lab Analyst</td><td>Accuracy/ Bias (Field Contamination)</td></rl<>	Verify TB results (reanalyze TB), qualify data as needed	Sampling Technician and Lab Analyst	Accuracy/ Bias (Field Contamination)
Field Duplicate (Single sample)	1 per < 20 samples	RPD ≤ 50% for solids w/results > 2x RL; Professional judgment for results < 2xRL	Flag outliers	Sampling Technician and Lab Analyst	Precision

Matrix	Soils
Analytical Group	Semi-volatiles
Concentration Level	Reported as ug/kg
Sampling SOP(s)	Soil Sampling, October 2023

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Analytical Method/SOP Reference	EPA Method SW 846 8270E / See Template #6
Sampler's Name	TBD
Field Sampling Organization	TTI
Analytical Organization	Pace
No. of Sample Locations	10

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)
DFTPP	Every 12 hours	Mass 51: 30-60 of mass 198 Mass 68: <2 % of mass 69 Mass 70: <2 % of mass 69 Mass 127: 40-60 % of mass 198 Mass 197: <1 % of mass 198 Mass 198: Base peak, 100 % relative abundance Mass 199: 5-9 % of mass 198 Mass 275: 10-30 % of mass 198 Mass 365: >1 % of mass 198 Mass 441: Present but less than mass 443 Mass 442: >40 % of mass 198 Mass 443: 17-23 % of mass	Re-tune MS & re- analyze	Laboratory Manager, GC/MS Analyst	Instrument Performance Check
ICAL	Prior to sample analysis & as needed	≤20 % RSD	Re-calibrate	Laboratory GC/MS Analyst	Accuracy
ICV	After ICAL & prior to sample analysis	≤30% D	Re-analyze affected sample, re-prepare ICV	Laboratory GC/MS Analyst	Accuracy/Bias
CCV	Every 12 hours or 1 per < 20 samples	≤20% D	Analyze second CCV, auto-tuning, routine system cleaning and routine system maintenance.	Laboratory GC/MS Analyst	Accuracy/ Bias (ICV Verification)
Method Blank	Every 12 hours or 1 per < 20 samples	<rl< td=""><td>Re-analyze affected sample, qualify analytical data</td><td>Lab Analyst</td><td>Accuracy/ Bias (Laboratory Contamination)</td></rl<>	Re-analyze affected sample, qualify analytical data	Lab Analyst	Accuracy/ Bias (Laboratory Contamination)
Blank Spike	1 per < 20 samples	Average Recovery 70- 130% for Target Compounds	Re-analyze Blank Spike & associated samples or flag outliers	Laboratory GC/MS Analyst	Accuracy/Bias

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)
Matrix Spike	1 per < 20 samples	Average Recovery 70- 130% for Target Compounds	Flag Outliers	Laboratory GC/MS Analyst	Accuracy/ Bias/ (Matrix Interference)
Matrix Spike Duplicate	1 per < 20 samples	<30% RPD	Flag outliers	Laboratory GC/MS Analyst	Precision
Surrogate	Added to all samples prior to extraction.	Solid Matrices: 30-130% for all surrogates 15-110% for acid surrogates (2-Fluorophenol; Phenold5; 2,4,6-Tribromophenol)	Check calculations and/or surrogate solutions; check instrument performance, correct any problems and reanalyze the sample to confirm.	Laboratory GC/MS Analyst	Accuracy/ Bias
Internal Standard	Added to all samples prior to analysis.	IS response is within 50 - 200% of the response of the same IS in the midpoint ICAL standard (or average of ICAL) or most recent CCV	Check calculations and/or internal standard solutions; check instrument performance, correct any problems and reanalyze the sample to confirm	Laboratory GC/MS Analyst	Precision
Field Duplicate (Single sample)	1 per ≤20 samples	RPD ≤ 50% for solids w/results > 2x RL; Professional judgment for results < 2xRL	Flag outliers	Sampling Technician and Lab Analyst	Precision

Matrix	Solids
Analytical Group	PCBs
Concentration Level	Reported as ug/kg
Sampling SOP(s)	Soil Sampling, October 2023
Analytical Method/SOP Reference	EPA Method SW 846 8082A / See Template #6
Sampler's Name	TBD
Field Sampling Organization	TTI
Analytical Organization	Pace
No. of Sample Locations	10

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)
ICAL	Prior to sample analysis & as needed	<20 % RSD	Re-calibrate	Lab Analyst	Accuracy
ICV	After ICAL & prior to sample analysis	≤20% D	Re-eanalyze affected sample, re-prepare ICV	Lab Analyst	Accuracy/Bias
CCV	Every 12 hours, 1 per ≤10 samples, at end of analysis sequence	≤20% D	Analyze second CCV, auto-tuning, routine system cleaning and routine system maintenance.	Lab Analyst	Accuracy/ Bias (ICV Verification)
Instrument Blank	After each CCV	<mdl< td=""><td>Identify & correct source of contamination, re- analyze</td><td>Lab Analyst</td><td>Accuracy (Cross Contamination)</td></mdl<>	Identify & correct source of contamination, re- analyze	Lab Analyst	Accuracy (Cross Contamination)
Method Blank	1 per ≤ 20 samples	<rl< td=""><td>Re-analyze affected sample, qualify analytical data</td><td>Lab Analyst</td><td>Accuracy/ Bias (Laboratory Contamination)</td></rl<>	Re-analyze affected sample, qualify analytical data	Lab Analyst	Accuracy/ Bias (Laboratory Contamination)
Blank Spike	1 per < 20 samples	40-140% Recovery	Re-analyze Blank Spike & associated samples or flag outliers	Lab Analyst	Accuracy/Bias
Matrix Spike	1 per < 20 samples	40-140% Recovery RPD < 30% for Solids	Flag Outliers	Lab Analyst	Accuracy/ Bias/ (Matrix Interference)
Matrix Spike Duplicate	1 per < 20 samples	40-140% Recovery RPD < 30% for Solids	Flag outliers	Lab Analyst	Precision
Surrogate	Added to all samples prior to extraction.	30-150% Recovery TCMX DCB	Check calculations and/or surrogate solutions; check instrument performance, correct any problems and reanalyze the sample to confirm.	Lab Analyst	Accuracy/ Bias
Field Duplicate (Single sample)	1 per ≤ 20 samples	RPD ≤50% for solids w/results > 2x RL; Professional judgment for results < 2xRL	Flag outliers	Sampling Technician and Lab Analyst	Precision

Matrix	Soils
Analytical Group	Metals

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Concentration Level	Reported as mg/kg
Sampling SOP(s)	Soil Sampling, October 2023
Analytical Method/SOP Reference	EPA Method SW 846 6010D / See Template #6
Sampler's Name	TBD
Field Sampling Organization	TTI
Analytical Organization	Pace
No. of Sample Locations	10

Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)
LCR	Daily, after calibration	Within 10% of true value	N/A	Lab Analyst	Accuracy
ICV	Daily, after calibration	90-110% Recovery; replicates exceeding 5x RL must have RSD < 5%	Re-analyze; Re-calibrate & re- analyze; Suspend all analysis until ICV meets criteria	Lab Analyst	Accuracy/Bias
ICB	After ICV	ICB < ½ RL (LLOQ)	Re-analyze; Re-calibrate & re- analyze	Lab Analyst	Accuracy
CCV	1 per < 10 samples, at end of analysis sequence	90-110% Recovery; replicates exceeding 5x RL must have RSD < 5%; 10% RE	Re-analyze; Re-calibrate & re- analyze	Lab Analyst	Accuracy (ICV Verification)
ССВ	After CCV	CCB < RL (LLOQ)	Re-analyze; Re-calibrate & re- analyze	Lab Analyst	Sensitivity
ICSA- ICSAB	Daily after calibration; Beginning of each analytical run	ICSA & ICSB: 80-120% recovery ICSA: non-spiked analytes < absolute value of RL	Re-analyze; adjust interference/ background correction/ linear ranges; re-calibrate & re-analyze	Lab Analyst	Accuracy
LLCCV	Beginning of each analytical batch	80-120% Recovery; 20% RE	Re-analyze; Re- calibrate & re- analyze; Suspend all analysis until LLICV meets criteria unless all results > 10x RL	Lab Analyst	Sensitivity
Method Blank	1 per < 20 samples	MB < ½ RL (LLOQ)	Re-analyze; Re- digest & re- analyze unless all detected results > 10x MB level	Lab Analyst	Accuracy & Sensitivity (Laboratory Contamination)

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Quality Control (QC) Sample:	Frequency/ Number	Method/SOP QC Acceptance Limits	Corrective Action	Person(s) Responsible for Corrective Action	Data Quality Indicator (DQI)
Blank Spike	1 per < 20 samples	80-120% Recovery	Re-analyze; Re- digest & re- analyze including all samples in batch	Lab Analyst	Accuracy/Bias
Matrix Spike	1 per < 20 samples	75-125% Recovery	Flag Outliers	Lab Analyst	Accuracy/ Bias/ (Matrix Interference)
Matrix Spike Duplicate	1 per < 20 samples	RPD ≤ 20%	Flag outliers	Lab Analyst	Precision
Field Duplicate (Single sample)	1 per < 20 samples	Soil/Sediment: Results ≥ 5xRL: RPD ≤ 50%; Results < 5xRL: professional judgment	Flag outliers	Sampling Technician and Lab Analyst	Precision

Brownfields QAPP Template #11a Data Management and Documentation

The following table describes the documentation that will be generated for the project, and the data management procedures that will be used in handling that information.

Field Sample Collection Documents and Records	Analytical Laboratory Documents and Records	Data Assessment Documents and Records	Project File
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 Site and field logbooks Boring Logs Chain-of-Custody (COC) forms Field Data Sheets 	 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 Laboratory analytical data package 	 Data validation reports Field inspection checklist(s) Laboratory Audit checklist (if performed) Review forms for electronic entry of data into database Corrective action documentation 	TTI's project file shall be stored electronically for a period of at least 5 years. • Lab timeline as to how long they will maintain their data is provided in Pace Analytical's Quality Management Planb
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^b https://spaces.hightail.com/space/tKeic7zIkq

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Brownfields QAPP Template #11b Project Reports

The table below lists the reports that will be generated during and following this work.

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)
Laboratory	3 weeks following each	TBD	TTI QA Manager	BRS
Deliverables	sampling event			
Data Validation	Once following receipt	TBD	BRS, Inc.	TTI
Report	of all lab data			
Data Usability	Once following receipt	TBD	TTI	CRA, USEPA Region
Assessment	of data validation report			II BPO, CRA
Final or interim Site	Once at the completion	TBD	TTI	CRA, USEPA Region
Investigation Report	of the investigation			II BPO, CRA

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Brownfields QAPP Template #12a Planned Project Assessments Table

Project Assessments are not planned for this project.

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Brownfields QAPP Template #12b Assessment Findings and Corrective Action Responses

Assessments and corrective action responses are not planned for this project.

Brownfields QAPP Template #13a Project Data Verification Process (Step I) $^{\rm 1}$

Verification Input	Description	Internal/ External ²	Responsible for Verification (Name, Organization)
Methods (sampling and analytical)	TTI Project Manager shall discuss in a kickoff meeting the purpose of sample locations and the analytes to be sampled for. This shall be done prior to all field events. The Project Manager shall discuss all QC samples to the field prior to sampling events.	I	Andrew Basehoar, TTI Environmental
Reporting Forms	Any and all forms required to be submitted shall be reviewed by TTI Project Manager for accuracy and completeness	I	Andrew Basehoar, TTI Environmental
Sampling Plans	Shall be completed prior to sampling events and reviewed by the Project Manager. Upon return from sampling, the Project Manager shall update all maps for accuracy. Names and identifications of the samples shall be relayed from the project manager to all field personnel.	I	Andrew Basehoar, TTI Environmental
Site/Field Logbooks	Field notes will be prepared daily and will be complete, appropriate, legible and pertinent. Upon completion of field work, logbook entries will be scanned and placed in the project electronic files.	I	TTI Environmental
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	TTI Environmental
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	TTI Environmental
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	BRS – Alicia Flammia
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	Andrew Basehoar, TTI Environmental
Electronic Data Deliverables	Review the data and add all pertinent information to the data deliverable package (as necessary) to be submitted.	I	Renee Michalak, TTI Environmental
Site Investigation Report	TTI shall prepare a Site Investigation Report, which includes the findings and recommendations for further action, as necessary	I	Andrew Basehoar, TTI Environmental

¹Step I – Completeness Check

²Internal or External is in relation to the data generator.

Brownfields QAPP Template #13b Project Data Validation Process (Steps IIa and IIb) ¹

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.	Andrew Basehoar, TTI Environmental
IIb	SOPs	Determine potential impacts from noted/approved deviations, in regard to PQOs.	Andrew Basehoar, TTI Environmental
IIa	Chains of custody	Examine COC forms against QAPP and laboratory contract requirements (e.g., analytical methods, sample identification, etc.).	Andrew Basehoar, TTI Environmental
Па	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.).	Andrew Basehoar, TTI Environmental Renee Michalak, TTI Environmental
IIb	Laboratory data package	Review the laboratory data and confirm all non-conformance issues. Determine if the non-conformance issues impact the validity of the data.	Andrew Basehoar, TTI Environmental Renee Michalak, TTI Environmental
IIa	Electronic Data Deliverables	Review all laboratory data deliverables and submit as necessary. Confirm all results are consistent with those in laboratory reports.	Renee Michalak, TTI Environmental
IIb	Field duplicates	Compare results of field duplicate (or replicate) analyses with RPD criteria	Andrew Basehoar, TTI Environmental Renee Michalak, TTI Environmental
IIa	Sampling Plans	Compare field locations with the sampling plan. Ensure that any deviations from the sampling plan are representative of the AOC being inspected.	Andrew Basehoar, TTI Environmental
IIa	Field Book	Ensure that all field books are stored within the project folder and are separate from other projects. Ensure that all field books are accurate to field conditions.	Andrew Basehoar, TTI Environmental
IIa/IIb	Reporting Forms/ Site Investigation Report	After review and validation of the data, preparation of the Site Investigation Report and associated forms summarizing the data. Review the report along with the data to confirm that the report is accurate to the data presented.	Andrew Basehoar, TTI Environmental

¹Step IIa – Compliance with Methods, Procedures, and Contracts

 $^{^1\}mbox{Step IIb}$ – Comparison with Performance Criteria in QAPP

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Brownfields QAPP Template #13c Project Matrix and Analytical Validation (Steps IIa and IIb) 1 Summary

			10) Bullillary		
Step IIa/IIb¹	Matrix	Analytical Group	Concentration Level	Validation Criteria	Data Validator (title and organizational affiliation)
IIa / IIb	Soil	VOCs	Trace Above NJDEP Stds. Non-Detect	NJDEP Data of Known Quality Protocols Technical Guidance (version 1.0) dated April 2014	Renee Michalak, TTI Environmental.
IIa / IIb	Soil	SVOCs/PAHs	Trace Above NJDEP Stds. Non-Detect	NJDEP Data of Known Quality Protocols Technical Guidance (version 1.0) dated April 2014	Renee Michalak, TTI Environmental
IIa / IIb	Soil	PCBs	Trace Above NJDEP Stds. Non-Detect	NJDEP Data of Known Quality Protocols Technical Guidance (version 1.0) dated April 2014	Renee Michalak, TTI Environmental
IIa / IIb	Soil	Metals	Trace Above NJDEP Stds. Non-Detect	NJDEP Data of Known Quality Protocols Technical Guidance (version 1.0) dated April 2014	Renee Michalak, TTI Environmental
IIa / IIb	Soil	ЕРН	Trace Above NJDEP Stds. Non-Detect	NJDEP Data of Known Quality Protocols Technical Guidance (version 1.0) dated April 2014	Renee Michalak, TTI Environmental

¹Step IIa – Compliance with Methods, Procedures, and Contracts

¹Step IIb – Comparison with Performance Criteria in QAPP

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Brownfields QAPP Template #13d Usability Assessment (Step III)

Data Usability

The purpose of this section is to describe the various data usability assessment methods that will be used by BRS to ensure that the validated laboratory data is consistent with the established project quality objectives, and that the quality of validated laboratory data is sufficient for its intended use. The data usability assessment process will also enable BRS to identify data trends, relationships, and anomalies, as well as data gaps and limitations, if any. The data usability assessment will be performed by the Project Manager, in conjunction with the Project QA Manager, and will be performed after the data validation has been completed.

Precision

The RPD between the matrix spike and the matrix spike duplicate, in the case of organic parameters, or sample and sample duplicate in the case of all parameters, is calculated to compare to precision objectives. MS/MSDs and laboratory duplicates will be used to assess analytical precision, while the field duplicates will be used to assess project precision. The RPD will be calculated according to the following formula:

The impact of analytical imprecision, project imprecision, and overall imprecision (when both analytical and project precision tests show problems) on data usability will be assessed. If the precision results yield data which are not usable, the data usability assessment will identify how this problem will be resolved, and the potential need for resampling will be discussed in the final report.

Accuracy

If field or laboratory contamination exists, the impact on the data will be evaluated during the data usability assessment. The direction of bias for contamination will be identified.

In order to assure the accuracy of the analytical procedures, matrix spike samples will be utilized. The increase in concentration of the analyte observed in the spiked sample, due to the addition of a known quantity of the analyte, compared to the reported value of the same analyte in the unspiked sample, determines percent recovery (%R).

Title: Reliable Tire Co QAPP Revision Number: 2 2/28/2024 Page 39 of 43

Accuracy is similarly assessed by determining the percent recovery for surrogate compounds that are added to each field and QC sample and analyzed for organic parameters. The recorded accuracy for all analyses will be further assessed by evaluating the percent recovery for LCSs and calibration results, etc. If the Data Validation Reports indicate contamination and/or analytical biases, the impact on the data will be assessed.

The percent recovery for MS/MSD results will be determined according to the following equation:

(Amount in Spiked Sample - Amount in Sample)
$$%R = \frac{100}{2}$$
Known Amount Added

The percent recovery for LCSs and surrogate compound results will be determined according to the following equation:

Overall contamination and accuracy/bias will be reviewed for each matrix and analytical parameter. The data usability assessment will include any limitations on the use of the data, if it is limited to a particular matrix, data package, parameter, or laboratory. If the accuracy results yield data which are not usable, the data usability assessment will identify how this problem will be resolved, and the potential need for resampling will be discussed in the final report.

Representativeness

If field duplicates indicate spatial variability, the data usability assessment will evaluate the impact on the data. Overall sample representativeness will be evaluated for each matrix and analytical parameter. The data usability assessment will include any limitations on the use of the data, if limited to a particular matrix, data package, parameter, or laboratory. If the results of the evaluation of representativeness yield data which are not usable, the data usability assessment will identify how this problem will be resolved, and the potential need for resampling will be discussed in the final report.

Title: Reliable Tire Co QAPP Revision Number: 2 2/28/2024 Page 40 of 43

Sensitivity and Quantitation Limits

Overall sensitivity will be reviewed for each matrix and analytical parameter. The impact on the lack of sensitivity or the reporting of higher quantitation limits by the laboratory will be assessed. The data usability assessment will include any limitations on the use of the data, if limited to a particular matrix, data package, parameter, or laboratory. If the results of the evaluation of sensitivity yield data which are not usable, the data usability assessment will identify how this problem will be resolved, and the potential need for resampling will be discussed in the final report.

Completeness

Completeness is the ratio of the number of valid sample results to the total number of samples analyzed or processed. Following completion of the testing, the percent completeness will be calculated by the following equation:

(number of valid measure	ments)
Completeness =	x 100
number of measurements	s planned)

Overall completeness will be reviewed for each matrix and analytical parameter. The data usability assessment will include any limitations on the use of the data, if limited to a particular matrix, data package, parameter, or laboratory. If the results of the evaluation of completeness yield data which are not usable, the data usability assessment will identify how this problem will be resolved, and the potential need for resampling will be discussed in the final report.

Data Limitations and Actions

The field and laboratory data collected during this investigation will be used to achieve the objectives identified in Section 3.0 of this QAPP. The QC results associated with each analytical parameter for each matrix will be compared to the objectives presented in this QAPP. Data generated in association with QC results meeting the stated acceptance criteria (i.e., data determined to be valid) will be considered usable for decision-making purposes. Limitations on the use of the data will be stated and explained, if necessary.

In addition, the data obtained will be both qualitatively and quantitatively assessed on a project wide, matrix-specific, and parameter-specific basis. Results of the measurement error assessments will be applied against the site as a whole; any conclusions will be documented in the final report. Data generated in association with QC results not meeting the stated acceptance criteria may still be considered usable for decision-making purposes, depending on certain

Title: Reliable Tire Co QAPP Revision Number: 2 2/28/2024 Page 41 of 43

factors. This assessment will be performed by the Project Manager, in conjunction with the QA Manager, and the results presented and discussed in detail in the final report. Factors to be considered in this assessment of field and laboratory data will include, but not necessarily be limited to, the following:

- Conformance to the field methodologies and procedures proposed in the QAPP;
- Conformance to the EPA methods and laboratory SOPs cited in the QAPP;
- Adherence to proposed sampling strategy;
- Presence of elevated detection limits due to matrix interferences or contaminants present at high concentrations;
- Presence of analytes not expected to be present;
- Conformance to validation protocols included in the QAPP for both field and laboratory data;
- Unusable data sets (qualified as "R") based on the data validation results;
- Data sets identified as usable for limited purposes (qualified as "J") based on the data validation results;
- Effect of qualifiers applied as a result of data validation on the ability to achieve the project objectives;
- Status of all issues requiring corrective action, as presented in the QA reports to management;
- Effect of nonconformance (procedures or requirements) on project objectives;
- Adequacy of the data as a whole in meeting the project objectives; and
- Identification of any remaining data gaps and need to reevaluate data needs.

Every attempt will be made by BRS to eliminate any sources of sampling and analytical error as early as possible during the performance of the site investigation. The implementation of an ongoing data assessment program during all phases of the site investigation will also assist in the early detection and correction of problems, thereby ensuring that project objectives are met.

Reconciliation with the project objectives will be considered successful if the measurement performance criteria from Section 5.0 are met. If the data usability indicates that the project quality objectives in Section 3.0 have not been met, then the project management team will meet to determine if additional work needs to be performed.

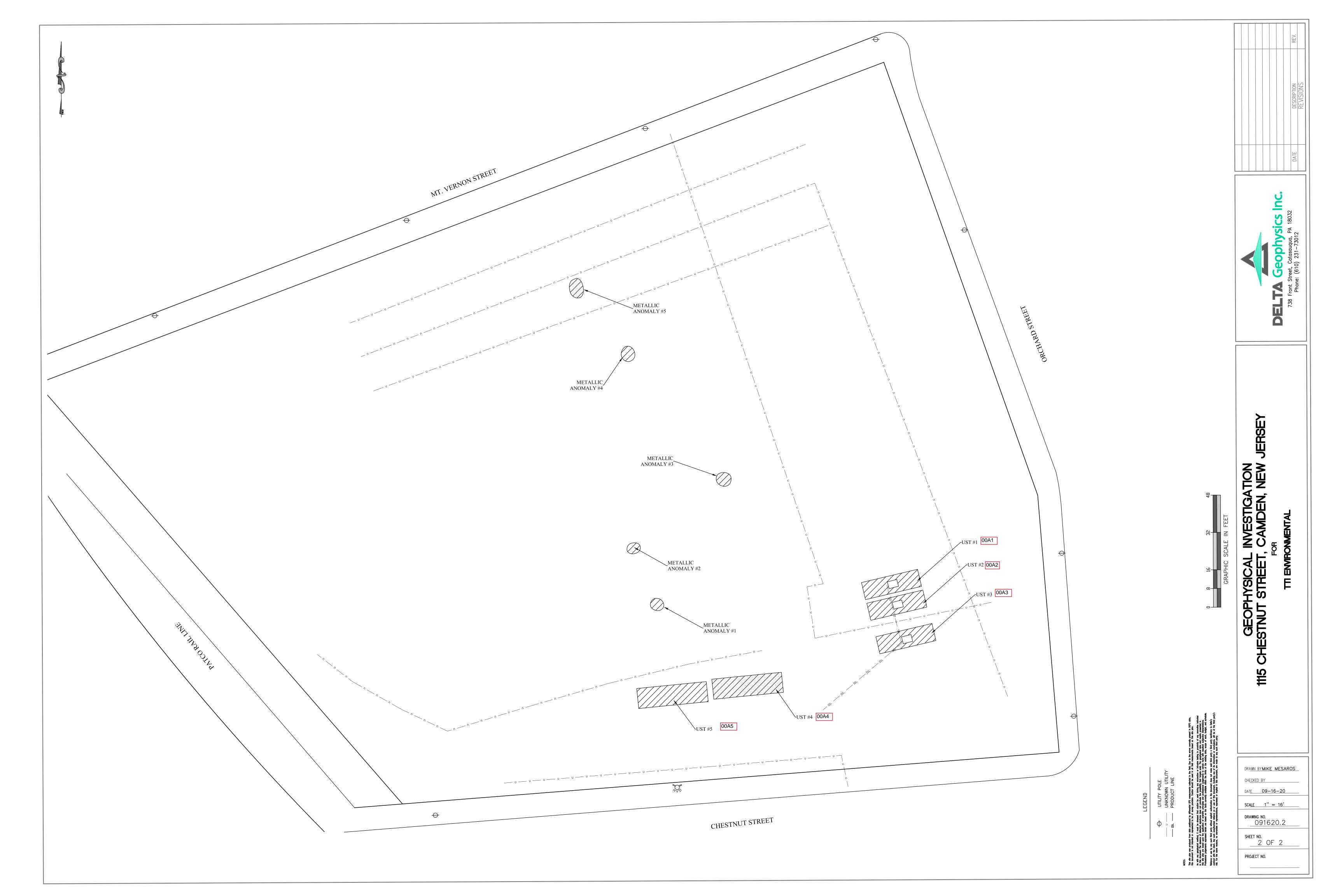
Title: Reliable Tire Co QAPP Revision Number: 2 2/28/2024 Page 42 of 43

Table 1

Project quality objectives	Data	Elements for D	ata Review Proce	ess	
Evidence of approval of QAPP X Identification of personnel X Laboratory name X Methods (sampling & analytical) X X X X X Y Performance requirements (including QC criteria) X X X X X X Y Performance requirements (including QC criteria) X X X X X Y Performance requirements (including QC criteria) X X X X X Y Project quality objectives X X X X X Sampling plans – locations, maps grids, sample ID numbers Site identification X X SoPs (sampling & analytical) X X X X X Staff training & certification X X SoPs (sampling & analytical) X X X X X X X X X X X X X X X X X X X	Item		Validation	Validation	Data
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Laboratory name X	Evidence of approval of QAPP	X			
Laboratory name	Identification of personnel	X			
Methods (sampling & analytical) Performance requirements (including QC criteria) QC criteria) Reporting forms X X X Sampling plans – locations, maps grids, sample ID numbers Site identification SOPs (sampling & analytical) List of project-specific analytes X X X Sample condition upon receipt, & X X Internal lab chain of custody Sample condition upon receipt, & X X Storage records Sample chronology (time of receipt, extraction/digestion, analysis) Identification of QC samples (sampling Alab) Communication Logs Copies of lab notebook, records, prep sheets Corrective action reports Documentation of individual QC results (e.g., spike, duplicate, LCS) Documentation of laboratory method deviations Is X X X X X X X X X X X X X X X X X X X	Laboratory name				
Performance requirements (including QC criteria) Project quality objectives X Reporting forms X X X Sampling plans – locations, maps grids, sample ID numbers Site identification X SOPs (sampling & analytical) List of project-specific analytes X X Analytical Data Package Case narrative X X Internal lab chain of custody X X Sample condition upon receipt, & X storage records Sample chronology (time of receipt, extraction/digestion, analysis) Identification of QC samples (sampling /lab) Associated PE sample results Communication Logs X X X Use output from previous steps Copies of lab notebook, records, prep sheets Corrective action reports Corrective action reports Corrective action reports Documentation of individual QC results (e.g., spike, duplicate, LCS) Documentation of laboratory method deviations	Methods (sampling & analytical)		X	X	
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Reporting forms		Y		V	
Sampling plans – locations, maps grids, sample ID numbers Site identification X SOPs (sampling & analytical) X Staff training & certification X List of project-specific analytes **Tanalytical Data Package** Case narrative Internal lab chain of custody X Sample condition upon receipt, & X Storage records Sample chronology (time of receipt, extraction/digestion, analysis) Identification of QC samples (sampling /lab) Associated PE sample results X X X Use output from previous steps Use output from previ			v	Λ	-
grids, sample ID numbers Site identification X SOPs (sampling & analytical) X Staff training & certification X List of project-specific analytes					_
SOPs (sampling & analytical) Staff training & certification List of project-specific analytes X X	grids, sample ID numbers		X		
Staff training & certification X X X X X X X X X X X X X X X X X X X					
List of project-specific analytes	SOPs (sampling & analytical)		X		
Case narrative Case narrative X X X Internal lab chain of custody Sample condition upon receipt, & X Storage records Sample chronology (time of receipt, extraction/digestion, analysis) Identification of QC samples (sampling /lab) Associated PE sample results Communication Logs Copies of lab notebook, records, prep sheets Corrective action reports Definition of laboratory qualifiers Documentation of individual QC results (e.g., spike, duplicate, LCS) Documentation of laboratory method deviations		X			
Case narrative	List of project-specific analytes	X	X		
Internal lab chain of custody Sample condition upon receipt, & X X X X X X X X X X X X X X X X X X		Analytical Da	ata Package	•	
Sample condition upon receipt, & X	Case narrative	X	X	X	
storage records Sample chronology (time of receipt, extraction/digestion, analysis) Identification of QC samples (sampling /lab) Associated PE sample results Communication Logs Copies of lab notebook, records, prep sheets Corrective action reports Definition of laboratory qualifiers Documentation of corrective action results Documentation of individual QC results (e.g., spike, duplicate, LCS) Documentation of laboratory method deviations	Internal lab chain of custody	X	X		
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Associated PE sample results Communication Logs X X X X Copies of lab notebook, records, prep sheets Corrective action reports Definition of laboratory qualifiers Documentation of corrective action x results Documentation of individual QC results (e.g., spike, duplicate, LCS) Documentation of laboratory method deviations Trom previous steps Trom previous steps Trom previous steps	Identification of QC samples	X	X		Use outputs
Communication Logs X X X Copies of lab notebook, records, prep sheets Corrective action reports X X X Definition of laboratory qualifiers X X X Documentation of corrective action results Documentation of individual QC results (e.g., spike, duplicate, LCS) Documentation of laboratory method deviations		X	X	X	
Copies of lab notebook, records, prep sheets Corrective action reports X X Definition of laboratory qualifiers X X Documentation of corrective action results Documentation of individual QC results (e.g., spike, duplicate, LCS) Documentation of laboratory method deviations X X X X X X X X X X X X X	Communication Logs				-
Corrective action reports X X X Definition of laboratory qualifiers X X X X Documentation of corrective action X X X X results Documentation of individual QC X X X X results (e.g., spike, duplicate, LCS) Documentation of laboratory method X X X X deviations					всерв
Definition of laboratory qualifiers X X X X Documentation of corrective action results Documentation of individual QC X X X X X results (e.g., spike, duplicate, LCS) Documentation of laboratory method deviations		X	X		
Documentation of corrective action X X X X results Documentation of individual QC X X X X results (e.g., spike, duplicate, LCS) Documentation of laboratory method X X X X deviations	Definition of laboratory qualifiers			X	
results Documentation of individual QC	-				
results (e.g., spike, duplicate, LCS) Documentation of laboratory method X X X X Adeviations		11	71	11	
Documentation of laboratory method X X X X Adeviations		X	X	X	
	Documentation of laboratory method	X	X	X	
Electronic data deriverables X X	Electronic data deliverables	X	X		
Instrument calibration reports X X X	Instrument calibration reports			X	
Laboratory name X X	_				
Laboratory sample identification no. X X					
QC sample raw data X X X			-	X	

QC summary report	X	X	X	
Data E	lements for I	Data Review Process	S	
Raw data	X	X	X	
Reporting forms, completed with actual results	X	X	X	Use outputs from
Signatures for laboratory sign-off (e.g., laboratory QA manager)	X	X		previous steps
Standards traceability records (to trace standard source form NIST, for example)	X	X	X	
	Sampling 1	Documents		
Chain of custody	X	X		
Communication logs	X	X		
Corrective action reports	X	X	X	
Documentation of corrective action results	X	X	X	Use outputs
Documentation of deviation from methods	X	X	X	from previous
Documentation of internal QA review	X	X	X	steps
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	
External PT sample results	X	X		Use outputs
Laboratory assessment	X	X		from previous
Laboratory QA plan	X	X		steps
MDL study information	X	X	X	Steps
NELAP accreditation	X	X		







State of New Jersey Department of Environmental Protection Certifies That

PACE ANALYTICAL NATIONAL CENTER

Laboratory Certification ID #TN002

is hereby approved as a

Nationally Accredited Environmental Laboratory

to perform the analyses as indicated on the Annual Certified Parameter List which must accompany this certificate to be valid

having duly met the requirements of the

Laboratories and Environmental Measurements N.J.A.C. 7:18 et. seq. Regulations Governing the Certification of

having been found compliant with the 2016 TNI Standard approved by the

The NELAC Institute

Expires June 30, 2024

THE RECOGNIE

NJDEP is a NELAP Recognized Accreditation Body

Michele M. Potter Manager

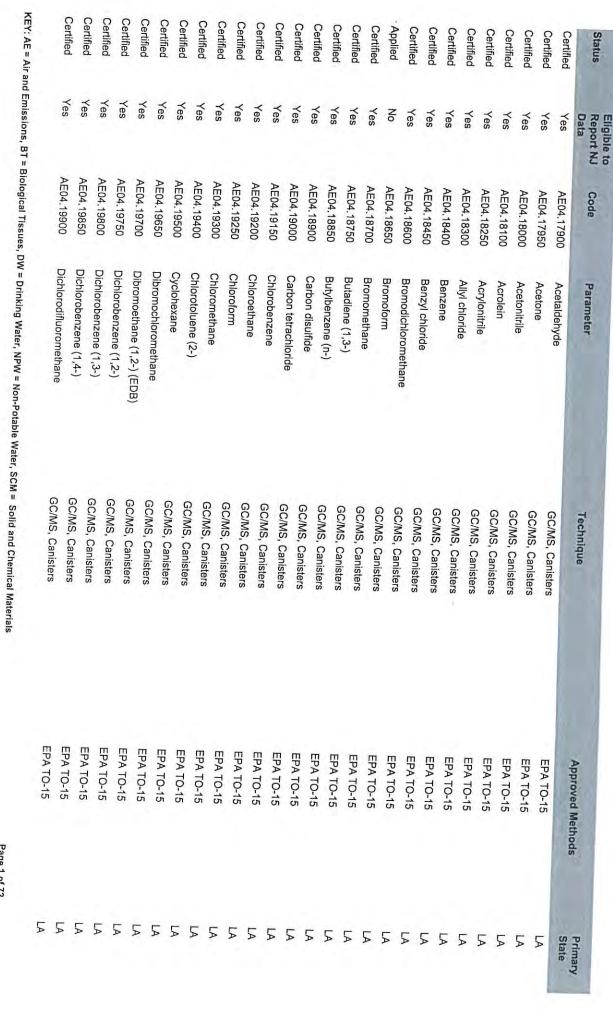


Annual Certified Parameter List and Current Status

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 Effective as of 07/01/2023 until 6/30/2024

Category: AE04 -- Organics Analysis

MT. JULIET TN 37122







Annual Certified Parameter List and Current Status

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122 Effective as of 07/01/2023 until 6/30/2024

Category: AE04 -- Organics Analysis

,1-) ,2-) (3-1,2-) ans-1,2-) 1,2-) cis-1,3-) ethane (1,2-) ethane (1,2-) ne (1,3-) ne (MBK)		Certified	certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Status
Parameter Dichloroethane (1,1-) Dichloroethene (1,2-) Dichloroethene (is-1,2-) Dichloroethene (is-1,2-) Dichloropropane (1,2-) Dichloropropane (1,2-) Dichloropropene (trans-1,3-) Dichloropropene (trans-1,3-) Dichlorotetrafluoroethane (1,2-) Dichlorotetrafluoroethane (1,2-) Dichlorotetrafluoroethane (1,2-) Dichlorotetrafluoroethane (1,2-) Dichlorotetrafluoroethane (1,3-) Ethyl acetate Ethyl acetate Ethyl benzene Ethyltoluene (4-) Gasoline range organic Hexachlorobutadiene (1,3-) Hexanone (2-) Isopropanol Isopropanol Isopropylbenzene Methyl alcohol (Methanol) Methyl isobutyl ketone (MIBK) Methyl isobutyl ketone (MIBK) Methyl methacrylate Geografic	Yes		·	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data
-) -) -) -) -) -) -) -) -) -) -) -) -) -	AF04 22100	AE04.22050	AE04.21950	AE04.21900	AE04.21850	AE04.21800	AE04.21750	AE04.21700	AE04.21600	AE04.21550	AE04.21450	AE04.21400	AE04.21350	AE04.21250	AE04.21100	AE04.20950	AE04.20900	AE04.20750	AE04.20400	AE04.20350	AE04.20300	AE04.20250	AE04.20150	AE04.20100	AE04.20050	AE04.20000	AE04.19950	Code
GC/MS, Canisters	Methyl tert-butyl ether	Methyl methacrylate	Methyl isobutyl ketone (MIBK)	Methyl iodide	Methyl ethyl ketone (MEK)	Methyl alcohol (Methanol)	Isopropylbenzene	Isopropanol	Hexanone (2-)	Hexane (n-)	Hexachlorobutadiene (1,3-)	Heptane (n-)	Gasoline range organic	Ethyltoluene (4-)	Ethylbenzene	Ethyl acetate	Ethanol	Dioxane (1,4-)	Dichlorotetrafluoroethane (1.2-)	Dichloropropene (trans-1.3-)	Dichloropropene (cis-1.3-)	Dichloropropane (1.2-)	Dichloroethene (trans-1 2-)	Dichloroethene (cis-1.2-)	Dichloroethene (1,1-)	Dichloroethane (1,2-)	Dichloroethane (1.1-)	Parameter
	COMO, Callisters	GC/MS. Canisters	GC/MS Canistors	GC/MS Canisters	GC/MS Canisters	GC/MS Canisters	GC/MS Canisters	GC/MS. Canisters	GC/MS, Canisters	GC/MS. Canisters	GC/MS Canisters	GC/MG Consters	GC/MS Capital	GC/MS, Canisters	GC/MG, Canisters	GC/MG, Canisters	GC/MS, Canisters	GC/Mb, Canisters	GC/MS, Canisters	GC/MS, Canisters	GC/MS, Canisters	GC/MS, Canisters	GC/MS, Canisters	GC/MS, Canisters	GC/MG, Canisters	GC/MS, Canisters		Technique
	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	EPA TO-15	Sponsed memods	



Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 **MT. JULIET TN 37122**

Category: AE04 -- Organics Analysis

AE04.22150 Methylene chloride (Dichloromethane) AE04.22300 Naphthalene AE04.22850 Propylbenzene (n-) AE04.22950 Propylene AE04.23150 Sec-butylbenzene AE04.23150 Styrene AE04.23300 Tert-butyl alcohol AE04.23350 Tert-butylbenzene AE04.23400 Tetrachloroethene	
	GC/MS, Canisters





Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122



	Certified	Status	
	Yes	Report NJ Data	Eligible to
	AE04 24500	Code	
Ayleries (10181)	Video (t.t.)	Parameter	
GC/MS, Canisters		Technique	
EPA TO-15	Shorman menons	Approved Methods	
Ā	State	Primary	

Category: DW03 --Inorganic Parameters

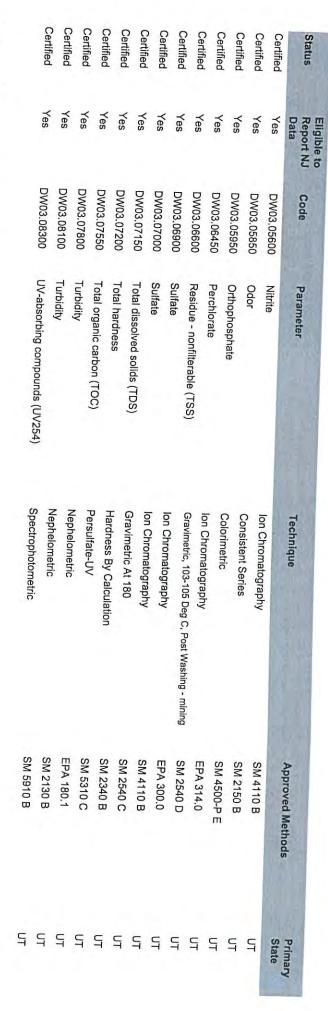
	Data	Code	Parameter	Technique	A
Certified	Yes	DW03.00200	Alkalinity		Approved Methods
Certified	Yes	DW03.01100	Bromide	Titrimetric Indicator	SM 2320 B
Certified	Yes	DW03.01200	Bromide	lon Chromatography	EPA 300.0
Certified	Yes	DW03.01800	Chloride	lon Chromatography	SM 4110 B
Certified	Yes	DW03.01900	Chloride	lon Chromatography	EPA 300.0
Certified	Yes	DW03.02550	Color	Ion Chromatography	SM 4110 B
Certified	Yes	DW03.02700	Conductivity	Platinum-Cobalt	SM 2120 B
Certified	Yes	DW03.03000	Cyanide	Conductance	SM 2510 B
Certified	Yes	DW03.03050	Cyanide	Spectrophotometric, Distill, Amenable	SM 4500-CN C, G
Certified	Yes	DW03.03150	Cyanide	Spectrophotometric, Distill, Manual	SM 4500-CN C, E
Certified	Yes	DW03.03350	Dissolved organic carbon (DOC)	Spectrophotometric, Distill, Semi Automated	EPA 335.4
Certified	Yes	DW03.03750	Fluoride	rersulfate-UV, Filtration	SM 5310 C
Certified	Yes	DW03.03850	Fluoride	ion Chromatography	EPA 300.0
Certified	Yes	DW03.03950	Foaming agents	ion Chromatography	SM 4110 B
Certified	Yes	DW03.04000	Nitrate	Metnylene Blue	SM 5540 C
Certified	Yes	DW03.04350	Nitrate	Automated Cadmium Reduction	EPA 353.2
Certified	Yes	DW03.04600	Nitrate	Automated Cadmium Reduction	SM 4500-NO3 F
Certified	Yes	DW03.04750	Nitrate	Ion Chromatography	EPA 300.0
Certified	Yes	DW03.05000	Nitrite	on Chromatography	SM 4110 B
Certified	Yes I	DW03.05350	Nitrite	Automated Cadmium Reduction	EPA 353.2
Certified	Yes [DW03.05450	Nitrite	Automated Cadmium Reduction	SM 4500-NO3 F

Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

MT. JULIET TN 37122 Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD

Category: DW03 --Inorganic Parameters



Category: DW04 --Analyze Immed, Cont Monitor and/or PWTA

Certified Certified Certified	Certified	Status
Yes Yes	Yes	Eligible to Report NJ Data
DW04.00950 DW04.01050 DW04.01200	DW04.00300	Code
pH pH Temperature	Chlorine - total, free or combined	Parameter
Electrometric Electrometric Thermometric		Technique
SM 4500-CI G EPA 150.1 SM 4500-H B SM 2550 B	Sport methods	Approved Mathala
	State	Primary

Category: DW06 -- Metals

Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001

Eligible to



Certified	Status	The second secon
Yes Yes	Report NJ Data Yes	
DW06.01500 DW06.01750	Code DW06.01400	
Mercury Calcium-hardness	Parameter Chromium (VI)	
Manual Cold Vapor Ca as Carbonate, AA	Technique	
EPA 218.6 EPA 245.1 SM 2340 B	Approved Methods	
다 다 다	Primary State	

Category: DW07 -- Metals - ICP, ICP/MS and DCP

Eligible to Data Code Parameter Technique Yes DW07.00950 Aluminum ICP Yes DW07.01000 Barium ICP Yes DW07.01100 Boron ICP Yes DW07.01150 Cadmium ICP Yes DW07.01200 Câtcium ICP Yes DW07.01350 Copper ICP Yes DW07.01400 Iron ICP Yes DW07.01500 Magnesium ICP Yes DW07.01600 Molybdenum ICP Yes DW07.01600 Molybdenum ICP Yes DW07.01700 Potassium ICP Yes DW07.01750 Silica ICP Yes DW07.01750 Silica ICP Yes DW07.01800 Silica ICP	Igible to Parameter Parameter Technique ata DW07.00950 Aluminum ICP ss DW07.01000 Barium ICP ss DW07.01050 Beryllium ICP ss DW07.01100 Boron ICP ss DW07.01150 Cadmium ICP ss DW07.01200 Caicium ICP DW07.01250 Chromium ICP DW07.01350 Copper ICP DW07.01400 Iron ICP DW07.01500 Manganese ICP DW07.01650 Molybdenum ICP DW07.01700 Potassium ICP DW07.01700 Silica ICP DW07.01800 Silver ICP
inum Illium In I	minum ICP IUM ICP IUM ICP On ICP ICP IUM ICP
Technique ICP ICP ICP ICP ICP ICP ICP IC	
	Approved Methods EPA 200.7

Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001

Category: DW07 -- Metals - ICP, ICP/MS and DCP



Category: DW08 --Organic Parameters - Chromatography

Eligible to

1	Data	Code	Parameter	Technique	
Certified	Yes	DWOS 03550			Approved Methods
		טבכנים.סטעעם	Dibromo-3-chloropropane (1 2-)		
Certified	Yes	DW08.03600	Dibromoethane (1.2-)	Solvent Extract, GC	EPA 504.1
Certified	Yes	DW08.05300	Alachlor	Solvent Extract, GC	EPA 504.1
Certified	Yes	DW08.05350	Atrovio	GC with Nitrogen/Phosphorus Detector	EPA 507
			, 11 0 C 11 10	GC with Nitrogen/Phosphorus Detector	EPA 507
KEY: AF = Air and Ferrical					11 77 007

ssions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

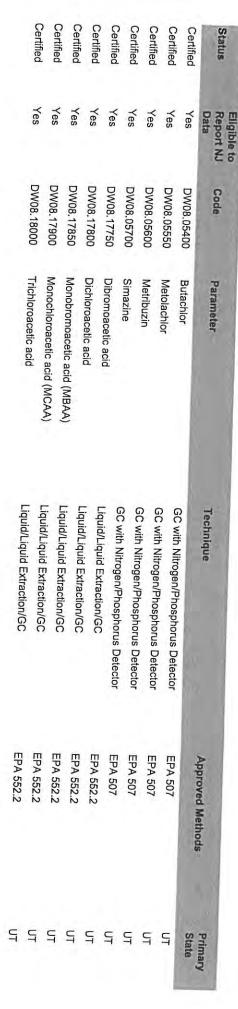
Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001

MT. JULIET TN 37122

Category: DW08 --Organic Parameters - Chromatography



Category: DW09 --Organic Parameters - Chromatography/MS

Eligible to

Status	Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary
Certified	Yes	DW09.11450	Acetone		chorona menioda	State
Certified	Yes	DW09.11600	Benzene	GC/MS, P & T	EPA 524.2	UT
Certified	Yes	DW09.11650	Bromobenzene	GC/MS, P& T	EPA 524.2	UT
Certified	Yes	DW09.11700	Bromochloromethane	GC/MW, T & T	EPA 524.2	UT
Certified	Yes	DW09.11750	Bromodichloromethane	GC/MS, P & T	EPA 524.2	TU
Certified	Yes	DW09.11800	Bromoform	GC/MS, P & T	EPA 524.2	UT
Certified	Yes	DW09.11850	Bromomethane	GC/MS, P & T	EPA 524.2	T
Certified	Yes	DW09.11900	Butanone (2-) (Methyl ethyl kotons)	GC/MS, P&T	EPA 524.2	TU
Certified	Yes	DW09.11950	Butylbenzene (n-)	GC/MS, P&T	EPA 524.2	디
Certified	Yes	DW09.12000	Carbon disulfide	GC/MS, P&T	EPA 524.2	UT
Certified	Yes	DW09.12050	Carbon tetrachloride	GC/MS, P & T	EPA 524.2	TU
Certified	Yes	DW09.12150	Chlorobenzene	GC/MS, P & T	EPA 524.2	TU
Certified	Yes	DW09.12250	Chloroethane	GC/MS, P & T	EPA 524.2	UT
			STATE STATE OF STATE	GC/MG, T & T	EPA 524.2	TU

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD **MT. JULIET TN 37122**

Category: DW09 --Organic Parameters - Chromatography/MS

Chloroform Chlorotoluene (2-) Chlorotoluene (4-) Dibromochloromethane Chlorotoluene (4-) Dibromomethane Dibromomethane Dichlorobenzene (1,2-) Dichlorobenzene (1,4-) Dichlorobenzene (1,1-) Dichloroethane (1,1-) Dichloroethene (cis-1,2-) Dichloroethene (trans-1,2-) Dichloropropane (1,2-) Dichloropropane (1,3-) Dichloropropane (2,2-) Dichloropropene (cis-1,3-) Dichloropropene (cis-1,3-) Dichloropropene (cis-1,3-) Dichloropropene (trans-1,3-) Dichloropropene (trans-1,3-) Ethylbenzene Hexanone (2-)	Iligible to Parameter Parameter Sets DW09.12300 Chloroform Ces DW09.12400 Chlorotoluene (2-) Es DW09.12450 Chlorotoluene (4-) es DW09.12450 Chlorotoluene (4-) es DW09.12550 Dibromochloromethane es DW09.12850 Dibromomethane es DW09.12860 Dichlorobenzene (1,2-) es DW09.12850 Dichlorobenzene (1,4-) ps DW09.12850 Dichlorocethane (1,1-) ps DW09.12850 Dichlorocethane (1,1-) ps DW09.13950 Dichlorocethane (1,2-) Quality ps DW09.13000 Dichlorocethane (1,2-) Quality ps DW09.13100 Dichlorocethane (1,2-) Quality ps DW09.13250 Dichloropropane (1,2-) Quality ps DW09.13250 Dichloropropane (1,3-) Quality ps DW09.13300 Dichloropropane (1,3-) Quality ps DW09.13450 Dichloropropane (1,3-) Quality </th
Parameter Chloroform Chlorotoluene (2-) Chlorotoluene (4-) Chlorotoluene (4-) Chlorotoluene (1,2-) Dibromochloromethane Dichlorobenzene (1,3-) Dichlorobenzene (1,1-) Dichloroethane (1,1-) Dichloroethane (1,1-) Dichloroethene (trans-1,2-) Dichloropropane (1,2-) Dichloropropane (1,3-) Dichloropropene (cis-1,3-) Dichloropropene (cis-1,3-) Dichloropropene (trans-1,3-) Dichloropropene (2-) Ethylbenzene Isopropyltoluene (4-)	Parameter Technique 100 Chloroform GC/MS, P & T I 150 Chloromethane GC/MS, P & T I 150 Chlorotolulene (2-) GC/MS, P & T I 150 Chlorotolulene (4-) GC/MS, P & T I 150 Dibromomethane GC/MS, P & T I 150 Dibromomethane GC/MS, P & T I 150 Dichlorobenzene (1,4-) GC/MS, P & T I 150 Dichlorobenzene (1,1-) GC/MS, P & T I 151 GC/MS, P & T I I 152 Dichloropropane (1,2-) GC/MS, P & T I 152 Dichloropropane (1,2-) GC/MS, P & T I 153 GC/MS, P & T I I
(2-) (4-) nethane ne (1,2-) e (1,3-) e (1,1-) (1,1-) (cis-1,2-) (rians-1,2-) (1,3-) (cis-1,3-)	Technique Technique GCMS, P&T GCMS
GC/MS, P&T	
	EPA 524.2



Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: DW09 --Organic Parameters - Chromatography/MS

Code Parameter DW09.14300 Methyl tert-buty DW09.14360 DW09.14400 DW09.14600 DW09.14750 DW09.14750 DW09.14750 DW09.14750 Sec-butylbenzer DW09.14950 Tert-butylbenzer DW09.15000 Tetrachloroethar DW09.15000 Tetrachloroethar
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

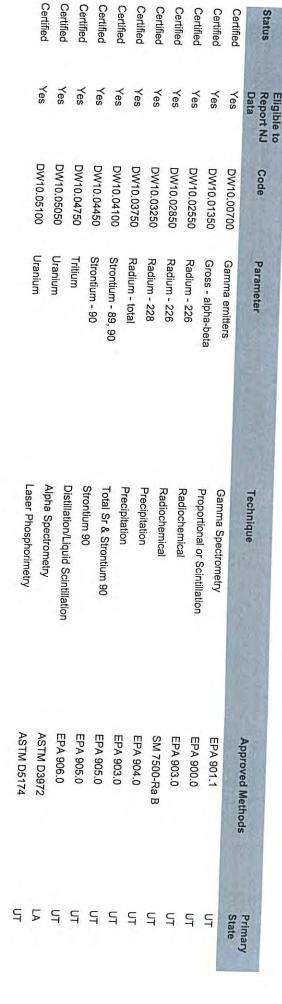


Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

MT. JULIET TN 37122 Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001

Category: DW10 --Radiochem. - Radioactivity/Radionuclides



Category: DW11 --Radon in Drinking Water

	Certified	Status
	Yes	Eligible to Report NJ Data
	DW11.00100	o J Code
vaccil	Badas	Parameter
Liquid Scintillation		Technique
SM 7500-Rn	Sponous memors	Approved Methods
UT	State	Primary

Category: NPW01--Microbiology

Certified	Certified	Status
Yes	Yes	Eligible to Report NJ Code Data
NPW01.01400 Fecal coliform	NPW01.00150	Code
Fecal coliform	0 Enterococci	Parameter
Multiple Tube/Mutiple Well - Enterolert Multiple Tube A-1		Technique
ASTM D6503-99 EPA 1681	Shorten menions	Approved Methods
Б Б	State	Primary

Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: NPW03--Inorganic Parameters

Code Parameter Technique NPW03.00100 Acidity as CaCO3 Electrometric or Phenolphthalein NPW03.00350 Alkalinity as CaCO3 Titrimetric Indicator NPW03.00550 Alkalinity as CaCO3 Titrimetric Indicator NPW03.01100 Ammonia Automated Titration NPW03.01150 Ammonia Distillation or Gas Diffusion, Semi-automated Phenate NPW03.01550 Biochemical oxygen demand Dissolved Oxygen Depletion - Membrane Electrode NPW03.02400 Bromide Ion Chromatography
Technique Electrometric or Phenolph Electrometric Titration Titrimetric Indicator Automated Titration Distillation or Gas Diffusion, S. Distolved Oxygen Depletion -
metric or Phenolph metric Titration metric Titration iric Indicator rited Titration an or Gas Diffusion, Son or Gas Diffusion, Son or Gas Diffusion, Son or Gas Diffusion, Son or Gas Diffusion o
5 5

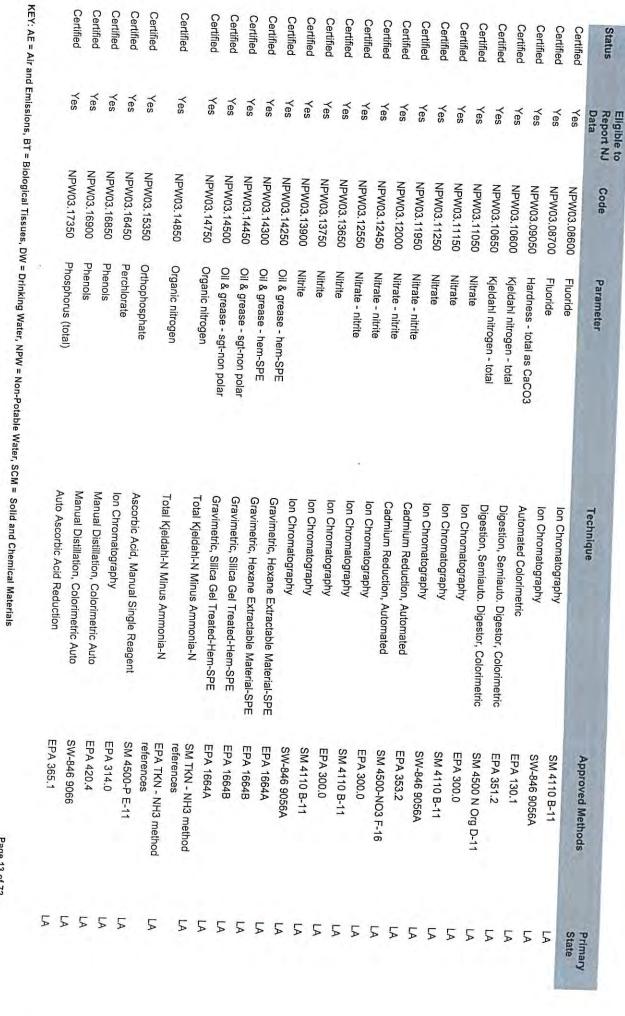


NO RECOGN

Annual Certified Parameter List and Current Status

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 Effective as of 07/01/2023 until 6/30/2024

Category: NPW03--Inorganic Parameters





Annual Certified Parameter List and Current Status

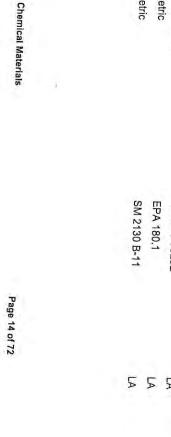
Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: NPW03-Inorganic Parameters

Report NJ Code Parameter Technique Yes NPW03.17500 Phosphorus (total) Auto Ascorbic Acid Reduction Yes NPW03.17500 Phosphorus (total) Semi-Automated Block Digestor Yes NPW03.17850 Residue - filterable (TDS) Semi-Automated Block Digestor Yes NPW03.18000 Residue - nonfilterable (TSS) Gravimetric, 103-105 Degrees C, Post Yes NPW03.18150 Residue - nonfilterable (TSS) Gravimetric, 103-105 Degrees C, Post Yes NPW03.18150 Residue - nonfilterable (TSS) Washing Yes NPW03.18260 Residue - volatile Yes Yes NPW03.18260 Specific conductance Wheatstone Bridge Yes NPW03.18650 Specific conductance Wheatstone Bridge	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified		Certified	Certified	Certified	Certified	Status
Parameter Phosphorus (total) Phosphorus (total) Residue - filterable (TDS) Residue - nonfilterable (TSS) Residue - nonfilterable (TSS) Residue - settleable Residue - total Residue - volatile Specific conductance Specific conductance Specific conductance Sulfate Sulfate Sulfate Sulfate Sulfate Sulfate Total organic carbon (TOC) Total organic halides (TOX) Total organic halides (TOX) Turbidity N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Report NJ Data
orus (total) orus	NPW03.22150	NPW03.22100	NPW03.21700	NPW03.21650	NPW03.21450	NPW03.21110	NPW03.20750	NPW03.20500	NPW03.20050	NPW03.19950	NPW03.19850	NPW03.18850	NPW03.18800	NPW03.18750	NPW03.18250	NPW03.18150	NPW03.18100	NPW03.18050	NEWO3.18000	NPW03.17850	NIDWOS ATORS	NPW03.17750	NPW03.17500	Code
Auto Ascorbic Acid Reduction Semi-Automated Block Digestor Gravimetric, 180 Degrees C Gravimetric, 103-105 Degrees C, Post Washing Gravimetric, 103-105 Degrees C, Post Washing Volumetric (Imhoff Cone) or Gravimetric Gravimetric, 550 Degrees C Gravimetric, 550 Degrees C Wheatstone Bridge Wheatstone Bridge Wheatstone Bridge Ion Chromatography Ion Chromatography Ion Chromatography Colorimetric (Methylene Blue) Combustion Infrared Spectrometry or FID Pyrolysis, Titrimetric Combustion, Titration Nephelometric	Turbidity	Turbidity	Total organic halides (TOX)	Total organic halides (TOX)	Total organic carbon (TOC)	Total organic carbon (TOC)	Surfactants	Sulfides	Sulfate	Sulfate	Sulfate	Specific conductance	Specific conductance	Specific conductance	Residue - volatile	Residue - total	Residue - settleable	Residue - nonfilterable (TSS)	Residue - nonfilterable (TSS)	Residue - filterable (TDS)	r lospilorus (total)	Phosphoria (total)	Phosphorie (total)	Parameter
	Nephelometric Nephelometric	Corribustion, Litration	Combination Transferric	Burgland Spectrometry or FID	Lafer of Country of the Country of t	Combination (Methylene Blue)	Colorimetric (Methylene Blue)	Calcination	lon Chromatography	lon Chromatography	or Charles Bridge	Whostop Did	Whoatstop Didge	Wheateton Bride	Gravimetric, 103-105 Degrees C	Continue (Imhoff Cone) or Gravimetric	Washing	ic. 103-105	ric, 103-105	Gravimetric, 180 Degrees C	Semi-Automated Block Digestor	Auto Ascorbic Acid Reduction		Technique
	5	5	LA	5	5	5	7	5	5	5	F	5	5	5	5	5	5	5	. 5	5	5	10	State	D

Category: NPW04--Analyze Immed, Cont Monitor and/or PWTA



Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

MT. JULIET TN 37122 Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD



Certified	Certified	Status	
Yes Yes Yes Yes Yes	Yes	Report NJ Data	1
	NPW04.00200	Code	
Chlorine Oxygen (dissolved) Oxygen (dissolved) pH pH (corrosivity) Sulfite - SO3 Temperature	Chlorino	Parameter	
Continuous DPD, Colorimetric Spectrophotometric, DPD Membrane Electrode Winkler, Azide Modification Electrometric Aqueous, Electrometric Titrimetric, lodine-lodate Thermometric		Technique	
SM 4500-CI G-11 SM 4500-CI G-11 SM 4500-O G-16 SM 4500-O C-16 SM 4500-H B-11 SW-846 9040C SM 4500-SO3 B-11 SM 2550 B-10	Approved Methods		
5555555	State		

Category: NPW06--Metals - NPW Preparation Methods

Certified Certified	Status Certified
Yes Yes	Eligible to Report NJ Data
NPW06.00100 NPW06.00300	Code
Metals Metals	Parameter
TCLP, Toxicity Procedure, Shaker Synthetic PPT Leachate Procedure Microwave Acid Digestion/Aqueous	Technique
SW-846 1311 SW-846 1312 SW-846 3015A	Approved Methods
LA LA	Primary

Category: NPW07--Metals

Eligible to Report NJ Code Parameter Technique Yes NPW07.03200 Chromium (VI) 0.45u Filter, Ion Chromatography Yes NPW07.03350 Mercury Manual Cold Vapor Yes NPW07.08700 Chromium (VI) 0.45u Filter, Colorimetric DPC Yes NPW07.08850 Iron, Ferrous 0.45u Filter, Ion Chromatography Yes NPW07.08850 Iron, Ferrous Digestion, Colorimetric (Phenanthroline) Yes NPW07.11950 Chromium (VI) Colorimetric Yes NPW07.12100 Chromium (VI) Colorimetric	Certified		Certified		Certified	Certified	Status
Parameter Chromium (VI) Mercury Chromium (VI) Chromium (VI) Iron, Ferrous Chromium (VI) Chromium (VI)	Yes	Yes	Yes Yes	Yes	Yes	Yes	Eligible to Report NJ Data
	NPW07.12100	NPW07.11950	NPW07.08700	NPW07.08650	NPW07.03350	NPW07.03200	Code
Technique 0.45u Filter, Ion Chromatography Manual Cold Vapor 0.45u Filter, Colorimetric DPC 0.45u Filter, Ion Chromatography Digestion, Colorimetric (Phenanthroline) Colorimetric Ion Chromatography	Chromium (VI)	Chromium (VI)	Chromium (VI)	Chromium (VI)	Mercury	Chromium (VI)	Parameter
	Colorimetric Ion Chromatography	Digestion, Colorimetric (Phenanthroline)	0.45u Filter, Colorimetric DPC	Manual Cold Vapor	0.45u Filter, Ion Chromatography		Technique
							1 (2)

Annual Certified Parameter List and Current Status

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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: NPW07--Metals



Category: NPW08--Metals - ICP, ICP/MS and DCP

Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Status
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data
NPW08.05150	NPW08.05100	NPW08.05050	NPW08.05000	NPW08.04950	NPW08.04900	NPW08.04850	NPW08.04800	NPW08.04750	NPW08.04700	NPW08.04650	NPW08.04600	NPW08.04550	NPW08.04500	NPW08.04450	NPW08.04400	NPW08.04350	NPW08.04300	NPW08.04250	NPW08.04200	NPW08.04150	Code
Selenium	Potassium	Phosphorus (total)	Nickel	Molybdenum	Manganese	Magnesium	Lithium	Lead	Iron	Copper	Cobalt	Chromium	Calcium	Cadmium	Boron	Beryllium	Barium	Arsenic	Antimony	Aluminum	Parameter
Digestion, ICP	Diapetion ICP	Dispersion ICD	Diagnostion ICB	Dispersion ICD	Digestion ICP	Digestion ICP	Disposition IOD	Dispersion IOD	Dispertion IOD	Dispersion ICD	Dispersion ICD	Dispetion ICB	Dispersion ICB	Dispersion ICD	ico Digestron, ich	Dispetion ICT	Dispation, ICT	Dispation CT	Disposition, ICT		Technique
EPA 200.7 EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7		Approved Methods
5 5	5	5	5	5	F	5	7	Ā	5	F	F	LA	4	F	LA	5	5	5	۶	State	Primary

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001

Category: NPW08--Metals - ICP, ICP/MS and DCP



Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: NPW08--Metals - ICP, ICP/MS and DCP

Eligible to

Callingo	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Status									
Yes	\	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data								
NPW08.13500		NPW08_13450	NPW08.13400	NPW08.13350	NPW08.13300	NPW08.13250	NPW08.13200	NPW08.13150	NPW08.13100	NPW08.13050	NPW08.13000	NPW08.12950	NPW08.12900	NPW08.12850	NPW08.12800	NPW08.09800	NPW08.07200	NPW08.07150	NPW08.07100	NPW08.07000	NPW08.06950	NPW08.06900	NPW08.06850	NPW08.06800	NPW08.06750	NPW08.06700	NPW08.06600	Code
Magnesium	Ention	ithium	Lead	Iron	Copper	Cobalt	Chromium	Calcium	Cadmium	Boron	Beryllium	Barium	Arsenic	Antimony	Aluminum	Hardness - total as CaCO3	Zinc	Vanadium	Uranium	Titanium	Tin	Thorium	Thallium	Strontium	Sodium	Silver	Selenium	Parameter
ICP	ICP	Ç	5 (<u> </u>	<u> </u>	ICP :	<u>C</u>	ΩP Z	ָּהָ לְּהָל	<u> </u>			7	ָּהָ הַּלְּהָ יים	Ca + Mg Carbonates, ICP	On Manager Communication of the Communication of th	Digestion, ICP/MS	Diagram, ICP/MS	Dispution, ICP/MS	Dispersion Control	Dispetion, ICP/MX	Dispersion COME	Disposition Tolling	rigestion, ICF/MS	Digestion, ICP/MS	Digestion, ICP/MS		Technique
SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SM 2340 B-11	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8		Approved Methods										
- -	5	Ā	F	Ā	7	FA	5	F	7	L _A	4	LA	F	LA	5	LA	LA	L _A	5	7	5	LA	A	4	₽.	LA	State	Primary



Annual Certified Parameter List and Current Status

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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: NPW08--Metals - ICP, ICP/MS and DCP

Yes Yes Yes Yes Yes Yes										Certified Yes			Certified Yes	Certified Yes	Certified Yes	Certified Yes		Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes						Status F
NPW08.14950 NPW08.14950	NPW08.1490	NPW08.1490	WI WOO. 1400	NDW/00 1100	NFW08.14800	NIDIMOD LAD	NPW08.14750	NPW08.14700	NPW08.14650	NPW08.14600	NPW08.14550	NPW08.14500	NPW08.14450	NPW08.14400	s NPW08.14300	s NPW08.14250	s NPW08.14150	s NPW08.14100	.s NPW08.14000	NPW08.13950		NPW08.13850	es NPW08.13800	Yes NPW08.13750	Yes NPW08.13700	Yes NPW08.13650	Yes NPW08.13600	Yes NPW08.13550	Eligible to Report NJ Code Data
	0 Iron			50 Cobalt	O Chromium					00 Beryllium	50 Barium		50 Antimony															3550 Manganese	Parameter
i																													
- 1110	ICB/Ms	ICP/MS	ICT/MIS		ICP/MS	ICP/MS	ICP/MS	ICT/MS	CT / WIG	ICP/MS	ICB/Ms	ICP/MG	וריאוני	C C	; c	<u> </u>	3	<u> </u>		7 0	CP CP	; c	<u> </u>	<u> </u>		<u>ੋ</u>	S C		Technique
	ICD/MS		SW-846 6020B	SW-846 6020B				SW-846 6020B	SW-846 6020B	ICP/MS SW-846 6020B	ICE/MS SW-846 6020B	ICE/MS SW-846 6020B	ICP/MS SW-846 6020B	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D		SW-846 6010D	ICP SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	ICP SW-846 6010D	Approved Methods	





Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: NPW08--Metals - ICP, ICP/MS and DCP

Eligible to



	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	oratus
	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data
	NPW08.15900	NPW08.15850	NPW08.15800	NPW08.15700	NPW08.15650	NPW08.15600	NPW08.15550	NPW08.15500	NPW08.15450	NPW08.15400	NPW08.15300	NPW08.15250	NPW08.15200	NPW08.15150	NPW08.15100	NPW08.15050	Code
	Zinc	Vanadium	Uranium	Titanium	Tin	Thorium	Thallium	Strontium	Sodium	Silver	Selenium	Potassium	Nickel	Molybdenum	Manganese	Magnesium	Parameter
CTING	IODANO CONTRACTOR OF THE PROPERTY OF THE PROPE	ICP/MS	ICD/MS	ICP/MS	ICP/MS	ICB/Ms	ICB/Ms	ICP/MS	ICP/MS	ICP/MS	ICP/MS	ICP/Ms	IOD/MS	ICPIMS	ICDIMS	ICDIMS	Technique
SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B		Approved Methods
Ā	LA	5	F	5	5	5	5	5	5	5	5	5	5	5	5	State	Primary

Category: NPW09--Organics - NPW Preparation Methods

NPW09.00250 Organics Synthetic PPT Leachate Procedure
Technique Synthetic PPT Leachate Procedure TCLP, Toxicity Procedure, Shaker

Annual Certified Parameter List and Current Status

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122 Effective as of 07/01/2023 until 6/30/2024



Category: NPW10--Organic Parameters - Chromatography

	Data	Code	Parameter
	Yes	NPW10.07700	Azinphos methyl
	Yes	NPW10.07750	Bolstar
	Yes	NPW10.07800	Chlorpyrifos
	Yes	NPW10.07850	Coumaphos
	Yes	NPW10.07950	Diazinon
	Yes	NPW10.08000	Dichlorvos
	Yes	NPW10.08050	Dimethoate
	Yes	NPW10.08150	Disulfoton
	Yes	NPW10.08200	EPN
	Yes	NPW10.08300	Ethoprop
	Yes	NPW10.08350	Fensulfothion
	Yes	NPW10.08400	Fenthion
	Yes	NPW10.08450	Malathion
	Yes	NPW10.08500	Merphos
1.	Yes	NPW10.08600	Mevinphos
	Yes	NPW10.08650	Naled
	Yes	NPW10.08700	Parathion methyl
~	Yes	NPW10.08750	Phorate
~	Yes	NPW10.08850	Ronnel
~	Yes	NPW10.08900	Stirofos
~	Yes	NPW10.08950	Sulfotepp
~	Yes		TEPP
4	Yes		Tokuthion [Protothiofoe]
~	Yes	NPW10.09150	Trichloronate
Yes	S	NPW10.16400	Benzene
Yes		NPW10.16650	Ethylbenzene

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

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Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: NPW10--Organic Parameters - Chromatography

Eligible to

	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Status
	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data
	NPW10.21950	NPW10.21900	NPW10.21800	NPW10.21050	NPW10.21000	NPW10.20850	NPW10.20800	NPW10.20650	NPW10.20600	NPW10.20550	NPW10.20500	NPW10.20450	NPW10.20400	NPW10.20350	NPW10.20200	NPW10.20150	NPW10.20100	NPW10.20050	NPW10.19750	NPW10.19700	NPW10.19650	NPW10.19300	NPW10.19200	NPW10.19150	NPW10.16850	NPW10.16800	NPW10.16700	Code
	PCB 1221	PCB 1016	Toxaphene	Methoxychlor	Lindane (gamma BHC)	Heptachlor epoxide	Heptachlor	Endrin ketone	Endrin aldehyde	Endrin	Endosulfan sulfate	Endosulfan II	Endosulfan I	Dieldrin	Delta BHC	DDT (4,4'-)	DDE (4,4'-)	DDD (4,4'-)	Chlordane (gamma) (trans-)	Chlordane (alpha) (cis-)	Chlordane	Beta BHC	Alpha BHC	Aldrin	Xylenes (total)	Toluene	Methyl tert-butyl ether	Parameter
באיי מכת פכי (ביכת)	Extract/CO (ECD)	Extract/GC (ECD)	Extract/GC (ECC)	Extract/GC (ECC)	Extract/GC (ECD)	Extract/CC (ECD)	Extract/CO (ECD)	Extract/CC (ECD)	Extracogo (ECD)	Extraction (ECD)	Extract/CC (ECD)	Extraction (ECD)	Extraction (FOD)	Extration (FOD)	Extraction (FOD)	Extraction (ECD)	Extraction (ECD)	Extraction (ECD)	Extraction (ECD)	Extract/OC (ECD)	Extraction (ECD)	Estination (ECD)	Extraction (ECD)	Extraction (Fig.)	Prince of Trap, GC (PID)	Pirro & Top GC (PID)		Technique
EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 608.3	EPA 602	EPA 602	EPA 602		Approved Methods
LA	LA	5	5	Ā	LA	F	LA	LA	5	LA	LA	5	5	5	5	5	LA	A	5	5	5	٦	7	LA	LA	LA	State	Primary

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MT. JULIET TN 37122 Effective as of 07/01/2023 until 6/30/2024

Category: NPW10--Organic Parameters - Chromatography

Report NJ Data	Code	Parameter	Technique	
Yes	NPW10.22000	707 1000	and an	Approved Methods
Yes	NPW10 22050	PCD 1232	Extract/GC (ECD)	П л , 600 о
Yes		PCB 1242	Extract/GC (ECD)	EFA 608.3
S	NPW10.22100	PCB 1248		EPA 608.3
Yes	NPW10.22150	PCB 1254	Extract/GC (ECD)	EPA 608.3
Yes	NPW10.22200	PCB 1260	Extract/GC (ECD)	EPA 608.3
Yes	NPW10.22450	D0000000000000000000000000000000000000	Extract/GC (ECD)	EPA 608 3
Yes	NPW10.22500	Acenaphthulan	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.22550	Anthrocopo	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.22600	Benzo(a)anthropen	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.22650	Benzo(a)nyrono	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.22700	Benzo(h)fluorante	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.22750	Benzo(ghi)nen/eno	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.22800	Benzo(k)fluoranthene	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.22850	Chrysene	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.22900	Dibenzo(a.h)anthracene	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.22950	Fluoranthene	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.23000	Fluorene	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.23050	Indeno(1,2,3-cd)nyrene	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.23100	Naphthalene	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.23150	Phenanthrene	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.23200	Pyrene	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.31400	Ethane	Extract/HPLC (UV/Fluorescence)	EPA 610
Yes	NPW10.31450	Ethene	GC, Headspace, FID	Other J. Chrom. Sci. RSK-175
Yes	NPW10.31550	Methane	GC, Headspace, FID	Other J. Chrom. Sci. RSK-175
Yes	NPW10.31600	Propane	GC, Headspace, FID	Other J. Chrom. Sci RSK-175
Yes	NPW10.31650	Extractable Petroleum Hydrocarbons	GC, Headspace, FID Extraction GC FID	Other J. Chrom. Sci. RSK-175
Yes	NPW10.39250	Dibromo-3-chloropropane (1,2-)	Extract/GC (ECD)	Other NJDEP EPH 10/08, Rev.

sions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



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MT. JULIET TN 37122

Category: NPW10--Organic Parameters - Chromatography

Status	Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary
Certified	Yes	NPW10.39300	Dibromoethane (1.2-) (EDB)		anomama manage	State
Certified	Yes	NPW10.39800	Diesel rence creech	Extract/GC (ECD)	SW-846 8011	F
Certified	Yes	NIDWAY ACCOUNT	Diesei lailge organic	Extraction, GC, FID	SW-846 8015D	D .
prified	V		Eulyi alconol	GC, Direct Injection, FID	SW-846 8015D	
	res	NPW10.40050	Ethylene glycol	GC, Direct Injection, FID	011 010 00 00	5
Certified	Yes	NPW10.40200	Gasoline range organic	הס פגד פוס	SW-846 8015D	LA
Certified	Yes	NPW10.40400	Methyl alcohol (Methanol)		SW-846 8015D	4
Certified	Yes	NPW10.40800	Propylene glycol	GC, Directinjection, FID	SW-846 8015D	5
Certified	Yes	NPW10.41150	Benzene	GC, Direct Injection, FID	SW-846 8015D	A
Certified	Yes	NPW10.42300	Ethylbenzene	GC, Direct Injection or P & T, PID-HECD	SW-846 8021B	2
Certified	Yes	NPW10.42350	Methyl tert-butyl ether		SW-846 8021B	LA
Certified	Yes	NPW10.42650	Toluene	GC, Direct Injection or P & T, PID-HECD	SW-846 8021B	5
Certified	Yes	NPW10.42950	Xviene (m-)	GC, Direct Injection or P & T, PID-HECD	SW-846 8021B	5
Certified	Yes	NPW10.43000	Xvlene (n.)	GC, Direct Injection or P & T, PID-HECD	SW-846 8021B	5
Certified	Yes	NPW10 43050	Xyleno (c.)	GC, Direct Injection or P & T, PID-HECD	SW-846 8021B	LA
Certified	Yes	NPW10 43100	Yylono (t-t-)	GC, Direct Injection or P & T, PID-HECD	SW-846 8021B	LA
Certified	Yes	NPW10 44600	Aldring (wai)	GC, Direct Injection or P & T, PID-HECD	SW-846 8021B	L _A
Certified	Yes	NPW10.44650	Alpha BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	LA
Certified	Yes	NPW10.44750	Beta BHC	GC, extraction, ECD or HECD, Capillary	SW-846 8081B	٦.
Certified	Yes	NPW10.44800	Chlordane (alpha) (cis-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	5
Certified	Yes	NPW10.44850	Chlordane (gamma) (trans.)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	5
Certified	Yes	NPW10.44900	Chlordane (technical)		SW-846 8081B	LA
Certified	Yes	NPW10.45250	DDD (4.4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	A
Certified	Yes	NPW10.45300	DDE (4.4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	A
Certified	Yes	NPW10.45350	DDT (4,4'-)		SW-846 8081B	5
Certified	Yes	NPW10.45400	Delta BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	7
Certified	Yes	NPW10.45450	Dieldrin		SW-846 8081B	5
Certified	Yes	NPW10.45500	Endosulfan I		SW-846 8081B	5
				GC, Extraction, ECD or HECD Canillany	011000000	

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Status	Report NJ Data	Code	Parameter	Technique		9
Certified	Yes	NPW10.45550	Endoniko II		Approved Methods	State
Certified	Yes	NPW10.45600	Endosulfan sulfata	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	
Certified	Yes	NPW10.45650	Endrin	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	5 5
Certified	Yes	NPW10.45700	Endrin aldebode	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	- !
Certified	Yes	NPW10.45750	Endrin ketone	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	- J
Certified	Yes	NPW10.45850	Heptachlor	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	- S
Certified	Yes	NPW10.45900	Heptachlor enovide	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	- S
Certified	Yes	NPW10.45950	Hexachlorohenzene	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	- S
Certified	Yes	NPW10.46050	Lindane (gamma BHC)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	- J
Certified	Yes	NPW10.46100	Methoxychlor		SW-846 8081B	5 !
Certified	Yes	NPW10.46450	Toxaphene		SW-846 8081B	Α .
Certified	Yes	NPW10.47600	PCB 1016	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	5 !
Certified	Yes	NPW10.47650	PCB 1221	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	5
Certified	Yes	NPW10.47700	PCB 1232	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	S .
Certified	Yes	NPW10.47750	PCB 1242	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	L
Certified	Yes	NPW10.47800	PCB 1248	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	5
Certified	Yes	NPW10.47850	PCB 1254	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	LA
Certified	Yes	NPW10.47900	PCB 1260	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	5
Certified	Yes	NPW10.52750	Azinphos methyl	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	5
Certified	Yes	NPW10.52800	Bolstar	GC, Extract or Dir Inj, NPD or FPD,Cap	SW-846 8141B	L
Certified	Yes	NPW10.52850	Chlorpyrifos	GC, Extract or Dir Inj, NPD or FPD,Cap	SW-846 8141B	5
Certified	Yes	NPW10.52900	Coumaphos	GC, Extract or Dir Inj, NPD or FPD,Cap	SW-846 8141B	LA .
Certified	Yes	NPW10.52950	Demeton (o-)	GC, Extract or Dir Inj, NPD or FPD,Cap	SW-846 8141B	5
Certified	Yes	NPW10.53000	Demeton (s-)	GC, Extract or Dir Inj, NPD or FPD,Cap	SW-846 8141B	5
Certified	Yes	NPW10.53050	Diazinon	GC, Extract or Dir Inj, NPD or FPD,Cap	SW-846 8141B	5
Certified	Yes	NPW10.53150	Dichlorvos	GC, Extract or Dir Inj, NPD or FPD,Cap	SW-846 8141B	5
Certified	Yes	NPW10.53200	Dimethoate	GC Extract or Dir Inj, NPD or FPD, Cap	SW-846 8141B	5
				(C) FAIR ACT OF THE INT. NEW OF FED. Can	200000000000000000000000000000000000000	

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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 **MT. JULIET TN 37122**

	Cermied	Certified	Patifical	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Status
Yes	Yes	Yes	S	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Eligible to Report NJ Data
NPW10.55950	NPW10.55850	NPW10.55800	W W 10.33700	NPW10 55700	NPW10.55650	NPW10.55550	NPW10.55450	NPW10.55400	NPW10.55350	NPW10.55150	NPW10.55100	NPW10.55050	NPW10.55000	NPW10.54950	NPW10.54850	NPW10.54800	NPW10.54750	NPW10.54700	NPW10.54650	NPW10.54600	NPW10.54550	NPW10.54500	NPW10.53450	NPW10.53400	NPW10.53350	NPW10.53300	NPW10.53250	Code
Pentachlorophenol	MCPP	MCPA	Dinoseb		Dichlorprop	Dicamba	DB (2,4-)	Dalapon	D (2,4-)	Trichloronate	Tokuthion [Protothiofos]	TEPP	Sulfotepp	Stirofos	Ronnel	Phorate	Parathion methyl	Parathion	Naled	Mevinphos	Merphos	Malathion	Fenthion	Fensulfothion	Ethoprop	EPN	Disulfoton	Parameter
GC, Extraction, ECD, Capillary	GC, Extraction, ECD Capillary		GC, Extraction, ECD, Capillary	GC, Extraction, ECD, Capillary	Sc, Extraction, ECD, Capillary	-							GC Extract of Dir Inj, NPU or FPD, Cap		GC Extract of Diffil, NPD of FPD, Cap	GC Extract or Dir Inj. NPD or FPD, Cap	GC Extract of Diff inj, NPD of PPD, Cap											Technique
SW-846 8151A	Svv-646 8151A	SW-846 8454	SW_846 8151	SW-846 8151A	SW-846 8151A	SW-846 8151A	SW-846 8151A	SW-846 8151A	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B	SW-846 8141B		Approved Methods
5	5	5	5	<u> </u>	LA	LA	5	5	LA	L _A	4	LA	5	LA	5	5	5	5	F	5	5	5	5	5	5	5	State	Primary



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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Yes NPW10.56100 TP (2,4,5) (Silvex) GC, Extraction, ECD, Capillary Yes NPW10.56150 Acenaphthene GC, Extraction, ECD, Capillary Yes NPW10.56200 Acenaphthylene Extraction, HPLC Yes NPW10.56300 Benzo(a)anthracene Extraction, HPLC Yes NPW10.56300 Benzo(a)anthracene Extraction, HPLC Yes NPW10.56450 Benzo(b)fluoranthene Extraction, HPLC Yes NPW10.56450 Benzo(k)fluoranthene Extraction, HPLC Yes NPW10.5650 Dibenzo(a)aphthracene Extraction, HPLC Yes NPW10.5650 Benzo(k)fluoranthene Extraction, HPLC Yes NPW10.5650 Dibenzo(a,h)anthracene Extraction, HPLC Yes NPW10.56650 Fluoranthene Extraction, HPLC Yes NPW10.56650 Indenot(1,2,3-cd)pyrene Extraction, HPLC Yes NPW10.56650 Phenanthrene Extraction, HPLC Yes NPW10.56650 Phenanthrene Extraction, HPLC Yes NPW10.56650 Phenanthren	Certified	Pes NPW10.56050
'es NPW10.56200 Acenaphthene 'es NPW10.56200 Acenaphthylene 'es NPW10.56250 Anthracene 'es NPW10.56300 Benzo(a)anthracene es NPW10.56350 Benzo(a)anthracene es NPW10.56450 Benzo(b)fluoranthene es NPW10.56500 Benzo(k)fluoranthene es NPW10.56500 Benzo(k)fluoranthene es NPW10.56550 Chrysene es NPW10.56550 Dibenzo(a,h)anthracene E NPW10.56650 Fluoranthene E es NPW10.56650 Fluoranthene E es NPW10.56650 Fluoranthene E es NPW10.56850 Naphthalene E es NPW10.56850 D (2.4-) H nPW10.57850 DB (2,4-) H nPW10.57950 Dicamba H nPW10.58050 MCPA H nPW10.58150 MCPA H nPW10.58150 T (2,4,5-) <		
(es NPW10.56200 Acenaphthylene (es NPW10.56300 Benzo(a)anthracene (es NPW10.56300 Benzo(a)pyrene (es NPW10.56400 Benzo(b)fluoranthene (es NPW10.56500 Benzo(b)fluoranthene (es NPW10.56500 Benzo(b)fluoranthene (es NPW10.56500 Benzo(k)fluoranthene (es NPW10.56500 Benzo(k)fluoranthene (es NPW10.56500 Benzo(k)fluoranthene (es NPW10.56600 Dibenzo(a, h)anthracene (es NPW10.56600 Dibenzo(a, h)anthracene (es NPW10.56600 Fluoranthene (es NPW10.56600 Pilooranthene (es NPW10.56600 Phenanthrene (es NPW10.56600 Phenanthrene (es NPW10.57850 D (2,4-) (es NPW10.57850 D (2,4-) (es NPW10.57950 Dichlorprop (es NPW10.58150 T (2,4,5-) (es NPW10.58150 T (2,4,5-) </td <td></td> <td></td>		
(es NPW10.56250 Anthracene es NPW10.56300 Benzo(a)anthracene es NPW10.56350 Benzo(a)pyrene es NPW10.56400 Benzo(b)fluoranthene es NPW10.56450 Benzo(ghi)perylene NPW10.56550 Chrysene ss NPW10.56600 Dibenzo(a,h)anthracene NPW10.56650 Fluoranthene NPW10.56700 Fluoranthene NPW10.56750 Indeno(1,2,3-cd)pyrene NPW10.56800 Naphthalene NPW10.56850 Phenanthrene NPW10.57850 D (2,4-) NPW10.57850 Dalapon NPW10.58000 Dicamba NPW10.58050 Dichlorprop NPW10.58050 MCPA NPW10.58150 T (2,4,5-)		
es NPW10.56300 Benzo(a)anthracene es NPW10.56450 Benzo(a)pyrene es NPW10.56450 Benzo(b)fluoranthene es NPW10.56550 Chrysene s NPW10.56550 Chrysene NPW10.56550 Dibenzo(a,h)anthracene NPW10.56550 Fluoranthene NPW10.56650 Fluoranthene NPW10.56750 Indeno(1,2,3-cd)pyrene NPW10.56800 Naphthalene NPW10.56850 Phenanthrene NPW10.57850 D(2,4-) NPW10.57850 DB (2,4-) NPW10.57850 DB (2,4-) NPW10.58050 MCPA NPW10.58150 T (2,4,5-) NPW10.58150 T (2,4,5-)		
es NPW10.56350 Benzo(a)pyrene es NPW10.56400 Benzo(b)fluoranthene es NPW10.56400 Benzo(ghi)perylene es NPW10.56500 Benzo(k)fluoranthene es NPW10.56500 Chrysene NPW10.56660 Dibenzo(a,h)anthracene NPW10.56650 Fluoranthene NPW10.56670 Fluoranthene NPW10.56800 Naphthalene NPW10.56800 Naphthalene NPW10.56850 Phenanthrene NPW10.57650 D(2,4-) NPW10.57650 Dbicamba NPW10.57950 Dicamba NPW10.57950 Dicamba NPW10.58050 MCPA NPW10.58100 MCPP NPW10.58150 T (2,4,5-)		
es NPW10.56450 Benzo(b)fluoranthene es NPW10.56450 Benzo(ghi)perylene es NPW10.56500 Benzo(k)fluoranthene NPW10.5650 Chrysene NPW10.56600 Dibenzo(a,h)anthracene NPW10.56650 Fluoranthene NPW10.56700 Fluorene NPW10.56800 Naphthalene NPW10.56800 Naphthalene NPW10.56850 Phenanthrene NPW10.57850 D(2,4-) NPW10.57850 Dalapon NPW10.57950 Dicamba NPW10.57950 Dichlorprop NPW10.58050 MCPA NPW10.58100 MCPA NPW10.58150 T (2,4,5-)		
es NPW10.56450 Benzo(ghi)perylene s NPW10.56500 Benzo(k)fluoranthene s NPW10.56550 Chrysene s NPW10.56660 Dibenzo(a,h)anthracene s NPW10.56660 Fluoranthene s NPW10.56750 Indeno(1.2,3-cd)pyrene s NPW10.56850 Phenanthrene s NPW10.56850 Phenanthrene s NPW10.56850 Pyrene s NPW10.57850 D (2,4-) s NPW10.57850 DB (2,4-) NPW10.57950 Dichlorprop NPW10.58000 Dinoseb NPW10.58000 Dinoseb NPW10.58150 T (2,4,5-)		Yes NPW1
NPW10.56500 Benzo(k)fluoranthene NPW10.56550 Chrysene NPW10.56650 Dibenzo(a,h)anthracene NPW10.56650 Fluoranthene NPW10.56700 Fluoranthene NPW10.56750 Indeno(1,2,3-cd)pyrene NPW10.56800 Naphthalene NPW10.56850 Phenanthrene NPW10.56800 Pyrene NPW10.57650 D (2,4-) NPW10.57850 DB (2,4-) NPW10.57850 DB (2,4-) NPW10.57950 Dicamba NPW10.58050 MCPA NPW10.58150 T (2,4,5-) NPW10.58150 T (2,4,5-)		Yes NPW1
NPW10.56550 Chrysene NPW10.56600 Dibenzo(a,h)anthracene NPW10.56650 Filoranthene NPW10.56700 Filorene NPW10.56750 Indeno(1,2,3-cd)pyrene NPW10.56800 Naphthalene NPW10.56850 Phenanthrene NPW10.57650 D (2,4-) NPW10.57850 DB (2,4-) NPW10.57850 Dicamba NPW10.57950 Dichlorprop NPW10.58050 MCPA NPW10.58150 T (2,4,5-)		Yes NPW10
NPW10.56600 Dibenzo(a,h)anthracene NPW10.56650 Fluoranthene NPW10.56700 Fluorene NPW10.56750 Indeno(1,2,3-cd)pyrene NPW10.56800 Naphthalene NPW10.56850 Phenanthrene NPW10.56900 Pyrene NPW10.57650 D (2,4-) NPW10.57800 Dalapon NPW10.57850 DB (2,4-) NPW10.57950 Dicamba NPW10.57950 Dichlorprop NPW10.58050 MCPA NPW10.58150 T (2,4,5-)		Yes NPW10
NPW10.56650 Fluoranthene NPW10.56700 Fluorene NPW10.56750 Indeno(1,2,3-cd)pyrene NPW10.56800 Naphthalene NPW10.56850 Phenanthrene NPW10.57650 D (2,4-) NPW10.57850 Dalapon NPW10.57850 Db (2,4-) NPW10.57950 Dicamba NPW10.58050 MCPA NPW10.58150 T (2,4,5-)		Yes NPW10
NPW10.56700 Fluorene NPW10.56750 Indeno(1,2,3-cd))pyrene NPW10.56800 Naphthalene NPW10.56850 Phenanthrene NPW10.56900 Pyrene NPW10.57650 D (2,4-) NPW10.57850 Dalapon NPW10.57850 Dicamba NPW10.57950 Dichlorprop NPW10.58050 MCPA NPW10.58150 T (2,4,5-)		Yes NPW10
NPW10.56750 Indeno(1,2,3-cd)pyrene NPW10.56800 Naphthalene NPW10.56850 Phenanthrene NPW10.57650 D (2,4-) NPW10.57800 Dalapon NPW10.57800 Dicamba NPW10.57900 Dicamba NPW10.57950 Dichlorprop NPW10.58000 Dinoseb NPW10.58150 MCPA NPW10.58150 T (2,4,5-)		Yes NPW10
NPW10.56800 Naphthalene NPW10.56850 Phenanthrene NPW10.56900 Pyrene NPW10.57650 D (2,4-) NPW10.57850 DB (2,4-) NPW10.57850 Dicamba NPW10.57950 Dichlorprop NPW10.58000 Dinoseb NPW10.58050 MCPA NPW10.58150 T (2,4,5-)		Yes NPW10
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NPW10.57800 Dalapon NPW10.57850 DB (2,4-) NPW10.57900 Dicamba NPW10.57950 Dichlorprop NPW10.58000 Dinoseb NPW10.58050 MCPA NPW10.58150 T (2,4,5-)		Yes NPW10.
NPW10.57850 DB (2,4-) NPW10.57900 Dicamba NPW10.57950 Dichlorprop NPW10.58000 Dinoseb NPW10.58050 MCPA NPW10.58150 T (2,4,5-)		Yes NPW10.
NPW10.57900 Dicamba NPW10.57950 Dichlorprop NPW10.58000 Dinoseb NPW10.58050 MCPA NPW10.58150 T (2,4,5-)		Yes NPW10.
NPW10.57950 Dichlorprop NPW10.58000 Dinoseb NPW10.58050 MCPA NPW10.58100 MCPP NPW10.58150 T (2,4,5-)		Yes NPW10.
NPW10.58000 Dinoseb NPW10.58050 MCPA NPW10.58100 MCPP NPW10.58150 T (2,4,5-)		Yes NPW10.
NPW10.58050 MCPA NPW10.58100 MCPP NPW10.58150 T (2,4,5-)		Yes NPW10.
NPW10.58100 MCPP NPW10.58150 T (2,4,5-)		Yes NPW10.
NPW10.58150 T (2,4,5-)	-	
	~	Yes NPW10.5





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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: NPW10--Organic Parameters - Chromatography

Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	Certified Yes	No.
	_												130			W	U	Report NJ Data
NPW10.62250	NPW10.59400	NPW10.59350	NPW10.59300	NPW10.59250	NPW10.59200	NPW10.59150	NPW10.59100	NPW10.59050	NPW10.59000	NPW10.58950	NPW10.58900	NPW10.58850	NPW10.58800	NPW10.58750	NPW10.58700	NPW10.58650	NPW10.58300	Code
Demeton (o-)	Trinitrotoluene (2.4.6-)	Trinitrobenzene (1.3.5-)	Tetryl	RDX	PETN	Nitrotoluene (4-)	Nitrotoluene (3-)	Nitrotoluene (2-)	Nitroglycerine	Nitrobenzene	HMX	Dinitrotoluene (4-amino-2,6-)	Dinitrotoluene (2-amino-4.6-)	Dinitrotoluene (2,6-)	Dinitrotoluene (2.4-)	Dinitrobenzene (1,3-)	TP (2,4,5-) (Silvex)	Parameter
Extraction, GC, NPD or FPD	HFLC, OV Detector	TELC, UV Detector	HEIO CINE CONTRACTOR	HBI O INTO LINE	HBI O INVESTIGATION	HPIC, UV Detector	HELO, LIVE	HBIO INVOLU	HBI O INVOLUTION	HBIO INVOLUTION	LIBIO INVOLUENTE	HBI C IN Details	nero, ov Detector	HPIC INC.	LIP CO Detector	HBI C INVOLUTION		Technique
SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8330B	SW-846 8321B	t promound mounds	Approved Methods
5	Ā	5	5	5	5	5	5	5	2	5	5	5	5	5	L _A	5	State	Primary

Category: NPW11--Organic Parameters - Chromatography/MS

	Certified	Certified	Certified	Certified	Status
	Yes	Yes	Yes	Yes	Eligible to Report NJ Data
	NPW11.38550	NPW11.38500	NPW11.38450	NPW11.38400	Code
	Acrylonitrile	Acrolein	Acetonitrile	Acetone	Parameter
- control is a facility column	GC/MS, P & T. Capillary Column	GC/MS, P & T, Capillary Column	GC/MS, F & I, Capillary Column		Technique
EPA 624.1	EPA 624.1	EPA 624.1	EPA 624.1	Spottom mental	Approved Methods
Ā	F	5	Ā	State	Primary

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

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Effective as of 07/01/2023 until 6/30/2024

MT. JULIET TN 37122 Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001

Yes NPW11.38800 Bromobenzene Yes NPW11.38850 Bromochloromethane Yes NPW11.38900 Bromochloromethane Yes NPW11.38950 Bromochloromethane Yes NPW11.39900 Bromoethane Yes NPW11.39100 Bromoethane Yes NPW11.39100 Butadiene (2-chloro-1,3-) Yes NPW11.39150 Butanone (2-) (Methyl ethyl ketone) Yes NPW11.39450 Carbon disulfide Yes NPW11.39500 Carbon disulfide Yes NPW11.39500 Chlorobenzene Yes NPW11.39650 Chlorobenzene Yes NPW11.39650 Chlorotoluene (2-) Yes NPW11.39700 Chlorotoluene (2-) Yes NPW11.39700 Chlorotoluene (2-) Yes NPW11.39800 Chlorotoluene (4-) Yes NPW11.39850 Chlorotoluene (4-) Yes NPW11.39850 Chlorotoluene (4-) Yes NPW11.40000 Cyclohexane Yes NPW11.40100 Dibromochloromethane	Yes Yes
'es NPW11.38850 'es NPW11.38950 'es NPW11.38950 'es NPW11.39050 'es NPW11.39050 'es NPW11.39150 'es NPW11.39150 'es NPW11.39450 's NPW11.39450 's NPW11.39560 's NPW11.39560 's NPW11.39650 's NPW11.40050	
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NPW11.40200	





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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122 Effective as of 07/01/2023 until 6/30/2024

Yes NPW11.40400 Dichlorobenzene (1,3-) Yes NPW11.40450 Dichlorobenzene (1,4-) Yes NPW11.40500 Dichlorodifluoromethane (1,1-) Yes NPW11.40500 Dichloroethane (1,2-) Yes NPW11.40600 Dichloroethane (1,2-) Yes NPW11.40750 Dichloroethene (cis-1,2-) Yes NPW11.40850 Dichloropropane (1,2-) Yes NPW11.40850 Dichloropropane (1,3-) Yes NPW11.40900 Dichloropropane (2,2-) Yes NPW11.40950 Dichloropropane (cis-1,3-) Yes NPW11.41000 Dichloropropene (cis-1,3-) Yes NPW11.41050 Dichloropropene (cis-1,3-) Yes NPW11.41200 Dichloropropene (cis-1,3-) Yes NPW11.41350 Dichloropropene (cis-1,3-) Yes NPW11.41350 Dichloropropene (cis-1,3-) Yes NPW11.41350 Dichloropropyl Ether (DIPE) Yes NPW11.41350 Ethyl acetate Yes NPW11.41500 Ethyl berzene Yes NPW11.41600	Status Certified Certified Certified	Report NJ Data Yes Yes
es NPW11.40500 es NPW11.40650 es NPW11.40660 es NPW11.40650 es NPW11.40750 es NPW11.40800 es NPW11.40800 NPW11.40800 NPW11.40800 NPW11.40900 NPW11.41000 NPW11.41000 NPW11.41150 NPW11.41260 NPW11.41260 NPW11.41400 NPW11.41500 NPW11.41500 NPW11.41500 NPW11.41500 NPW11.41600 NPW11.41600 NPW11.41650 NPW11.41650 NPW11.41650	Certified	Yes
es NPW11.4050 es NPW11.40600 es NPW11.40600 es NPW11.40700 es NPW11.40750 NPW11.40800 NPW11.40850 NPW11.40950 NPW11.41050 NPW11.41100 NPW11.41150 NPW11.41260 NPW11.41260 NPW11.41500	Certified	Yes
es NPW11.40600 es NPW11.40600 es NPW11.40750 es NPW11.40750 es NPW11.40800 es NPW11.40850 NPW11.40950 NPW11.41000 NPW11.41100 NPW11.41150 NPW11.41250		Yes
es NPW11.40650 BS NPW11.40750 BS NPW11.40800 NPW11.40800 NPW11.40900 NPW11.410900 NPW11.41000 NPW11.41100 NPW11.41100 NPW11.41200 NPW11.41200 NPW11.41200 NPW11.41350 NPW11.41400 NPW11.41500 NPW11.41500 NPW11.41600 NPW11.41600 NPW11.41600 NPW11.41650 NPW11.41650		Yes
NPW11.41500 NPW11.41500 NPW11.41600 NPW11.41600 NPW11.41000 NPW11.41100 NPW11.41100 NPW11.41160 NPW11.41260		Yes
NPW11.41500 NPW11.41600 NPW11.41600 NPW11.41600 NPW11.41100 NPW11.41100 NPW11.41250 NPW11.41400 NPW11.41500 NPW11.41500 NPW11.41500 NPW11.41500 NPW11.41500 NPW11.41500 NPW11.41500 NPW11.41600 NPW11.41600 NPW11.41600 NPW11.41600 NPW11.41650		Yes
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NPW11.41500 NPW11.41600 NPW11.41000 NPW11.41100 NPW11.41100 NPW11.41150 NPW11.41250		Yes
NPW11.41500 NPW11.41500 NPW11.41600 NPW11.41150 NPW11.41250		Yes
NPW11.41500 NPW11.41600 NPW11.41100 NPW11.41100 NPW11.41200 NPW11.41250 NPW11.41250 NPW11.41350 NPW11.41400 NPW11.41500 NPW11.41500 NPW11.41600 NPW11.41600 NPW11.41650 NPW11.41650 NPW11.41650		Yes
NPW11.41000 NPW11.41100 NPW11.41100 NPW11.41100 NPW11.41250		Yes
S NPW11.41050 S NPW11.41150 S NPW11.41200 NPW11.41250 NPW11.41250 NPW11.41350 NPW11.41400 NPW11.41600 NPW11.41600 NPW11.41600 NPW11.41650 NPW11.41650 NPW11.41650		Yes
S NPW11.41100 S NPW11.41200 S NPW11.41250 NPW11.41250 NPW11.41250 NPW11.41400 NPW11.41600 NPW11.41600 NPW11.41600 NPW11.41600 NPW11.41600 NPW11.41600 NPW11.41650 NPW11.41650		Yes
NPW11.41150 NPW11.41250 NPW11.41250 NPW11.41350 NPW11.41400 NPW11.41450 NPW11.41500 NPW11.41600 NPW11.41650		Yes
NPW11.41260 NPW11.41250 NPW11.41350 NPW11.41400 NPW11.41450 NPW11.41500 NPW11.41600 NPW11.41600		Yes
NPW11.41250 NPW11.41350 NPW11.41400 NPW11.41450 NPW11.41500 NPW11.41600 NPW11.41650		Yes
NPW11.41350 NPW11.41400 NPW11.41450 NPW11.41500 NPW11.41600 NPW11.41650		Yes
NPW11.41400 NPW11.41450 NPW11.41500 NPW11.41600 NPW11.41650		Yes
NPW11.41450 NPW11.41500 NPW11.41600 NPW11.41650		Yes
NPW11.41500 NPW11.41600 NPW11.41650		Yes
NPW11.41600 NPW11.41650		Yes
NPW11.41650		Yes



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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Certified	Yes	NPW11 41700		echnidae	Approved Methods
Certified	Yes	NIDWAA 447ED	Hexanone (2-)	GC/MS, P & T, Capillary Column	77
		NEW 11.41750	Iso-butyl alcohol	COMAC DO T OLIMINA	EPA 624.1
	Yes	NPW11.41850	Isopropanol	CONS, F & 1, Capillary Column	EPA 624.1
Certified	Yes	NPW11.42000	sopropylhopzopo	GC/MS, P & T, Capillary Column	EPA 624.1
Certified	Yes	NPW11.42050	Copropy Legite	GC/MS, P & T, Capillary Column	EPA 624 1
Certified \	Yes	NPW11 42100	Mother (4-)	GC/MS, P & T, Capillary Column	EBA 624 1
Certified Y	Yes	NPW11.42150	Mothod	GC/MS, P & T, Capillary Column	EPA 624 1
Certified y	Yes	NPW11 42300	welly acetale	GC/MS, P & T, Capillary Column	EBA 634.1
Certified Y	Yes	NPW11 42350	Mothyl rodice	GC/MS, P & T, Capillary Column	EBA 634 1
Certified Y	Yes	NDW11 ASASS	Metrlyi Isobutyi ketone (MIBK)	GC/MS, P & T, Capillary Column	EDA 0024
	Yes	NP VV 11.42400	Methyl methacrylate	GC/MS, P & T. Capillary Column	EPA 624.1
		NPW11.42450	Methyl tert-butyl ether	COMS D& T Copillary Column	EPA 624.1
	Yes	NPW11.42500		Comic, F & I, Capillary Column	EPA 624.1
	Yes	NPW11.42550	(Dichloromethan)	GC/MS, P & T, Capillary Column	EPA 624.1
	Yes	NPW11.42600		GC/MS, P & T, Capillary Column	EPA 624.1
Certified Yes		NPW11.42650	(2-)	GC/MS, P & T, Capillary Column	EPA 624.1
Certified Yes		NPW11.42750	D	GC/MS, P & T, Capillary Column	EPA 624.1
Certified Yes		NPW11.42800		GC/MS, P & T, Capillary Column	EPA 624.1
Certified Yes		NPW11.42900		GC/MS, P & T, Capillary Column	EPA 624.1
Certified Yes		NPW11.42950	Sec-bith/benzes	GC/MS, P & T, Capillary Column	EPA 624 1
Certified Yes		NPW11.43000		GC/MS, P & T, Capillary Column	EPA 624.1
Certified Yes		NPW11.43050	mothyl other /Taken	GC/MS, P & T, Capillary Column	EPA 624.1
Certified Yes		NPW11.43150		GC/MS, P & T, Capillary Column	EPA 624 1
Certified Yes		NPW11.43200		GC/MS, P & T, Capillary Column	EPA 624 1
Certified Yes		NPW11.43250		GC/MS, P & T, Capillary Column	EPA 624.1
Certified Yes		NPW11.43300		GC/MS, P & T, Capillary Column	EPA 624.1
Certified Yes		NPW11.43350	Tetrachlorothon	GC/MS, P & T, Capillary Column	EPA 624 1
Certified Yes		NPW11.43400		GC/MS, P & T, Capillary Column	EPA 624.1



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MT. JULIET TN 37122 Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001

Report NJ Data	Code	Parameter	Technique	Annound Matheut
Yes	NPW11.43450	Tolliene		Approved Methods
Yes	NPW11 43500	Tribulation	GC/MS, P & T, Capillary Column	EPA 624.1
Ype		111C111010 (1,1,2-) trifluoroethane (1,2,2-)	GC/MS, P & T, Capillary Column	П D> 651.
Tes	NPW11.43550	Trichlorobenzene (1,2,3-)	GOIMS B & T C III O I	EPA 624.1
Yes	NPW11.43600	Trichlorobenzene (1.2.4-)	Colins, F & I, Capillary Column	EPA 624.1
Yes	NPW11.43650	Trichloroethane (1 1 1-)	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.43700	Trichloroethane (1 1 2-)	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.43750	Trichloroethene	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.43800	Trichlorofluoromethane	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.43850	Trichloropropane (1.2.3.)	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.43900	Trimethylbenzene (1.23.)	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.43950	Trimethylbenzene (1 2 4)	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.44000	Trimethylbenzene (1 3 5)	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.44050	Vinvl acetate	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.44100	Vinyl chloride	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.44200	Xviene (m-)	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.44250	Xylene (o-)	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.44300	Xylene (p-)	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.44350	Xvienes (total)	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.44400	Acenaphthene	GC/MS, P & T, Capillary Column	EPA 624.1
Yes	NPW11.44450	Acenaphthylene	Extract, GC/MS	EPA 625.1
Yes	NPW11.44500	Acetophenone	Extract, GC/MS	EPA 625.1
Yes	NPW11.44650	Alpha - ternineo	Extract, GC/MS	EPA 625.1
Yes	NPW11.44800	Aniline	Extract, GC/MS	EPA 625.1
Yes	NPW11.44850	Anthracene	Extract, GC/MS	EPA 625.1
Yes	NPW11.45200	Benzidine	Extract, GC/MS	EPA 625.1
Yes	NPW11.45250	Benzo(a)anthracene	Extract, GC/MS	EPA 625.1
Yes	NPW11.45300	Benzo(a)pyrene	Extract, GC/MS	EPA 625.1
			EXITACL GC/MS	





Annual Certified Parameter List and Current Status

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 Effective as of 07/01/2023 until 6/30/2024

Status	Report NJ Data	Code	Parameter	Technique	Annoved Mothers	Prin
Certified	Yes	NPW11.45350	Bonzo/L\B		Approved Methods	State
Certified	Yes	NPW11 45400	Bono (aking a l	Extract, GC/MS	EPA 625.1	
Hillian	V	141 44 11.43400	Benzo(ghi)perylene	Extract, GC/MS		5
Cermied	Yes	NPW11.45500	Benzo(k)fluoranthene	T CONTROL	EPA 625.1	5
Certified	Yes	NPW11.45550	Benzoic acid	Extract, GC/MS	EPA 625.1	A
Certified	Yes	NPW11.45650	Binhenylamino (A.)	Extract, GC/MS	EPA 625.1	D
Certified	Yes	NPW11_45700	Bic (2 obligation (+)	Extract, GC/MS	EPA 625.1	5 5
Certified	Yes	NPW11 45750	Ris /3 obligations/) methane	Extract, GC/MS	EPA 625.1	- 5
Certified	Yes	NPW11 45800	Bis/S chi	Extract, GC/MS	EPA 625.1	: 5
			chloropropane)	Extract, GC/MS	EPA 625 1	5
Certified	Yes	NPW11.45850	Bis (2-ethylhexyl) phthalato			5
Certified	Yes	NPW11.46000	Bromonhenyl-phenyl ethor (4)	Extract, GC/MS	EPA 625.1	_ >
Certified	Yes	NPW11,46050	Butylbenzylphtholote	Extract, GC/MS	EPA 625.1	<u> </u>
Certified	Yes	NPW11.46250	Carbazola	Extract, GC/MS	EPA 625.1	- !
Certified	Yes	NPW11.46400	Chloroaniline (A.)	Extract, GC/MS	EPA 625.1	- !
Certified	Yes	NPW11.46500	Chloropanhthalana (1)	Extract, GC/MS	EPA 625.1	- !
Certified	Yes	NPW11.46550	Chloropanhthalana (2)	Extract, GC/MS	EPA 625.1	- !
Certified	Yes	NPW11.46650	Chlorophenol (2-)	Extract, GC/MS	EPA 625.1	5 5
Certified	Yes	NPW11.46700	Chlorophenyl phonyl other (4)	Extract, GC/MS	EPA 625.1	- S
Certified	Yes	NPW11.46900	Chrysene	Extract, GC/MS	EPA 625.1	5 5
Certified	Yes	NPW11.47050	Decane (n-)	Extract, GC/MS	EPA 625.1	- ! - !
Certified	Yes	NPW11.47500	Dibenzo/a h)anthranan	Extract, GC/MS	EPA 625.1	D !
Certified	Yes	NPW11.47650	Dibenzofiran	Extract, GC/MS	EPA 625.1	- ! > !
Certified	Yes	NPW11.47700	Dichlorospilion (2.2)	Extract, GC/MS	EPA 625.1	> !
Certified \	Yes	NPW11.47750	Dichlorohenziding (2.31)	Extract, GC/MS	EPA 625.1	- !
Certified Y	Yes !	NPW11.47800	Dichlorophenol (2.4.)	Extract, GC/MS	EPA 625.1	D !
Certified Y	Yes	NPW11.47950	Diethyl phthalate	Extract, GC/MS	EPA 625.1	D
Certified Y	Yes	NPW11.48100	Dimethyl phthalato	Extract, GC/MS	EPA 625.1	- !
Certified Y	Yes		Dimethylphenol (2.4-)	Extract, GC/MS	EPA 625.1	5 !



Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: NPW11--Organic Parameters - Chromatography/MS

Annual Certified Parameter List and Current Status

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122 Effective as of 07/01/2023 until 6/30/2024



Yes NPW11.51350 Nitrophenol (2-) Yes NPW11.51450 Nitrophenol (4-) Yes NPW11.51450 Nitrophenol (4-) Yes NPW11.51450 N-Nitrosodiethylamine Yes NPW11.51500 N-Nitrosodiethylamine Yes NPW11.5150 N-Nitrosodiethylamine Yes NPW11.5150 N-Nitrosodiethylamine Yes NPW11.5150 N-Nitrosodiethylamine Yes NPW11.5150 N-Nitrosodiethylamine Yes NPW11.51800 N-Nitrosodiethylamine Yes NPW11.51800 N-Nitrosodiethylamine Yes NPW11.52400 N-Nitrosodiethylamine Yes NPW11.52450 Pentachlorobenzene Yes NPW11.52450 Pentachlorobenzene Yes NPW11.52550 Pentachlorobenzene Yes NPW11.52450 Phenol Yes NPW11.53450 Pyrene Yes NPW11.53450 Pyrene Yes NPW11.53450 Tetrachlorobenzene (1,2,4,5-) Yes NPW11.55500 Tetrachlorophenol (2,3,4,6-) Yes NPW11.55500 Trichlorophenol (2,4,5-) Yes NPW11.55600 Trichlorophenol (2,4,5-) Yes NPW11.55600 Trichlorophenol (2,4,6-) Yes NPW11.56850 Acetone	Certified Certified Certified	Data Yes Yes
Yes NPW11.51300 Yes NPW11.51350 Yes NPW11.51400 Yes NPW11.51450 Yes NPW11.51500 Yes NPW11.51500 Yes NPW11.51600 Yes NPW11.51600 Yes NPW11.52400 Yes NPW11.52450 Yes NPW11.52750 Yes NPW11.52750 Yes NPW11.53450 Yes NPW11.53450 Yes NPW11.55100 Yes NPW11.55400 Yes NPW11.55400 Yes NPW11.55550	Certified Certified	Yes
Yes NPW11.51400 Yes NPW11.51450 Yes NPW11.51530 Yes NPW11.51550 Yes NPW11.51600 Yes NPW11.51600 Yes NPW11.51600 Yes NPW11.52450 Yes NPW11.52450 Yes NPW11.52750 Yes NPW11.52750 Yes NPW11.53450 Yes NPW11.53450 Yes NPW11.53450 Yes NPW11.55500 Yes NPW11.55500 TYes NPW11.55550 Yes NPW11.55550	Certified	Yes
Yes NPW11.51450 Yes NPW11.51500 Yes NPW11.51530 Yes NPW11.51500 Yes NPW11.51600 Yes NPW11.51800 Yes NPW11.52400 Yes NPW11.52450 Yes NPW11.52450 Yes NPW11.52750 Yes NPW11.52750 Yes NPW11.53450 Yes NPW11.53450 Yes NPW11.55100 Yes NPW11.55400 Yes NPW11.55550 TYes NPW11.55550 TYes NPW11.55550 TYes NPW11.56850 Yes NPW11.56850	Certified	Yes
es NPW11.51500 es NPW11.51500 es NPW11.51600 es NPW11.51600 es NPW11.51600 es NPW11.52400 es NPW11.52450 NPW11.52550 NPW11.52550 NPW11.52750 S NPW11.52750 S NPW11.52750 S NPW11.52750 NPW11.53450 NPW11.55100 NPW11.55400 NPW11.55550	Certified	Yes
es NPW11.51530 es NPW11.51600 es NPW11.51600 es NPW11.51800 NPW11.52450 NPW11.52450 NPW11.52550 S NPW11.52750 S NPW11.52750 S NPW11.53400 NPW11.53400 NPW11.55160 T NPW11.55500 NPW11.55500 NPW11.55500 NPW11.55500 NPW11.56800 NPW11.56850 NPW11.56850 NPW11.56850 A	Certified	Yes
es NPW11.5150 es NPW11.51600 es NPW11.51800 nPW11.52400 ns NPW11.52450 nPW11.52550 nPW11.52550 nPW11.52750 nPW11.52750 nPW11.52750 nPW11.53450 nPW11.53450 nPW11.55160 nPW11.55400 nPW11.55550 nPW11.55550 nPW11.55550 nPW11.55550 nPW11.56850	Certified	Yes
NPW11.51600 NPW11.51600 NPW11.51900 NPW11.52400 NPW11.52450 NPW11.52550 NPW11.52750 NPW11.52750 NPW11.53400 NPW11.53450 NPW11.55100 NPW11.55400 NPW11.55500 NPW11.55500 NPW11.55550 NPW11.55550 NPW11.56850	Certified	Yes
NPW11.51800 NPW11.51800 NPW11.52400 NPW11.52450 NPW11.52550 NPW11.52750 NPW11.52750 NPW11.53450 NPW11.53450 NPW11.55150 NPW11.55500 NPW11.55500 NPW11.55500 NPW11.55550 NPW11.56800 NPW11.56850	Certified	Yes
NPW11.52450 NPW11.52450 NPW11.52450 NPW11.52550 NPW11.52750 NPW11.52750 NPW11.52750 NPW11.53400 NPW11.53450 NPW11.55400 NPW11.55400 NPW11.55500 NPW11.55550 NPW11.56860		Yes
NPW11.52400 NPW11.52450 NPW11.52550 NPW11.52700 NPW11.52750 NPW11.53400 NPW11.53450 NPW11.55150 NPW11.55150 NPW11.55500 NPW11.55500 NPW11.55550 NPW11.56860		Yes
NPW11.52450 NPW11.52550 NPW11.52700 NPW11.52750 NPW11.53400 NPW11.53450 NPW11.55150 NPW11.55150 NPW11.55550 NPW11.55550 NPW11.56800 NPW11.56850		Yes
NPW11.5250 NPW11.52700 NPW11.52750 NPW11.53400 NPW11.53450 NPW11.55150 NPW11.55150 NPW11.55500 NPW11.55500 NPW11.55500 NPW11.56860		Yes
NPW11.52700 NPW11.52750 NPW11.52750 NPW11.53450 NPW11.53450 NPW11.55150 NPW11.55150 NPW11.55500 NPW11.55500 NPW11.56860 NPW11.56860		Yes
S NPW11.52750 S NPW11.53400 NPW11.53450 NPW11.55150 NPW11.55150 NPW11.55500 NPW11.55500 NPW11.55500 NPW11.56860 NPW11.56860		Yes
S NPW11.53450 S NPW11.53450 S NPW11.55100 S NPW11.55150 NPW11.55500 NPW11.55500 NPW11.56800 NPW11.56800 NPW11.56850		Yes
NPW11.53450 NPW11.55100 NPW11.55150 NPW11.55400 NPW11.5550 NPW11.5650 NPW11.56800 NPW11.56800		Yes
NPW11.55100 NPW11.55150 NPW11.55400 NPW11.55500 NPW11.5550 NPW11.56800 NPW11.56850		Yes
NPW11.55150 NPW11.55400 NPW11.55500 NPW11.56500 NPW11.56800 NPW11.56850		Yes
NPW11.55400 NPW11.55500 NPW11.5550 NPW11.56800 NPW11.56850	Certified	
NPW11.55500 NPW11.55550 NPW11.56800 NPW11.56850	Certified	
NPW11.55550 NPW11.56800 NPW11.56850		
NPW11.56800 NPW11.56850		
NPW11.56850		
	Certified	

Annual Certified Parameter List and Current Status

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122 Effective as of 07/01/2023 until 6/30/2024

	Code NPW11.56900 NPW11.57100 NPW11.57150 NPW11.57200 NPW11.57250 NPW11.57300 NPW11.57350 NPW11.57450 NPW11.57450 NPW11.57450	CodeParameterNPW11.56900AcrylonitrileNPW11.56950Allyl chlorideNPW11.57100BenzeneNPW11.57150BromobenzeneNPW11.57200BromochloromethaneNPW11.57250BromodichloromethaneNPW11.57300BromoethaneNPW11.57350BromoformNPW11.57400Bromomomethane	
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Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD **MT. JULIET TN 37122**

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods
Certified	Yes	NPW11.58400	Dichlorodifluoromethane	GC/MS, P & T, Capillary Column	SM 6200 R-11
Certified	Yes	NPW11.58450	Dichloroethane (1,1-)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.58500	Dichloroethane (1,2-)	GC/MS, P & T. Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.58550	Dichloroethene (1,1-)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.58600	Dichloroethene (trans-1,2-)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.58650	Dichloropropane (1,2-)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.58700	Dichloropropane (1,3-)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.58750	Dichloropropane (2,2-)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.58800	Dichloropropene (1,1-)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.58850	Dichloropropene (cis-1,3-)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.58900	Dichloropropene (trans-1,3-)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.58950	Diethyl ether (Ethyl ether)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59000	Diisopropyl Ether (DIPE)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59050	Dioxane (1,4-)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59100	Ethanol	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59150	Ethyl acetate	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59200	Ethyl methacrylate	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59250	Ethylbenzene	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59300	Ethyl-tert-butyl Ether (ETBE)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59400	Hexachlorobutadiene (1,3-)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59450	Hexane (n-)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59500	Iso-butyl alcohol	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59600	Isopropanol	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59750	Isopropylbenzene	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59800	Isopropyltoluene (4-)	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11.59850	Methacrylonitrile	GC/MS, P & T, Capillary Column	SM 6200 B-11
Certified	Yes	NPW11 60000	Mother mathematical		



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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD **MT. JULIET TN 37122**

Category: NPW11--Organic Parameters - Chromatography/MS

NPW11.60250 NPW11.60250 NPW11.60350 NPW11.60350 NPW11.60450 NPW11.60450 NPW11.60550 NPW11.60650 NPW11.60650 NPW11.60650 NPW11.60750 NPW11.60850 NPW11.60850 NPW11.60850 NPW11.61050 NPW11.61150 NPW11.61150 NPW11.61150 NPW11.68850	Certified Certified	Yes Yes	Code NPW11.60050 NPW11.60100	Parameter Methyl tert-butyl ether Methylene chloride (Dichloromethane)
NPW11.60200 NPW11.60250 NPW11.60350 NPW11.60350 NPW11.60450 NPW11.60560 NPW11.60560 NPW11.60560 NPW11.60560 NPW11.60560 NPW11.60650 NPW11.60650 NPW11.60650 NPW11.60850 NPW11.60850 NPW11.60850 NPW11.61050 NPW11.61050 NPW11.61050 NPW11.61050 NPW11.61150 NPW11.61200 NPW11.68850 NPW11.68850 NPW11.68850 NPW11.68850 NPW11.68850 NPW11.68850 NPW11.68850 NPW11.68850	Certified	Yes	NPW11.60150	Pentachloroethane
NPW11.60300 NPW11.60300 NPW11.60300 NPW11.60400 NPW11.60500 NPW11.60500 NPW11.60500 NPW11.60650 NPW11.60650 NPW11.60650 NPW11.60850 NPW11.60900 NPW11.60900 NPW11.61050 NPW11.61050 NPW11.61050 NPW11.61150 NPW11.61200 NPW11.63800 NPW11.68850 NPW11.68850 NPW11.68850 NPW11.68850 NPW11.68850 NPW11.68850 NPW11.68850 NPW11.68850	Certified Certified	Yes Yes	NPW11.60200	Propionitrile
NPW11.60350 NPW11.60400 NPW11.60450 NPW11.60550 NPW11.60550 NPW11.60550 NPW11.60650 NPW11.60750 NPW11.60750 NPW11.60750 NPW11.60750 NPW11.60950 NPW11.61000 NPW11.61000 NPW11.61150 NPW11.61150 NPW11.61150 NPW11.61200 NPW11.61200 NPW11.68850	Certified	Yes	NPW11.60300	Sec-butylbenzene
NPW11.60400 NPW11.60500 NPW11.60500 NPW11.60560 NPW11.60650 NPW11.60650 NPW11.60750 NPW11.60850 NPW11.60850 NPW11.60850 NPW11.60900 NPW11.61000 NPW11.61050 NPW11.61050 NPW11.61150 NPW11.61200 NPW11.61500 NPW11.68500 NPW11.68500 A	Certified	Yes	NPW11.60350	tert-Amylmethyl ether /TAME)
NPW11.60450 NPW11.60550 NPW11.60550 NPW11.60650 NPW11.60650 NPW11.60750 NPW11.60750 NPW11.60800 NPW11.60850 NPW11.60850 NPW11.60950 NPW11.61050 NPW11.61050 NPW11.61050 NPW11.61150 NPW11.6150 NPW11.61500 NPW11.61500 NPW11.61500 NPW11.61500 NPW11.61500 NPW11.61500 NPW11.68850 NPW11.68850 A	Certified	Yes	NPW11.60400	Tert-butyl alcohol
NPW11.60500 NPW11.60600 NPW11.60650 NPW11.60650 NPW11.60750 NPW11.60750 NPW11.60800 NPW11.60900 NPW11.60900 NPW11.61000 NPW11.61150 NPW11.61150 NPW11.61150 NPW11.61200 NPW11.68850 NPW11.68850 NPW11.68850 A	Certified	Yes	NPW11.60450	Tert-butylbenzene
NPW11.60550 NPW11.60650 NPW11.60650 NPW11.60750 NPW11.60750 NPW11.60800 NPW11.60800 NPW11.60800 NPW11.60950 NPW11.61050 NPW11.61050 NPW11.61150 NPW11.61150 NPW11.61500 NPW11.61500 NPW11.6150 NPW11.61500 NPW11.61500 NPW11.68800 NPW11.68850 A	Certified	Yes	NPW11.60500	Tetrachloroethane (1 1 1 2)
NPW11.60600 NPW11.60750 NPW11.60750 NPW11.60750 NPW11.60850 NPW11.60850 NPW11.60950 NPW11.61000 NPW11.61150 NPW11.61150 NPW11.61150 NPW11.61200 NPW11.68850 NPW11.68850 A	Certified	Yes	NPW11.60550	Tetrachloroethane (1,1,1,2-)
NPW11.60650 NPW11.60750 NPW11.60750 NPW11.60850 NPW11.60960 NPW11.60960 NPW11.61060 NPW11.61160 NPW11.61150 NPW11.61150 NPW11.61200 NPW11.68850 NPW11.68850		Yes	NPW11.60600	Tetrachloroethene
NPW11.60700 NPW11.60850 NPW11.60850 NPW11.60850 NPW11.60960 NPW11.61000 NPW11.61050 NPW11.61150 NPW11.61200 NPW11.68850 NPW11.68850	Certified	Yes	NPW11.60650	Tetrahydrofuran
NPW11.60750 NPW11.60800 NPW11.60800 NPW11.60900 NPW11.61000 NPW11.61000 NPW11.61100 NPW11.61150 NPW11.61500 NPW11.61500 NPW11.68850 NPW11.68850	Certified	Yes	NPW11.60700	Tolluene
NPW11.60800 NPW11.60900 NPW11.60900 NPW11.61000 NPW11.61050 NPW11.61150 NPW11.61200 NPW11.68800 NPW11.68850	Certified	Yes	NPW11.60750	Trichlorohenzene (1.3.3.)
NPW11.60850 NPW11.60900 NPW11.60950 NPW11.61000 NPW11.61050 NPW11.61100 NPW11.61200 NPW11.68800 NPW11.68850		Yes	NPW11.60800	Trichloroethane (1.1.1.)
NPW11.60900 NPW11.60950 NPW11.61000 NPW11.61050 NPW11.61100 NPW11.61150 NPW11.61200 NPW11.68800 NPW11.68800		Yes	NPW11.60850	Trichloroethane (1 1 2-)
NPW11.60950 NPW11.61000 NPW11.61050 NPW11.61100 NPW11.61150 NPW11.61200 NPW11.68800 NPW11.68800		Yes	NPW11,60900	Trichloroethene
NPW11.61000 NPW11.61050 NPW11.61100 NPW11.61150 NPW11.61200 NPW11.68750 NPW11.68800 NPW11.68850		Yes	NPW11.60950	Trichlorofluoromethane
NPW11.61050 NPW11.61100 NPW11.61150 NPW11.61200 NPW11.68750 NPW11.68800 NPW11.68850		Yes	NPW11.61000	Trichloropropane (1.2.3-)
NPW11.61100 NPW11.61150 NPW11.61200 NPW11.68750 NPW11.68800 NPW11.68850		Z _o	NPW11.61050	Trimethylbenzene (1 2 3-)
NPW11.61150 NPW11.61200 NPW11.68750 NPW11.68800 NPW11.68850	Certified	Yes	VPW11.61100	Trimethylbenzene (1 2 4-)
NPW11.61200 NPW11.68750 NPW11.68800 NPW11.68850	Certified	Yes	VPW11.61150	Trimethylbenzene (1 3 5-)
NPW11.68750 NPW11.68800 NPW11.68850	Certified	Yes	NPW11.61200	Vinyl chloride
NPW11.68800 NPW11.68850	Certified	Yes	VPW11.68750	Acetone
NPW11.68850	Certified	Yes	VPW11.68800	Acetonitrile
	Certified	Yes	VPW11.68850	Acrolein



Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

MT. JULIET TN 37122 Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD





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Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD **MT. JULIET TN 37122**

Category: NPW11--Organic Parameters - Chromatography/MS

Certilled	Colinar	Certified	Certified	Certified	Сепіне	Cermied		Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	O Line	Certified	Certified	Certified	Certified	Certified	Certified	Cerulled	7	Certified	Status
Yes	× - cs	Yes	Yes	Yes	Yes	Yes	× - c	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	- c	Yes	Yes	Yes	Yes	Yes	Yes	Yes	< 0	Y-000	Report NJ Data
NPW11.71850	NEW III	NIDW/11 71800	NPW11.71700	NPW11.71650	NPW11.71600	NPW11.71550	NT VV 1 1.7 1300	NIDW/11 71500	NPW11 71450	NPW11 71400	NPW11 71350	NPW11.71300	NPW11.71250	NPW11.71200	NPW11.71150	NPW11.71100	NPW11.71050	NPW11.71000	NPW11.70950	INT WY I I. / UBOO	NIDW/11 70000	NPW11 70850	NPW11.70800	NPW11.70750	NPW11.70700	NPW11.70650	NPW11.70600	N. W. 1.70000	NPW11.70500	Code
Ethyl methacrylate	Etnyl acetate	Tip. John St. Co.	Ethanol	Dioxane (1,4-)	Diisopropyl Ether (DIPE)	Diethyl ether (Ethyl ether)	Dichloropropene (trans-1,3-)	Distriction optoberie (cis-1,3-)	Dishloroproperie (1,1-)	Dichlosopropalie (2,2-)	Dichloroproposo (3.3)	Dichloropropane (1.3-)	Dichloropropane (1 2-)	Dichloroethene (trans-1 2-)	Dichloroethene (cis-1.2-)	Dichloroethene (1,1-)	Dichloroethane (1,2-)	Dichloroethane (1,1-)	Dichlorodifluoromethane	Dichlorobenzene (1,4-)		Dishlorobonzono (13)	Dichlorobenzene (1 2-)	Dichloro-2-butene (trans-1,4-)	Dichloro-2-butene (cis-1,4-)	Dibromomethane	Dibromoethane (1,2-) (EDB)	Dibromocnioromethane	Dibromo-3-chloropropane (1,2-)	Parameter
GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	Compared to Direct Injection, Capillary	GOIMS B & Tot Disch Indiana, Committy	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/NS, P & I or Direct Injection, Capillary		COMO DE LO DIFECTION, Capillary	CC/MS D 8 To Direct Injection, Capillary	GC/MS B 8 T or Direct Injection, Capillary	GC/MS. P & T or Direct Injection Capillany	GC/MS, P & T or Direct Injection Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & I of Direct Injection, Capillary	COMO DO HOR DISCOUNT, Capillary	GC/MS P & T or Direct Injection Capillary	GC/MS. P & T or Direct Injection Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	Technique
SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	CW-040 0200D	SW-848 8V8-D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-646 62600	SW1846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SVV-846 8260D	SW-846 8260D	SW 846 8260D	SW-846 8360D	SW-846 8260D	SW-846 8260D	SW-846 8260D	Approved Methods					
- !	LA	F	5	5	5 5	- !	LA	5	L	5	5	LA	7	5	LA	5	: 5	5 5	_ \ .	LA	L _A	5	7	5	: 5	5	- <u>!</u>	A	2	Primary State



Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

MT. JULIET TN 37122 Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001

Status	Eligible to Report NJ Data
Certified	Yes
Calillan	res
Applica	T es
Certified	Yes
Ceruiled	Yes



Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

MT. JULIET TN 37122 Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001





Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD **MT. JULIET TN 37122**





Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122



Eligible to

Certified		Continos	,	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified -	Certified	Certified	Certified	Status							
Y00	Yes		()	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data
10000	NPW11.78400	NPW11.78350	W VV 1.70000	NPW11 78300	NPW11.78250	NPW11.78200	NPW11.78150	NPW11.78100	NPW11.78050	NPW11.78000	NPW11.77950	NPW11.77900	NPW11.77850	NPW11.77650	NPW11.77450	NPW11.77400	NPW11.77350	NPW11.77300	NPW11.77250	NPW11.77200	NPW11.77150	NPW11.76950	NPW11.76900	NPW11.76850	NPW11.76800	NPW11.76750	NPW11.76700	Code
Dishlorophonol /3 A	Dichlorobenzidine (3,3'-)	Dichlorobenzene (1,4-)	Dichloropenzene (1,3-)	Dishlershore (1,2-)	Dichlorohenzene (4.2.)	Dibenzofuran	Dibenzo(c,g)carbazole (7H-)	Dibenzo(a,i)pyrene	Dibenzo(a,h)pyrene	Dibenzo(a,h)anthracene	Dibenzo(a,e)pyrene	Dibenz(a,j)acridine	Dibenz(a,h)acridine	Decane (n-)	Chrysene	Chlorophenyl-phenyl ether (4-)	Chlorophenol (2-)	Chloronaphthalene (2-)	Chloronaphthalene (1-)	Chlorobenzilate	Chloroaniline (4-)	Carbazole	Caprolactam	Butylbenzylphthalate	Bromophenyl-phenyl ether (4-)	Bis (2-ethylhexyl) phthalate	Bis(2-chloroisopropyl)ether[2,2'-oxybis(1-chloropropane)	Parameter
GC/MS Extract or Dir Inj, Capillary	GC/MS Extract or Dir Inj. Capillary	GC/MS, Extract or Dir Inj. Capillary	GC/MS, Extract or Dir Inj, Capillary	GC/MS, Extract or Dir Inj, Capillary	GC/MS, Extract or Dir Inj, Capillary	Coars =	GC/MS Extract of Dir Inj, Capillary			SCINIS, Extract or Dir Inj, Capillary	GC/MS, Extract or Dir Inj, Capillary	SCIMS, Extract or Dir Inj, Capillary	00000	GC/MS, Extract or Dir Inj, Capillary	Technique													
SW-846 8270E	SVV-846 8270E	00/20 04/20 C	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	279 0 0	SW-846 8270F	Approved Methods
LA																												

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD **MT. JULIET TN 37122**

	Status Certified Certified	Eligible to Report NJ Data Yes Yes	Code NPW11.78500 NPW11.78600	Parameter Dichlorophenol (2,6-) Diethyl phthalate	100	Technique GC/MS, Extract or Dir Inj, Capillary GC/MS, Extract or Dir Inj, Capillary
dd Yes NPW11.78700 Dimethyl benzidine (3,3-) d Yes NPW11.78750 Dimethyl phthalate d Yes NPW11.79050 Dimethylphenzl (2,4-) d Yes NPW11.79100 Dimethylphenzl (2,4-) Yes NPW11.79100 Dimethylphenzl (2,4-) Yes NPW11.79300 Dinitrobenzene (1,3-) Yes NPW11.79300 Dinitrobenzene (2,4-) Yes NPW11.79350 Dinitrotoluene (2,4-) Yes NPW11.79400 Dinitrotoluene (2,4-) Yes NPW11.79500 Din-octyl phthalate Yes NPW11.79500 Dinoseb Yes NPW11.80500 Filuoranthene Yes NPW11.80350 Hexachlorobutadiene (1,3-) Yes NPW11.80400 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80500 Hexachlorophene Yes NPW11.80500 Indene(1,2,3-cd)pyrene	Certified	Yes	NPW11.78650	Dimethoate		GC/MS, Extract or Dir Inj, Capillary
d Yes NPW11.78750 Dimethyl phthalate d Yes NPW11.79050 Dimethyl phthalate d Yes NPW11.79100 Dimethyl phthalate Yes NPW11.79150 Din-butyl phthalate Yes NPW11.79200 Dinitrobenzene (1,3-) Yes NPW11.79350 Dinitrobenzene (2,4-) Yes NPW11.79350 Dinitrotoluene (2,4-) Yes NPW11.79400 Dinitrotoluene (2,6-) Yes NPW11.79400 Dinitrotoluene (2,6-) Yes NPW11.7950 Dinoseb Yes NPW11.7950 Dinoseb Yes NPW11.80150 Piworanthene Yes NPW11.80150 Fiworanthene Yes NPW11.80350 Hexachlorobutadiene (1,3-) Yes NPW11.80450 Hexachlorocyclopentadiene Yes NPW11.80450 Hexachlorocyclopentadiene Yes NPW11.80500 Hexachlorocyclopentadiene	Certified	Yes	NPW11.78700	Dimethyl benzidine (3.3-)		GC/MS, Extract or Dir Inj, Capillary
d Yes NPW11.79050 Dimethylbenz(a) Anthracene (7,12-) Yes NPW11.79150 Dimethylphenol (2,4-) Yes NPW11.79200 Dimitrobenzene (1,3-) Yes NPW11.79300 Dimitrobenzene (1,3-) Yes NPW11.79350 Dimitrobluene (2,4-) Yes NPW11.79450 Dimitrotoluene (2,4-) Yes NPW11.79450 Dimitrotoluene (2,6-) Yes NPW11.79550 Dimoseb Yes NPW11.79550 Disulfoton Yes NPW11.80150 Fluorene Yes NPW11.80350 Hexachlorobenzene Yes NPW11.80350 Hexachlorobentadiene Yes NPW11.80350 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80500 Hexachlorophene Yes NPW11.80500 Hexachlorophene Yes NPW11.80500 Indene(1,2,3-cd)pyrene	Certified	Yes	NPW11.78750	Dimethyl phthalate		GC/MS, Extract or Dir Inj. Capillary
yes NPW11.79100 Dimethylphenol (2,4-) yes NPW11.79200 Dintrobenzene (1,3-) yes NPW11.79200 Dinitrobenzene (1,3-) yes NPW11.79300 Dinitrophenol (2,4-) yes NPW11.79350 Dinitrotoluene (2,4-) yes NPW11.79450 Dinitrotoluene (2,6-) yes NPW11.79550 Dinoseb yes NPW11.79550 Dinoseb yes NPW11.79700 Disulfoton yes NPW11.80150 Fluorene yes NPW11.80350 Hexachlorobenzene yes NPW11.80450 Hexachlorocyclopentadiene yes NPW11.80450 Hexachlorophene yes NPW11.80550 Hexachlorophene yes NPW11.80550 Hexachlorophene yes NPW11.80550 Hexachlorophene yes NPW11.80550 Indeno(1,2,3-cd)pyrene	Certified	Yes	NPW11.79050	Dimethylbenz(a)anthracene (7.12)		GC/MS, Extract or Dir Inj, Capillary
d Yes NPW11.79150 Di-n-butyl phthalate Yes NPW11.79200 Dinitrobenzene (1,3-) Yes NPW11.79300 Dinitrobenzene (2,4-) Yes NPW11.79400 Dinitrotoluene (2,4-) Yes NPW11.79450 Dinitrotoluene (2,6-) Yes NPW11.79500 Di-n-octyl phthalate Yes NPW11.79500 Di-n-octyl phthalate Yes NPW11.80100 Famphur Yes NPW11.80150 Fluoranthene Yes NPW11.80350 Hexachlorobutadiene (1,3-) Yes NPW11.80450 Hexachlorocyclopentadiene Yes NPW11.80550 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80500 Indene	Certified	Yes	NPW11.79100	Dimethylphenol (2.4-)		GC/MS, Extract or Dir Inj. Capillary
d Yes NPW11.79200 Dinitrobenzene (1,3-) d Yes NPW11.79300 Dinitrobenzene (1,3-) d Yes NPW11.79350 Dinitrobenzene (2,4-) Yes NPW11.79400 Dinitrotoluene (2,4-) Yes NPW11.79500 Dinitrotoluene (2,6-) Yes NPW11.79500 Dinitrotoluene (2,6-) Yes NPW11.79500 Dinitrotoluene (2,6-) Yes NPW11.79500 Dinitrotoluene (2,6-) Yes NPW11.79500 Dinoseb Yes NPW11.80100 Famphur Yes NPW11.80100 Famphur Yes NPW11.80200 Fluoranthene Yes NPW11.80350 Hexachlorobenzene Yes NPW11.80350 Hexachlorocyclopentadiene (1,3-) Yes NPW11.80500 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80500 Hexachlorophene Yes NPW11.80750 Indene	Certified	Yes	NPW11.79150	Di-n-butyl phthalate		GC/MS, Extract or Dir Inj, Capillary
d Yes NPW11.79300 Dinitrophenol (2,4-) d Yes NPW11.79350 Dinitrophenol (2,4-) Yes NPW11.79400 Dinitrotoluene (2,4-) Yes NPW11.79450 Dinitrotoluene (2,6-) Yes NPW11.79500 Di-n-octyl phthalate Yes NPW11.79500 Disulfoton Yes NPW11.80100 Famphur Yes NPW11.80150 Fluoranthene Yes NPW11.80200 Fluoranthene Yes NPW11.80350 Hexachlorobutadiene (1,3-) Yes NPW11.80400 Hexachlorocyclopentadiene Yes NPW11.80450 Hexachlorophene Yes NPW11.80500 Hexachlorophene	Certified	Yes	NPW11.79200	Dinitrobenzene (1.3-)		GC/MS, Extract or Dir Inj, Capillary
d Yes NPW11.79350 Dinitrophenol (2-methyl-4,6-) Yes NPW11.79400 Dinitrotoluene (2,4-) Yes NPW11.79450 Dinitrotoluene (2,6-) Yes NPW11.79500 Di-n-octyl phthalate Yes NPW11.79500 Dinoseb Yes NPW11.80150 Famphur Yes NPW11.80200 Fluoranthene Yes NPW11.80200 Fluoranthene Yes NPW11.80350 Hexachlorobutadiene (1,3-) Yes NPW11.80450 Hexachlorophene Yes NPW11.80450 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80500 Hexachlorophene Yes NPW11.80500 Hexachlorophene Yes NPW11.80500 Hexachlorophene Yes NPW11.80500 Indene	Certified	Yes	NPW11.79300	Dinitrophenol (2,4-)		
d Yes NPW11.79400 Dinitrotoluene (2,4-) Yes NPW11.79450 Dinitrotoluene (2,6-) Yes NPW11.79500 Di-n-octyl phthalate Yes NPW11.79500 Disulfoton Yes NPW11.80100 Famphur Yes NPW11.80150 Fluoranthene Yes NPW11.80200 Fluoranthene Yes NPW11.80400 Hexachlorobenzene Yes NPW11.80450 Hexachlorocyclopentadiene (1,3-) Yes NPW11.80550 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80500 Hexachlorophene Yes NPW11.80500 Hexachlorophene Yes NPW11.80500 Indene (1,2,3-cd)pyrene	Certified	Yes	NPW11.79350	Dinitrophenol (2-methyl-4,6-)		GC/MS Extract or Dir Inj. Capillary
Yes NPW11.79450 Dinitrotoluene (2,6-) Yes NPW11.79500 Di-n-octyl phthalate Yes NPW11.79550 Dinoseb Yes NPW11.79700 Disulfoton Yes NPW11.80150 Fluoranthene Yes NPW11.80200 Fluorene Yes NPW11.80350 Hexachlorobenzene Yes NPW11.80400 Hexachlorocyclopentadiene (1,3-) Yes NPW11.80450 Hexachlorocyclopentadiene Yes NPW11.80550 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80600 Hexachloropropene Yes NPW11.80750 Indene	Certified	Yes	NPW11.79400	Dinitrotoluene (2,4-)	_	GC/MS Extract or Dir Inj. Capillary
Yes NPW11.79500 Din-octyl phthalate Yes NPW11.79550 Dinoseb Yes NPW11.80100 Disulfoton Yes NPW11.80100 Famphur Yes NPW11.80150 Fluoranthene Yes NPW11.80350 Hexachlorobenzene Yes NPW11.80400 Hexachlorocyclopentadiene Yes NPW11.80450 Hexachlorocyclopentadiene Yes NPW11.80500 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80500 Hexachlorophene Yes NPW11.80500 Indene Yes NPW11.80750 Indene	Certified	Yes	NPW11.79450	Dinitrotoluene (2,6-)	0	GC/MS. Extract or Dir Inj. Capillary
Yes NPW11.79500 Dinoseb Yes NPW11.80100 Famphur Yes NPW11.80150 Fluoranthene Yes NPW11.80200 Fluorene Yes NPW11.80350 Hexachlorobenzene Yes NPW11.80400 Hexachlorocyclopentadiene (1,3-) Yes NPW11.80450 Hexachlorocyclopentadiene Yes NPW11.80550 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80600 Hexachlorophene Yes NPW11.80750 Indene	Certified	Yes	NPW11.79500	Di-n-octyl phthalate	0	GC/MS, Extract or Dir Inj. Capillary
Yes NPW11.80100 Famphur Yes NPW11.80100 Fluoranthene Yes NPW11.80200 Fluorene Yes NPW11.80350 Hexachlorobenzene Yes NPW11.80350 Hexachlorobutadiene (1,3-) Yes NPW11.80450 Hexachlorocyclopentadiene Yes NPW11.80500 Hexachloroethane Yes NPW11.80550 Hexachlorophene Yes NPW11.80500 Hexachlorophene Yes NPW11.80500 Indene Yes NPW11.80750 Indene	Certified	Yes	NPW11.79550	Dinoseb	0	GC/MS, Extract or Dir Inj, Capillary
Yes NPW11.80100 Fluoranthene Yes NPW11.80200 Fluoranthene Yes NPW11.80200 Fluoranthene Yes NPW11.80350 Hexachlorobenzene Yes NPW11.80400 Hexachlorocyclopentadiene Yes NPW11.80450 Hexachlorocthane Yes NPW11.80550 Hexachlorophene Yes NPW11.80550 Hexachlorophene Yes NPW11.80600 Hexachlorophene Yes NPW11.80700 Indene Yes NPW11.80750 Indeno(1,2,3-cd)pyrene	Certified	Yos Y	NPW11.79700	Disulfoton	0	GC/MS, Extract or Dir Inj, Capillary
Yes NPW11.80350 Fluorene Yes NPW11.80350 Hexachlorobenzene Yes NPW11.80400 Hexachlorobutadiene (1,3-) Yes NPW11.80450 Hexachlorocyclopentadiene Yes NPW11.80500 Hexachloroethane Yes NPW11.80550 Hexachlorophene Yes NPW11.80500 Hexachlorophene Yes NPW11.80700 Indene Yes NPW11.80750 Indeno(1,2,3-cd)pyrene	Certified	Yes	NDW11.80100	Famphur	0	GC/MS, Extract or Dir Inj, Capillary
Yes NPW11.80350 Hexachlorobenzene Yes NPW11.80400 Hexachlorobutadiene (1,3-) Yes NPW11.80450 Hexachlorocyclopentadiene Yes NPW11.80500 Hexachloroethane Yes NPW11.80550 Hexachlorophene Yes NPW11.80600 Hexachloropropene Yes NPW11.80700 Indene Yes NPW11.80750 Indeno(1,2,3-cd)pyrene	Certified	Yes	NPW11 80200	Elipropo	0	GC/MS, Extract or Dir Inj, Capillary
Yes NPW11.80400 Hexachlorocyclopentadiene (1,3-) Yes NPW11.80450 Hexachlorocyclopentadiene Yes NPW11.80500 Hexachloroethane Yes NPW11.80550 Hexachlorophene Yes NPW11.80600 Hexachloropropene Yes NPW11.80700 Indene Yes NPW11.80750 Indeno(1,2,3-cd)pyrene	Certified	Yes	NPW11 80350	Heyechlorohonzon		GC/MS, Extract or Dir Inj, Capillary
Yes NPW11.80450 Hexachlorocyclopentadiene Yes NPW11.80500 Hexachloroethane Yes NPW11.80550 Hexachlorophene Yes NPW11.80600 Hexachloropropene Yes NPW11.80700 Indene Yes NPW11.80750 Indeno(1,2,3-cd)pyrene	Certified	Yes	NPW11.80400	Hexachlorobitadians (1.3.)		GC/MS, Extract or Dir Inj, Capillary
Yes NPW11.80500 Hexachloroethane Yes NPW11.80550 Hexachlorophene Yes NPW11.80600 Hexachloropropene Yes NPW11.80700 Indene Yes NPW11.80750 Indeno(1,2,3-cd)pyrene	Certified	Yes	NPW11.80450	Hexachlorocyclopentadiene		
Yes NPW11.80550 Hexachlorophene Yes NPW11.80600 Hexachloropropene Yes NPW11.80700 Indene Yes NPW11.80750 Indeno(1,2,3-cd)pyrene	Certified	Yes	NPW11.80500	Hexachloroethane		GC/MS Extract or Dir Inj, Capillary
Yes NPW11.80600 Hexachloropropene Yes NPW11.80700 Indene Yes NPW11.80750 Indeno(1,2,3-cd)pyrene	Certified	Yes	NPW11.80550	Hexachlorophene		
Yes NPW11.80700 Indene Yes NPW11.80750 Indeno(1,2,3-cd)pyrene	Certified	Yes	NPW11.80600	Hexachloropropene	_	GC/MS Extract or Dir Inj. Capillary
Yes NPW11.80750 Indeno(1,2,3-cd)pyrene	Certified	Yes	NPW11.80700	Indene	0	GC/MS, Extract or Dir Inj. Capillary
	Certified	Yes	NPW11.80750	Indeno(1,2,3-cd)pyrene	9	



Annual Certified Parameter List and Current Status

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 Effective as of 07/01/2023 until 6/30/2024

MT. JULIET TN 37122





Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: NPW11--Organic Parameters - Chromatography/MS

	Certified	Certified	Certified	Certified	Certified	Certified	i	Applied	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Snitte
	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data
	NPW11.84000	NPW11.83950	NPW11.83900	NPW11.83850	NPW11.83800	NPW11.83750		NPW11.83700	NPW11.83650	NPW11.83600	NPW11.83550	NPW11.83500	NPW11.83450	NPW11.83400	NPW11.83350	NPW11.83300	NPW11.83250	NPW11.83200	NPW11.83150	NPW11.82750	NPW11.82700	NPW11.82650	NPW11.82600	NPW11.82550	NPW11.82500	NPW11.82450	NPW11.82400	NPW11.82350	Code
	Quinoline -1-Oxide (4-Nitro)	Quinoline	Pyridine	Pyrene	Pronamide	Picoline (2-)	[Thionazin]	Phoenhorothicate (diother)	Phosphorothinate (O.Otriathyl)	Phorate (Principle of the Phorate	Phenylethylamine (alpha, alpha-Dimethyl)	Phenylenediamine (1,4-)	Phenol	Phenanthrene	Phenacetin	Pentachlorophenol	Pentachloronitrobenzene	Pentachloroethane	Pentachlorobenzene	Parathion methyl	Parathion	Octadecane (n-)	N-Nitrosopyrrolidine	N-Nitrosopiperidine	N-Nitrosomorpholine	N-Nitrosomethylethylamine	N-Nitrosodiphenylamine / Diphenylamine	N-Nitroso-di-n-propylamine	Parameter
		GC/MS, Extract or Dir Inj. Capillary	GC/MS Extract or Dir Inj. Capillary			GC/MS Extract or Dir Is: Cosillos	GC/MS, Extract or Dir Inj, Capillary	GC/MS Extract or Dir Inj, Capillary	GC/MS Extract or Dir Inj, Capillary	GC/MG Extract or Dir Inj, Capillary	GC/MG Extract or Dir Inj, Capillary	GC/MS Extract or Dir Inj, Capillary	COMS Extract of Dir Inj, Capillary	GC/MS Extract a Dir Inj, Capillary	GC/MS Extract or Dir Inj, Capillary	GC/MS Extract or Dir Inj, Capillary	GC/MS Extract or Dir Inj, Capillary	GC/MS, Extract of Dirinj, Capillary	COME Extract of Dirinj, Capillary	GC/Ms Extract or Dirinj, Capillary	GC/MG Extract or Dirinj, Capillary	GC/MS Extract or Dir Inj, Capillary	GC/MG Extract of Dir Itil, Capillary	GC/MS Extract of Dir Inj, Capillary	GC/MS Extra Distriction	Technique			
SW-646 82/UE	SW-646 8270F	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E		SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E		Approved Methods				
Ā	L _A	5	LA	5	LA		Ā	5	5	LA	5	۵	5	5	5	5	5	L _A	FA	5	5	5	2	5	5	LA	LA	State	Primary



Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: NPW11--Organic Parameters - Chromatography/MS

Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Status
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data
NPW11.85850	NPW11.85700	NPW11.85650	NPW11.85600	NPW11.85550	NPW11.85350	NPW11.85300	NPW11.85250	NPW11.85200	NPW11.85150	NPW11.85100	NPW11.85050	NPW11.85000	NPW11.84950	NPW11.84900	NPW11.84850	NPW11.84750	NPW11.84700	NPW11.84650	NPW11.84550	NPW11.84450	NPW11.84400	NPW11.84350	NPW11.84300	NPW11.84250	NPW11.84150	NPW11.84100	Code
Indeno(1,2,3-cd)pyrene	Hexachlorobenzene	Fluorene	Fluoranthene	Dioxane (1,4-)	Dibenzo(a,h)anthracene	Chrysene	Benzo(k)fluoranthene	Benzo(ghi)perylene	Benzo(b)fluoranthene	Benzo(a)pyrene	Benzo(a)anthracene	Anthracene	Acenaphthylene	Acenaphthene	Trinitrobenzene (1.3.5-)	Trichlorophenol (2,4,6-)	Trichlorophenol (2,4,5-)	Trichlorobenzene (1.2.4-)	Toluidine (5-nitro-2-)	Toluidine (2-) (2-Methylaniline)	Tetrachlorophenol (2 3 4 6-)	Tetrachlorobenzene (1.2.4.5-)	Tetrachlorobenzene (1,2,3,5-)	Tetrachlorobenzene (1.2.3.4-)	Sulfotepp	Safrole	Parameter
GC/MS/SIM, Extract or Dir Inj, Capillary	GC/MS/SIM, Extract or Dir Inj, Capillary		GC/MS/SIM Extract to Dirinj, Capillary	GC/Mg/gill Extract of Dirity, Capillary	GC/MS/SIM Extract or Dir Itil, Capillary	GC/MS/SIM Extract or Dir It; Capillary	GC/MS/SIM Extract or Dir Inj, Capillary	GC/MS/SIM, Extract or Dir Inj, Capillary	GC/MS/SIM, Extract or Dir Inj, Capillary	GC/MS/SIM Extract or Dir inj, Capillary	GC/MS/SIM, Extract or Dir Inj, Capillary	GC/MS/SIM Extract or Dir Inj, Capillary	GC/MS/SIM, Extract or Dir Inj, Capillary	GC/MS/SIM Extract of Dir Inj, Capillary	GC/MS, Extract or Dir Inj, Capillary	GC/MC Extract or Dir Inj, Capillary	GC/MS Extract or Dir Inj, Capillary	GC/MS, Extract or Dir Inj, Capillary	COMS, Extract or Dir Inj, Capillary	GC/MS, Extract or Dir Inj, Capillary	SCANS, Extract or Dir Inj, Capillary	GC/MS Extract of Dir inj, Capillary	GC/MS Extract a Dir Inj, Capillary	GC/MG, Extract of Dir Inj, Capillary	GC/MS, Extract or Dir Inj, Capillary	COMO THE	Technique
SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E		Approved Methods
5	5	5	5	۲ _A	5	5	5	5	5	5	5	5	F	5	LA	7	5	LA	LA	LA	LA	7	2	5	LA	State	Primary



Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

MT. JULIET TN 37122 Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD

Category: NPW11--Organic Parameters - Chromatography/MS



Category: NPW12--Toxicity Testing

Report NJ Code Parameter Technique		Status F
	Data	Report NJ
Parameter Technique		Code
Technique		Parameter
Technique		
	iechnique	
	Approved Methods	
Approved Methods	Prim	



Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: NPW12--Toxicity Testing

Certified Certified Certified	Status Certified
Yes Yes	Eligible to Report NJ Data
NPW12.00400 NPW12.00900 NPW12.01000	Code
Toxicity - acute, FW organism Toxicity - acute, FW organism Toxicity - chronic, FW organism Toxicity - chronic, FW organism	Parameter
Ceriodaphnia Mortality Fathead Minnow (FHM) Mortality FHM Larval Survival & Growth Ceriodaphnia Survival & Reproduction	Technique
EPA 2002.0 EPA 2000.0 EPA 1000.0 EPA 1002.0	Approved Methods
5555	Primary State

Category: NPW13--Radiochem. - Radioactivity/Radionuclides

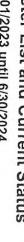
Status	Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary
Certified	Yes	NPW13.00001	Alpha Emitting Radium Isotopoo			State
Certified	Yes	NPW13 00300	Cestim 434/437	Precipitation	SW-846 9315	F
Certified	\		CO01011 104/107	Gamma Spectrometry	EPA 901 1	
Comico	Tes	NPW13.00550	Cobalt 60	Gamma Spectrometry		5
Certified	Yes	NPW13.00700	Gross - alpha	Carrina opecinometry	EPA 901.1	LA
Certified	Yes	NPW13 01000	Green both	Proportional or Scintillation	EPA 900.0	F
Certified	Yes	NIDWIA	7 (6 6	Proportional Counter	EPA 900.0	ΙA
		141 44 10.01000	Froion Emitters	Gamma Spectrometry		Ţ
Certified	Yes	NPW13.01400	Plutonium		EPA 901.1	LA
Certified	Yes	NPW13.01450	Radium - 226	Property - I	EPA 907.0	4
Certified	Yes	NPW13.01700	Radium - 226		EPA 903.0	5
Certified	Yes	NPW13.01950	Radium - 228		SM 7500-Ra B	7
Certified	Yes	NPW13.02300	Radium - total	Co-1 recipitation / Beta Counting	EPA 904.0	LA
Certified	Yes	NPW13.02500	Strontium - 80 00	Frecipitation	SM 7500-Ra B	LA
Certified	Yes	NPW13.02550	Strontium - 80	Precipitation / Beta Counting	EPA 905.0	LA
Certified	Yes	NPW13.02700	Thorium	Precipitation / Beta Counting	EPA 905.0	LA
Certified	Yes	NPW13.02750	Tritium	Alpha Spectrometry	Other LANL ER-200	5
Certified	Yes	NPW13.02800	Uranium	Usuilation/Liquid Scintillation	EPA 906.0	5
Certified	Yes	NPW13.02850	Uranium	Isotopic Analysis / Alpha Spectrometry	ASTM D3972	5
Certified	Yes	NPW13.03300	Zinc 65	Laser Phosphorimetry	ASTM D5174	5
				Gamma Spectrometry	EPA 901.1	5
KEY. AE - Air	KEY. AE I AIL III .					

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

MT. JULIET TN 37122 Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD





Category: NPW14--Radon in Non-Potable Water

Ceralled	Status
Yes	Report NJ Data
NPW14.00050	Code
Radon	Parameter
Liquid Scintillation	Technique
SM 7500-Rn	Approved Methods
LA	Primary

Category: SCM01--Microbiology

	Certified	Status
	Yes	Report NJ (
	SCM01.00150	Code
י ככפו כטווטוווו	SCM01.00150 Facal coliform	Parameter
Multiple Tube A-1		Technique
EPA 1681-14		Approved Methods
LA	State	Primary

Category: SCM02--Characteristics of Hazardous Waste

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods
Certified	Vac	20000000000			The monitore
Cermien	res	SCM02.00450	Free liquid	Flow Through Doint File Of	
Applied	No	SCM02.00500	Heat of combustion (RTII)	now-infough Paint Filter, Observation	SW-846 9095B
Certified	Yes	SCM02 00560	Floor Doing	Bumb Calorimeter	ASTM D240
			י ימצוו רטווון	Pensky-Martens	000000000000000000000000000000000000000
Сеппеd	Yes	SCM02.00600	Ignitability		90101 948-448
Certified	Yes	SCM02 00800	DH soil and most	relisky Wartens	User Defined ASTM D93
			דיי בכון מות אמסונ	Mix with Water or Calcium Chlorides	SW-846 9045D

Category: SCM03--Inorganic Parameters and Preparation

Commen	Status
Yes	Report NJ Code Data
SCM03.00200	Code
Ammonia	Parameter
Distillation, Semi-automated	Technique
EPA 350.1	Approved Methods
LA	Primary

Annual Certified Parameter List and Current Status Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: SCM03--Inorganic Parameters and Preparation

ad Yes SCM03.00550 Bromide ad Yes SCM03.00850 Chloride ad Yes SCM03.01550 Chloride ad Yes SCM03.01250 Cyanide d Yes SCM03.01250 Cyanide - amenable to CI2 d Yes SCM03.01250 Cyanide - amenable to CI2 d Yes SCM03.01550 Cyanide - amenable to CI2 d Yes SCM03.01550 Cyanide - amenable to CI2 d Yes SCM03.01550 Fluoride d Yes SCM03.01950 Fluoride Yes SCM03.02650 Nitrate Yes SCM03.03500 Nitrate Yes SCM03.03200 Oil & grease - sludge-hem Interpretation of the properties of the proper	Status	Report NJ Data Yes	Code SCM03.00500	Parameter Bromide	Technique	Approved Methods
ad Yes SCM03.00850 Chloride ad Yes SCM03.01550 Chloride ad Yes SCM03.01200 Chloride d Yes SCM03.01250 Cyanide - amenable to CI2 d Yes SCM03.01550 Fluoride d Yes SCM03.01550 Nitrate d Yes SCM03.02700 Nitrate Yes SCM03.03250 Oil & grease - sludge-hem yes SCM03.03250 Oil & grease - sludge-hem-npm Prophosphate Yes SCM03.04500 Sulfate Yes SCM03.04500 Sulfates, acid sol. & insol. Yes SCM03.04500 Total organic carbon (TOC) Yes SCM03.04500 Total organic carbon (TOC)	Certified	Yes	SCM03.00550	Bromide	lon Chromatography	
Yes SCM03.09800 Chloride dd Yes SCM03.01150 Cyanide dd Yes SCM03.01250 Cyanide dd Yes SCM03.01250 Cyanide dd Yes SCM03.01250 Cyanide Yes SCM03.01550 Cyanide - amenable to Cl2 Yes SCM03.01550 Fluoride Yes SCM03.01900 Fluoride Yes SCM03.01900 Fluoride Yes SCM03.02700 Nitrate Yes SCM03.02700 Nitrate Yes SCM03.03250 Oil & grease - sludge-hem Yes SCM03.03250 Oil & grease - sludge-hem-npm Yes SCM03.04200 Sulfate Yes SCM03.04200 Sulfate Yes SCM03.04450 Sulfate Yes SCM03.04450 Sulfate Yes SCM03.04500 Total organic carbon (TOC) Yes SCM03.04800 Total, fixed, and volatile solids (SQAR) Gd Yes SCM03.04500 S	Certified	Yes	SCM03.00850	Chloride	ion Chromatography	
Yes SCM03.01150 Cyanide d Yes SCM03.01200 Cyanide d Yes SCM03.01250 Cyanide - amenable to Ct2 d Yes SCM03.01550 Cyanide - amenable to Ct2 d Yes SCM03.01550 Cyanide - amenable to Ct2 Yes SCM03.01550 Extractable organic halides (ECX) Yes SCM03.01950 Fluoride Yes SCM03.02650 Nitrate Yes SCM03.03050 Nitritle Yes SCM03.03050 Nitritle Yes SCM03.03250 Oil & grease - sludge-hem Yes SCM03.03250 Orthophosphate Yes SCM03.04200 Sulfate Yes SCM03.04450 Total organic carbon (TOC) Yes SCM03.04500 Total, fixed, and volatile solids (SQAR) G Yes SCM03.04500 G	Certified	Yes	SCM03.00900	Chloride	Ion Chromatography	
dd Yes SCM03.01250 Cyanide dyes SCM03.01250 Cyanide - amenable to CI2 dyes SCM03.01550 Cyanide - amenable to CI2 Yes SCM03.01550 Cyanide - amenable to CI2 Yes SCM03.01750 Extractable organic halides (EOX) Yes SCM03.01950 Fluoride Yes SCM03.02650 Nitrate Yes SCM03.02650 Nitrate Yes SCM03.03050 Nitrate Yes SCM03.03050 Nitrite Yes SCM03.03050 Oil & grease - sludge-hem Yes SCM03.03250 Oil & grease - sludge-hem-npm Yes SCM03.04150 Sulfate Yes SCM03.0450 Sulfate Yes SCM03.04500 Sulfate Yes SCM03.04500 Sulfate Yes SCM03.04500 Total organic carbon (TOC) Yes SCM03.04500 Total organic carbon (TOC) SSCM03.04500 Total fixed, and volatile solids (SQAR) G	Certified	Yes	SCM03.01150	Cyanide	Dietilotion	
d Yes SCM03.01250 Cyanide d Yes SCM03.01550 Cyanide - amenable to Ci2 d Yes SCM03.01750 Extractable organic halides (EOX) d Yes SCM03.01750 Fluoride d Yes SCM03.02650 Nitrate d Yes SCM03.02700 Nitrate d Yes SCM03.03100 Nitrite d Yes SCM03.03100 Nitrite Yes SCM03.03200 Oil & grease - sludge-hem Yes SCM03.03250 Orthophosphate Yes SCM03.04150 Sulfide Yes SCM03.04200 Sulfides, acid sol. & insol. Yes SCM03.04500 Sulfides, acid sol. & insol. Yes SCM03.04500 Total organic carbon (TOC) Yes SCM03.04500 Total, fixed, and volatile solids (SQAR) Yes SCM03.04800 Total, fixed, and volatile solids (SQAR)	Certified	Yes	SCM03.01200	Cyanide	Extraction Ollows Delication	
d Yes SCM03.01550 Cyanide - amenable to Ci2 d Yes SCM03.01750 Extractable organic halides (EOX) d Yes SCM03.01900 Fluoride Yes SCM03.02650 Nitrate Yes SCM03.02650 Nitrate Yes SCM03.03050 Nitrite Yes SCM03.03050 Nitrite Yes SCM03.03200 Oil & grease - sludge-hem Yes SCM03.03250 Orthophosphate Yes SCM03.04200 Sulfate Yes SCM03.04450 Sulfate Yes SCM03.04450 Sulfides, acid sol. & insol. Yes SCM03.04450 Total organic carbon (TOC) Yes SCM03.04800 Total, fixed, and volatile solids (SQAR)	Certified	Yes	SCM03.01250	Cyanide	Colorination Automated	
d Yes SCM03.01750 Extractable organic halides (EOX) yes SCM03.01900 Fluoride Yes SCM03.02650 Nitrate Yes SCM03.02650 Nitrate Yes SCM03.03050 Nitrite Yes SCM03.03050 Nitrite Yes SCM03.03100 Nitrite Yes SCM03.03200 Oil & grease - sludge-hem Yes SCM03.03250 Orthophosphate Yes SCM03.04150 Sulfate Yes SCM03.04450 Sulfate Yes SCM03.04450 Sulfades, acid sol. & insol. Yes SCM03.04600 Total organic carbon (TOC) Yes SCM03.04750 Total organic carbon (TOC) Yes SCM03.04500 Total, fixed, and volatile solids (SQAR)	Certified	Yes	SCM03.01550	Cyanide - amenable to CI2	Distillation	
d Yes SCM03.01900 Fluoride d Yes SCM03.01950 Fluoride Yes SCM03.02650 Nitrate Yes SCM03.02700 Nitrite Yes SCM03.03050 Nitrite Yes SCM03.03050 Nitrite Yes SCM03.03250 Oil & grease - sludge-hem Yes SCM03.03250 Orthophosphate Yes SCM03.0450 Sulfate Yes SCM03.04450 Sulfate Yes SCM03.04500 Total organic carbon (TOC) Yes SCM03.04800 Total, fixed, and volatile solids (SQAR)	Certified	Yes	SCM03.01750	Extractable organic halides (EOX)	Extraction	
d Yes SCM03.01950 Fluoride d Yes SCM03.02650 Nitrate d Yes SCM03.02700 Nitrate Yes SCM03.03050 Nitrite Yes SCM03.03100 Nitrite Yes SCM03.03200 Oil & grease - sludge-hem Yes SCM03.03550 Orthophosphate Yes SCM03.04500 Sulfate Yes SCM03.04450 Sulfate Yes SCM03.04450 Sulfides, acid sol. & insol. Yes SCM03.04500 Total organic carbon (TOC) Yes SCM03.04800 Total organic carbon (TOC) Yes SCM03.04800 Total, fixed, and volatile solids (SQAR)	Certified	Yes	SCM03,01900	Fluoride	los Chromata	
d Yes SCM03.02650 Nitrate Yes SCM03.02700 Nitrate Yes SCM03.03050 Nitrite Yes SCM03.03050 Nitrite Yes SCM03.03200 Oil & grease - sludge-hem Yes SCM03.03250 Orthophosphate Yes SCM03.0450 Sulfate Yes SCM03.04450 Sulfate Yes SCM03.04450 Sulfate, acid sol. & insol. Yes SCM03.04500 Total organic carbon (TOC) Yes SCM03.04800 Total, fixed, and volatile solids (SQAR)	Certified	Yes	SCM03.01950	Fluoride	lon Chromatography	
dYesSCM03.02700NitratedYesSCM03.03050NitritedYesSCM03.03100NitritedYesSCM03.03200Oil & grease - sludge-hemyesSCM03.03250OrthophosphateyesSCM03.04500SulfateYesSCM03.04200Sulfides, acid sol. & insol.yesSCM03.04500Sulfides, acid sol. & insol.YesSCM03.04500Total organic carbon (TOC)YesSCM03.04750Total organic carbon (TOC)YesSCM03.04800Total organic carbon (TOC)YesSCM03.04800Total organic carbon (TOC)	Certified	Yes	SCM03.02650	Nitrate	lon Chromatography	
Yes SCM03.03050 Nitrite Yes SCM03.03100 Nitrite Yes SCM03.03200 Oil & grease - sludge-hem Yes SCM03.03250 Oil & grease - sludge-hem-npm Yes SCM03.03550 Orthophosphate Yes SCM03.04150 Sulfate Yes SCM03.04200 Sulfate Yes SCM03.04450 Sulfides, acid sol. & insol. Yes SCM03.04500 Total organic carbon (TOC) Yes SCM03.04800 Total organic carbon (TOC) Yes SCM03.04800 Total, fixed, and volatile solids (SQAR)	Certified	Yes	SCM03.02700	Nitrate	lon Chromatography	
Yes SCM03.03100 Nitrite Yes SCM03.03200 Oil & grease - sludge-hem Yes SCM03.03250 Oil & grease - sludge-hem-npm Yes SCM03.03550 Orthophosphate Yes SCM03.04150 Sulfate Yes SCM03.04200 Sulfate Yes SCM03.04450 Sulfides, acid sol. & insol. Yes SCM03.04500 Total organic carbon (TOC) Yes SCM03.04800 Total organic carbon (TOC) Yes SCM03.04800 Total, fixed, and volatile solids (SQAR)	fied	Yes	SCM03.03050	Nitrite	lon Chromatography	
Yes SCM03.03200 Oil & grease - sludge-hem Yes SCM03.03250 Oil & grease - sludge-hem-npm Yes SCM03.03550 Orthophosphate Yes SCM03.04150 Sulfate Yes SCM03.04200 Sulfate Yes SCM03.04450 Sulfides, acid sol. & insol. Yes SCM03.04500 Sulfides, acid sol. & insol. Yes SCM03.04600 Total organic carbon (TOC) Yes SCM03.04800 Total organic carbon (TOC) Yes SCM03.04800 Total, fixed, and volatile solids (SQAR)	ied	Yes	SCM03.03100	Nitrite	Ion Chromatography	
Yes SCM03.03250 Oil & grease - sludge-hem-npm Yes SCM03.03550 Orthophosphate Yes SCM03.04150 Sulfate Yes SCM03.04200 Sulfate Yes SCM03.04450 Sulfides, acid sol. & insol. Yes SCM03.04500 Total organic carbon (TOC) Yes SCM03.04800 Total organic carbon (TOC) Yes SCM03.04800 Total, fixed, and volatile solids (SQAR)	O.	Yes	SCM03.03200	Oil & grease - sludge-hem	Extraction & Crawlengtrip	
Yes SCM03.03550 Orthophosphate Yes SCM03.04150 Sulfate Yes SCM03.04200 Sulfate Yes SCM03.04200 Sulfides, acid sol. & insol. Yes SCM03.04500 Sulfides, acid sol. & insol. Yes SCM03.04600 Total organic carbon (TOC) Yes SCM03.04800 Total organic carbon (TOC) Yes SCM03.04800 Total, fixed, and volatile solids (SQAR)	ď	Yes	SCM03.03250	Oil & grease - sludge-hem-npm	Extraction & Glavimenic	
Yes SCM03.04150 Sulfate Yes SCM03.04200 Sulfate Yes SCM03.04450 Sulfides, acid sol. & insol. Yes SCM03.04500 Sulfides, acid sol. & insol. Yes SCM03.04600 Total organic carbon (TOC) Yes SCM03.04750 Total organic carbon (TOC) Yes SCM03.04800 Total, fixed, and volatile solids (SQAR)	ed	Yes	SCM03.03550	Orthophosphate	los Obronotociones	
Yes SCM03.04200 Sulfate Yes SCM03.04450 Sulfides, acid sol. & insol. Yes SCM03.04500 Sulfides, acid sol. & insol. Yes SCM03.04600 Total organic carbon (TOC) Yes SCM03.04750 Total organic carbon (TOC) Yes SCM03.04800 Total organic carbon (TOC) Yes SCM03.05000 Total, fixed, and volatile solids (SQAR)	ied	Yes	SCM03.04150	Sulfate	ion Chromatography	
Yes SCM03.04450 Sulfides, acid sol. & insol. Yes SCM03.04500 Sulfides, acid sol. & insol. Yes SCM03.04600 Total organic carbon (TOC) Yes SCM03.04750 Total organic carbon (TOC) Yes SCM03.04800 Total organic carbon (TOC) Yes SCM03.05000 Total, fixed, and volatile solids (SQAR)	fied	Yes	SCM03.04200	Sulfate	ion Chromatography	
Yes SCM03.04500 Sulfides, acid sol. & insol. Yes SCM03.04600 Total organic carbon (TOC) Yes SCM03.04750 Total organic carbon (TOC) Yes SCM03.04800 Total organic carbon (TOC) Yes SCM03.05000 Total, fixed, and volatile solids (SQAR)	Certified	Yes	SCM03.04450	Sulfides, acid sol. & insol.	Redox Titration	
Yes SCM03.04600 Total organic carbon (TOC) Yes SCM03.04750 Total organic carbon (TOC) Yes SCM03.04800 Total organic carbon (TOC) Yes SCM03.05000 Total, fixed, and volatile solids (SQAR)	Certified	Yes	SCM03.04500	Sulfides, acid sol. & insol.	Titration	
Yes SCM03.04750 Total organic carbon (TOC) Yes SCM03.04800 Total organic carbon (TOC) Yes SCM03.05000 Total, fixed, and volatile solids (SQAR)	Certified	Yes	SCM03.04600	Total organic carbon (TOC)	Gravimetric	
Yes SCM03.04800 Total organic carbon (TOC) Yes SCM03.05000 Total, fixed, and volatile solids (SQAR)	Certified	Yes	SCM03.04750	Total organic carbon (TOC)	Spectroscopy	
rotat, lixed, and volatile solids (SQAR)	ŭ ŭ	Yes Yes	SCM03.04800	Total organic carbon (TOC)	Spectroscopy	
			Contraction of the contraction o	lotal, lixed, and volatile solids (SQAR)	Gravimetric, 500 Degrees C	





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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD **MT. JULIET TN 37122**

Category: SCM05--Metals - SCM Preparation Methods

Certified	Certified	Certified	Certified	Certified	Certified	Certified	Status
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data
SCM05.00600	SCM05.00550	SCM05.00350	SCM05.00300	SCM05.00100	SCM05.00050	SCM05.00001	Code
Metals	Metals	Metals	Metals	Metals	Metals	Metals	Parameter
TCLP, Toxicity Procedure, Shaker	Studge	Microwave Acid Digest - Still Coding Matrix	Microway Add Disease Office of the Control of the C	Charles 17.7.	Acid Digestion, Cil	2.2	Technique
SW-846 1312 SW-846 1311	SW-846 3051A	SW-846 3052	SW-846 3060A	SW-846 3050B	SW-846 3031		Approved Methods
5 5	٦	5	5	5	۶	State	Primary

Category: SCM06--Metals

	Status Rep Data Certified Vac
SCM06.02750 SCM06.02800	ort NJ
Chromium (VI) Chromium (VI) Mercury - solid waste	Parameter
Colorimetric Ion Chromatography AA, Manual Cold Vapor	Technique
SW-846 7196A SW-846 7199 SW-846 7471B	Approved Methods
555	Primary State

Category: SCM07--Metals - ICP, ICP/MS and DCP

Certified	Certified	Certified	Certified	Certified	Status
Yes	Yes	Yes	Yes	Yes	Eligible to Report NJ Data
SCM07.00200	SCM07.00150	SCM07.00100	SCM07.00050	SCM07.00001	Code
Beryllium	Barium	Arsenic	Antimony	Aluminum	Parameter
ICP	ה מל מ	7			Technique
SW-846 6010D SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D		Approved Methods
55	4	A	5	State	Primary

Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: SCM07--Metals - ICP, ICP/MS and DCP

Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Status											
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data											
SCM07.01750	SCM07.01700	SCM07.01650	SCM07.01600	SCM07.01500	SCM07.01450	SCM07.01350	SCM07.01300	SCM07.01200	SCM07.01150	SCM07.01100	SCM07.01050	SCM07.01000	SCM07.00950	SCM07.00850	SCM07.00800	SCM07.00750	SCM07.00700	SCM07.00650	SCM07.00600	SCM07.00550	SCM07.00500	SCM07.00450	SCM07.00400	SCM07.00350	SCM07.00300	SCM07.00250	Code
Barium	Arsenic	Antimony	Aluminum	Zinc	Vanadium	Titanium	Th	Thallium	Strontium	Sodium	Silver	Selenium	Potassium	Nickel	Molybdenum	Manganese	Magnesium	Lithium	Lead	Iron	Copper	Cobalt	Chromium	Calcium	Cadmium	Boron	Parameter
ICP/MS	ICP/MS	ICP/MS	ICP/MS	Ę,	C :	ICP	lob c	מס "כי	ICB C	CP C	ָרָה <u>ה</u>	CB :	ICP :	ICP :	GP :	ြင့် (<u></u>	<u></u>	ਨੂੰ ਦੁ	ָהָ יָּהָ יַּהָ	<u>.</u>	ic c	ac d	i i	l i	ICP	Technique
SW-846 6020B	SW-846 6020B	2W-846 6020B	0W-846 60T0U	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D	SW-846 6010D		Approved Methods							
5 5	5	5	5	4	7	LA	LA	LA	LA	LA	5	5	5	5	5	5	5	5	5	7	A	5	L	5	F	State	Primary



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MT. JULIET TN 37122

Category: SCM07--Metals - ICP, ICP/MS and DCP

	Certified	Certified	Celtilled	Colina	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Status													
	Yes	Yes	Yes	•	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data													
	SCM07.03100	SCM07.03050	SCM07.03000		SCM07.02900	SCM07.02850	SCM07.02800	SCM07.02750	SCM07.02700	SCM07.02650	SCM07.02600	SCM07.02500	SCM07.02450	SCM07.02400	SCM07.02350	SCM07.02300	SCM07.02250	SCM07.02200	SCM07.02150	SCM07.02100	SCM07.02050	SCM07.02000	SCM07.01950	SCM07.01900	SCM07.01850	SCM07.01800	Code
	Zinc	Vanadium	Uranium	Hammin	Titanium	디	Thorium	Thallium	Strontium	Sodium	Silver	Selenium	Potassium	Nickel	Molybdenum	Manganese	Magnesium	Lead	Iron	Copper	Cobalt	Chromium	Calcium	Cadmium	Boron	Beryllium	Parameter
ICP/MS	ICT/MIS	ICB/MS	ICP/MS	ICP/MS	ICP/MS		IOD/MO	CDIMS	ICPIMS	ICD/MS	ICE/MG	IC PANIS	ICT/MIX	ICD/NO	ICP/Ms	ICP/MS	ICD/Ms	COMO	COMO	ICD/MO		ICT/WIG	ICD/MIG	IOD/No			Technique
S/M 8/8 50000	SW-846 6020B	SW-846 6020B	511-545 00Z0B	SINL8/18 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B	SW-846 6020B		Approved Methods													
	5	A	LA		LA	LA	LA	LA	LA	7	5	5	5	5	5	5	4	L _A	5	5	5	5	5	5	5	State	Primary



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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD Effective as of 07/01/2023 until 6/30/2024

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Category: SCM08--Organics - SCM Prep. / Screening Methods

Eligible to



Certified	Pes Yes	Code SCM08.00400	0 0	Parameter Organics Organics
Yes	U)	SCM08.00500	Organics	
	Yes	SCM08.00700	Semivolatile organics	ics
	Yes	SCM08.00750	Semivolatile organics	anics
	Yes	SCM08,00900	Semivolatile	
	Yes	SOMOB DODED	ocitiivoladie organics	Gariics
	ē	טכועוטס.טטפטט	Semivolatile organics	ganics
	Yes	SCM08.01300	Semivolatile organics	ranics
	Yes	SCM08 01350	Semivolatile on	di iio
	< ps	50400000000	Serilly ordanics	anics
		OCIVIOO.01400	semivolatile organics	nics
	Yes	SCM08.01600	Semivolatile organics	S
Certified	Yes	SCM08 01850	Valatila assasias	
Certified	Yes	SCMOB DODED	Volatile organics	
Certified	9		Voidure organics - no	n conc.
	Yes	SCM08 02100	Victoria - Service in Brit control	

Category: SCM09--Organic Parameters - Chromatography

Status	Report NJ Data	Code	Parameter	Technique
Certified	Yes	SCM09.00001	Petroleum Organics	Extraction CO ED
Certified	Yes	SCM09.00150	Tytroptakia Dataliana Lindingaria	Extraction, GC, FID
			Extractable Felloleum Hydrocarbons	Extraction, GC, FID
Certified	Yes	SCM09.00450	Diesel range organic	Extraction OC EID
Certified	Yes	SCM09.00500	Gasoline range organic	GC P&T EID
Certified	Yes	SCM09.01200	Ethyl alcohol	OD Direct Injection of D. H.
Certified	Yes	SCM09.01400	Methyl alcohol (Methanol)	
Certified	Yes	SCM09.01950	Ethylene glycol	GC Direct Injection of F & I, FID
Certified	Yes	SCM09.02050	Propylene glycol	GC Direct Injection, FID

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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: SCM09--Organic Parameters - Chromatography

	Code SCM09.02200 SCM09.03350 SCM09.03400 SCM09.03700 SCM09.04050 SCM09.04050 SCM09.04150 SCM09.04150 SCM09.04150		
yl ether	or P & T, PID-HECD	Approved Methods SW-846 8021B SW-846 8021B	



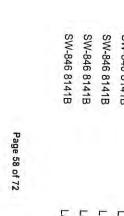
Annual Certified Parameter List and Current Status

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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD **MT. JULIET TN 37122**

Category: SCM09--Organic Parameters - Chromatography

Status	Report NJ Data	Code	Parameter	Technique	
Certified	Yes Yes	SCM09.07000	Hexachlorobenzene	GC, Extraction, ECD	D or HECD, Capillary
Certified	Yes	SCM09.07.100	Mother (gamma BHC)	GC, Extraction, EC	GC, Extraction, ECD or HECD, Capillary
Certified	Yes	SCM09.07500	Toxanhene	GC, Extraction, EC	GC, Extraction, ECD or HECD, Capillary
Certified	Yes	SCM09.08700	PCB 1016	GC, Extraction, ECI	GC, Extraction, ECD or HECD, Capillary
Certified	Yes	SCM09.08750	PCB 1221	GC Extraction, ECI	GC, Extraction, ECD or HECD, Capillary
Certified	Yes	SCM09.08800	PCB 1232	Co, Extraction, Eco	Co, Extraction, ECD or HECD, Capillary
Certified	Yes	SCM09.08850	PCB 1242	GC, Extraction, EC	GC, Extraction, ECD or HECD, Capillary
Certified	Yes	SCM09.08900	PCB 1248	GC, Extraction, E	GC, Extraction, ECD or HECD, Capillary
Certified	Yes	SCM09.08950	PCB 1254	GC Extraction I	CC, Extraction FCD or HECD, Capillary
Certified	Yes	SCM09.09000	PCB 1260	GC Extraction I	CC, Extraction, ECD of HECD, Capillary
Certified	Yes	SCM09.13850	Azinphos methyl	GC Extract or D	GC Extract or Dir Ini NBD or EBD Co-
Certified	Yes	SCM09.13900	Bolstar	GC, Extract or I	GC, Extract or Dir Inj. NPD or FPD Can
Certified	Yes	SCM09.13950	Chlorpyrifos	GC, Extract or I	GC, Extract or Dir Inj, NPD or FPD,Cap
Certified	Yes	SCM09.14000	Coumaphos	GC, Extract or Dir	GC, Extract or Dir Inj, NPD or FPD,Cap
Certilled	Yes	SCM09.14050	Demeton (o-)	GC, Extract or Dir Inj. N	Ini. NPD or EPD Cap
Certified	Yes	SCM09.14100	Demeton (s-)	GC, Extract or Dir	GC, Extract or Dir Inj. NPD or FPD Can
Сеппеd	Yes	SCM09.14150	Diazinon	GC, Extract or Di	GC, Extract or Dir Inj, NPD or FPD.Cap
Certified	Yes	SCM09.14200	Dichlorvos	GC, Extract or Di	GC, Extract or Dir Inj, NPD or FPD,Cap
Certified	Yes	SCM09.14250	Dimethoate	GC, Extract or D	GC, Extract or Dir Inj, NPD or FPD,Cap
	:	SCIVIUS. 14300	Disulfoton	GC, Extract or I	GC, Extract or Dir Inj, NPD or FPD,Cap
Certified	Yes	SCM09.14350	EPN	GC, Extract or	GC, Extract or Dir Inj, NPD or FPD Cap
Certified	Yes	SCM09.14400	Ethoprop	GC, Extract c	GC, Extract or Dir Ini, NPD or FPD Cap
Certified	Yes	SCM09.14450	Fensulfothion	GC, Extract or	GC, Extract or Dir Inj. NPD or FPD Cap
Certified	Yes	SCM09.14500	Fenthion	GC, Extract or D	GC, Extract or Dir Inj, NPD or FPD,Cap
Certified	Yes	SCM09.14550	Malathion	GC, Extract or Dir Inj, N	Inj, NPD or FPD,Cap
		CONICO. 14000	ivierprios	GC, Extract or Dir I	GC, Extract or Dir Inj, NPD or FPD, Cap



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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: SCM09--Organic Parameters - Chromatography

	Yes SCM09.14650
Certified	Yes SCM09.14700
Certified	Yes SCM09.14750
Certified	Yes SCM09.14800
Certified	Yes SCM09.14850
Certified	Yes SCM09.14900
Certified	Yes SCM09.15000
Certified	Yes SCM09.15050
Certified	Yes SCM09.15100
Certified	Yes SCM09.15150
Certified	Yes SCM09.15200
Certified	Yes SCM09.15400
Certified	Yes SCM09.15450
Certified	Yes SCM09.15500
Certified	Yes SCM09.16000
Certified	Yes SCM09.16100
Certified	Yes SCM09.16150
Certified	Yes SCM09.16250
Certified	Yes SCM09.16300
Certified	Yes SCM09.16400
Certified	Yes SCM09.16500
Certified	Yes SCM09.16550
Certified	Yes SCM09.16600
Certified	Yes SCM09.16650
Certified	Yes SCM09.16700
Certified	Yes SCM09.16750
Certified	Yes SCM09.16800



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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Category: SCM09--Organic Parameters - Chromatography



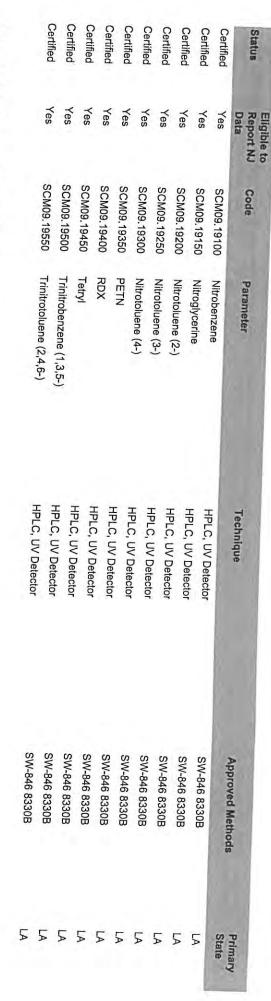
Certified	Certified	Cerulled	5	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Status
Yes	Yes	Yes	<	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data
SCM09.19050	SCM09.19000	SCM09.18950	SCIVIUS, 16800	SCM00 18000	SCM09.18850	SCM09.18800	SCM09.18750	SCM09.18600	SCM09.18550	SCM09.18500	SCM09.18450	SCM09.18400	SCM09.18350	SCM09.18300	SCM09.18250	SCM09.18100	SCM09.17350	SCM09.17300	SCM09.17250	SCM09.17200	SCM09.17150	SCM09.17100	SCM09.17050	SCM09.17000	SCM09.16950	SCM09.16900	SCM09.16850	Code
HMX	Dinitrotoluene (4-amino-2,6-)	Dinitrotoluene (2-amino-4,6-)	Dinitrotoluene (2,6-)		Dinitrotoluene (2.4-)	Dinitrobenzene (1,3-)	TP (2,4,5-) (Silvex)	T (2,4,5-)	MCPP	MCPA	Dinoseb	Dichlorprop	Dicamba	DB (2,4-)	Dalapon	D (2,4-)	Pyrene	Phenanthrene	Naphthalene	Indeno(1,2,3-cd)pyrene	Fluorene	Fluoranthene	Dibenzo(a,h)anthracene	Chrysene	Benzo(k)fluoranthene	Benzo(ghi)perylene	Benzo(b)fluoranthene	Parameter
HDI O IN Detector	HPLC, UV Detector	HPLC, UV Detector	HPLC, UV Detector	HPLC, UV Detector	in C. OV Detector	LBI O IN DETECTOR	HDIO IN Detactor	HPI C IIV Detector	HPLC IIV Detector	HPI C IIV Detector	HBI O IIV Detector	HBI O IN Details	EDIO IN Details	HBI O IN Details	EDIO IN DATA	HDI C TIV Detector	בעליסגוס בייי	Extraction Holo	Extraction HPI C	Extraction Holo	Extraction HBI O	Extraction LDIO	Extraction HDI C	Extraction HBI C	Extraction HBIO	Extraction HBI C	Extraction HBI C	Technique
SW-846 8330B	SVV-846 8330B	SW 046 03300	SW-846 83308	SW-846 8330B	SW-846 8330B	SW-846 8321B	SW-846 8321B	SW-846 8321B	SW-846 8321B	SW-846 8321B	SW-846 8321B	SW-846 8321B	SW-846 8321B	SW-846 8321B	SW-846 8321B	SW-846 8310	SW-846 8310	SW-846 8310	SW-846 8310	SW-846 8310	SW-846 8310	SW-846 8310	SW-846 8310	SW-846 8310	SW-846 8310	SW-846 8310		Approved Methods
5	5	5	: 5	Ā	L _A	F	5	5	F	LA	4	A	7	A	5	5	A	5	5	4	A	LA	5	LA	5	5	State	Primary

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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 **MT. JULIET TN 37122**

Category: SCM09--Organic Parameters - Chromatography



Category: SCM10--Organic Parameters - Chromatography/MS

Report NJ Data	Report NJ Code Data	Parameter	Technique	
Certified Yes	SCM10.22900	Acetone		Spotness manufacture
Yes	SCM10.22950	Acetonitrile	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Yes	SCM10.23000	Acrolein	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Yes	SCM10.23050	Acrylonitrile	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Yes	SCM10.23100	Allyl chloride	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Yes	SCM10.23130	Amyl alcohol (t-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Yes	SCM10.23200	Benzene	GC/MS, P & T, or Direct Injection, Capillary	SW-846 8260D
Yes	SCM10.23300	Bromobenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Yes	SCM10.23350	Bromochloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Yes	SCM10.23400	Bromodichloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Yes	SCM10.23450	Bromoethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Yes	SCM10.23500	Bromoform	GC/MS, P & T or Direct Injection, Capillary GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D

Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

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Category: SCM10--Organic Parameters - Chromatography/MS

MT. JULIET TN 37122

Yes	< - c	Yes	Yes		Yes	Yes	Yes	Yes	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data
SCM10.24850	SCM10.24600	SCM10.24800	SCM10.24750	SCINITU.Z470D	SCM10 24700	SCM10.24650	SCM10.24600	SCM10.24550	SCM10.24500	SCM40 24500	SCM10.24450	SCM10.24400	SCM10.24350	SCM10.24330	SCM10.24250	SCM10.24200	SCM10.24150	SCM10.24100	SCM10.24000	SCM10.23950	SCM10.23900	SCM10.23850	SCM10.23800	SCM10.23680	SCM10.23650	SCM10.23630	SCM10.23610	SCM10.23600	SCM10.23550	Code
Dichlorodifluoromethane	Dichlorobenzene (1,4-)	Dichlorohenzeno (1.4.)	Dichlorobenzene (1,3-)	Dichlorobenzene (1,2-)	Dichlorobonzon (10)	Dichloro-2-butene (trans-1 4-)	Dichloro-2-butene (cis-1,4-)	Dibromomethane	Dibromoethane (1,2-) (EDB)	D::	Dibromochloromothopo	Dibromo-3-chloropropane (1 2-)	Cyclohexanone	Cyclohexane	Chlorotoluene (4-)	Chlorotoluene (2-)	Chloromethane	Chloroform	Chloroethane	Chlorobenzene	Carbon tetrachloride	Carbon disulfide	Butylbenzene (n-)	Butyl formate (t-)	Butanone (2-) (Methyl ethyl ketone)	Butanol (3,3-Dimethyl-1-)	Butanol (1-)	Butadiene (2-chloro-1,3-)	Bromomethane	Parameter
																													- 9	
GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & I or Direct Injection, Capillary	COMS D. T. S. Direct II) ection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & 1 or Direct Injection, Capillary	Control of Direct Injection, Capillary	GC/MS P & Tor Direct Injustice Co-illa	GC/MS, P & T or Direct Injection Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & T or Direct Injection, Capillary	GC/MS, P & I or Direct Injection, Capillary	COMO, F & F of Direct Injection, Capillary	GC/MS B & T or Direct Injection, Capillary	GC/Ms B & T of Direct Hection, Capillary	GC/MS P & T or Direct Injection, Capillary	GC/MS. P & T or Direct Injection Conflict.	GC/MS. P & T or Direct Injection, Capillary	GC/MS P & T or Direct Injection, Capillary	GC/MS P & Tot Direct Injection, Capillary	GC/MS P & T or Direct Injection, Capillary	GC/MS P & Tor Direct Injection, Capillary	GC/MS. P. & T. or Direct Injection, Capillary	GC/MS P & T or Direct Injection, Capillary	GC/MS. P & T or Direct Injection, Capillary	GC/MS P & Tor Direct Injection, Capitary	GC/MS P & T or Direct Injection, Capillary	GC/MS P & T or Direct Injection, Capillary	GC/MS P & T of Direct Injection, Capillary	GC/MS D& Tor Direct Linearies on	Technique
		SW-846 8260D	GC/MS B & Total Tribing Capitally SW-846 8260D		SW-846 8260D	CONT. TO THE CHINECTON, Capillary SW-846 8260D				GC/MS, P & T or Direct Injection, Capillary SW-846 8260D	SW-846 8260D	CCING, F & I of Direct Injection, Capillary SW-846 8260D		ary		lary				lary	liary									Technique Approved Methods



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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
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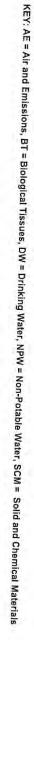


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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Status	Report NJ Data	Code	Parameter	Technique	Approved Methods
Certified	Yes	SCM10.26250	Methacrylonitrile	מסואמם פאלים ביינים ליינים אינים מאולים	
Certified	Yes	SCM10.26280	Methyl acetate	GC/MS P& T of Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10.26300	Methyl acrylate	GC/MS, F & I, or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10.26330	Methylcyclohexane	GC/MS, F & F of Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10.26350	Methyl iodide	GC/MS, P & I, or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10.26400	Methyl methacrylate	GC/MS, P & I or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10.26450	Methyl tert-hityl ether	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10.26500	Mother of the little of the li	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10 96550	Mother-Ether (2)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10 Seeds	Math. (1-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10 26660	Mediyirlaprımalene (2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10 26730	Nitronalia	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10 26780	Octobe (z)	GC/MS, P & T, or Direct Injection, Capillary	SW-846 8260D
Certified	≺ _{Po}	SCM10.25000	Octaile (-n)	GC/MS, P & T, or Direct Injection, Capillary	SW-846 8260D
Certified	< : ·	CCIVI 10.20000	Pentachioroethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10.26850	rentanol (2-Methyl-2-)	GC/MS, P & T, or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10 26000	Providential (4-methyl-z-) (MIBK)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10 26950	Providence (1)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10 27000	See hit bases	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10 27050	Strong	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10 27100	ted Amulanthulathan (TAME)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10.27200	Tert-butt shoots	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10 27250	Tert-hit/horzon	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10 27300	Totalogicalization	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10.27360	Tenachiordemane (1,1,1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10.27400	reudollioroemane (1,1,2,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
Certified	Yes	SCM10.27450	Tetrahydrafura	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D
			, charly arolatell	GC/MS, P & T or Direct Injection, Capillary	CM1 846 100



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MT. JULIET TN 37122 Effective as of 07/01/2023 until 6/30/2024

Certified	O Common	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Certified	Status
Yes	, g	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Report NJ Data
SCM10.29500	SCM10.29450	200000000000000000000000000000000000000	SCM10.29350	SCM10.29300	SCM10.29050	SCM10.29000	SCM10.28950	SCM10.28900	SCM10.28400	SCM10.28350	SCM10.28300	SCM10.28250	SCM10.28200	SCM10.28150	SCM10.28100	SCM10.28050	SCM10.28000	SCM10.27980	SCM10.27950	SCM10.27900	SCM10.27850	SCM10.27800	SCM10.27750	SCM10.27700	SCM10.27650	SCM10.27600	SCM10.27500	Code
Aramite	Anthracene		Apiline	Aminobiohenyl (4-)	Acetylaminofluorene (2-)	Acetophenone	Acenaphthylene	Acenaphthene	Xylenes (total)	Xylene (p-)	Xylene (o-)	Xylene (m-)	Vinyl chloride	Vinyl acetate	Trimethylpentane (2,2,4-)	Trimethylbenzene (1,3,5-)	Trimethylbenzene (1,2,4-)	Trimethylbenzene (1,2,3-)	Trichloropropane (1,2,3-)	Trichlorofluoromethane	Trichloroethene	Trichloroethane (1,1,2-)	Trichloroethane (1,1,1-)	Trichlorobenzene (1,2,4-)	Trichlorobenzene (1,2,3-)	Trichloro (1,1,2-) trifluoroethane (1,2,2-)	Toluene	Parameter
GC/MS. Extract or Dir Ini Capillary	GC/MS, Extract or Dir Inj, Capillary	GC/MS, Extract or Dir Inj, Capillary	GC/M/S, Extract or Dir Inj, Capillary	Convo, Exhact of Diff Hij, Capillary	GOMS Extract of Dirity, Capillary	GC/Ms Extract or Dir Inj. Capillary	GC/MS Extract or Dir Inj. Capillary	GC/MS Extract or Dir Ini Consultry	GC/MS P & T or Direct Injection Conflict	GC/MS P & T or Direct Injection, Capillary	GC/MS P & Tot Direct Injection, Capillary	GC/MG B & Toping this time of the GC/MG B & Toping this time of the GC/MG B & Toping the GC/M	GC/MS B of Direct Injection, Capillary	GC/Ms D.S.T. or Direct Library	GC/Ms Extract or Direct injection, Capillary	GC/MS P & Tor Direct Injection, Capillary	GC/MS B & T or Direct Injection, Capillary	GC/MS B & T or Direct Injection, Capillary	GCMS P & Tor Direct Injection, Capillary	GC/MS P & T or Direct Injection, Capillary	GC/MS P & T or Direct Injection, Capillary	GC/MS D & Tor Direct Injection, Capillary	GC/MS P & T or Direct Injection, Capillary	GC/MS P & T or Direct Injection, Capillary	GC/MS P & Tor Direct Injection, Capitlary	GC/MS P & T or Direct Injection, Capillary	GC/Ms B & Top Distriction Continue	Technique
CW-040 02/00	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8270E	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SVV-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D	SW-846 8260D		Approved Methods
5	5	Ā	5	5	LA	5	2	5	5	5	L _A	LA	L	LA	LA	5	5	5	5	5	5	5	5	5	5	7	State	Primary



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Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods
Certified	Yes	SCM10.29550	Atrazine	DOMO Extra Division Comments	
Certified	Yes	SCM10.29600	Benzal chloride	SC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10 29650	ביייים ניייטומס	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	007000000000000000000000000000000000000	Bossess	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
1.1.6.1	.	GCM10.29700	Benzenethiol	GC/MS, Extract or Dir Inj, Capillary .	SW-846 8270⊑
Certilled	Yes	SCM10.29750	Benzidine	GC/MS, Extract or Dir Inj, Capillary	200-848 8370E
Certified	Yes	SCM10.29800	Benzo(a)anthracene	GC/MS Extract or Dir Ini Capillan	000-040 827 UE
Certified	Yes	SCM10.29850	Benzo(a)pyrene	COME CALLET OF DIT INJ. Capillary	SW-846 8270E
Certified	Yes	SCM10.29900	Benzo(h)flioranthan	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10 200E0		GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
ortified	× .	OCINI 10.25950	Benzo(gni)perylene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Cermien	Yes	SCM10.30000	Benzo(j)fluoranthene	GC/MS, Extract or Dir Ini, Capillary	SW/ 848 9750
Certified	Yes	SCM10.30050	Benzo(k)fluoranthene	GC/MS Extract or Dir Ini Capillany	011 010 02/00
Certified	Yes	SCM10.30100	Benzoic acid	COMO Estrat or Dir III Capitaly	SVV-846 82/0E
Certified	Yes	SCM10.30150	Benzotrichloride	COMO, Extract of Diffinity, Capillary	SW-846 8270E
Certified	Yes	SCM10 30200	Boots clocked	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10 30250	Donal of France	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.30250	Delizyl Cilloride	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
1		OCIVITO:30330	sipnenyi (1,1-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270F
Carrilled	res	SCM10.30400	Bis (2-chloroethoxy) methane	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.30450	Bis (2-chloroethyl) ether	GC/MS, Extract or Dir Inj. Capillary	SIN/ 046 0070F
Certified	Yes	SCM10.30500	Bis(2-chloroisopropyl)ether/2,2'-oxybis(1-	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
ortified	V 22	200000000000000000000000000000000000000	cillolopiopane)		i i i i i i i i i i i i i i i i i i i
Certified	Yes	SCM10.30550	Bis (2-ethylhexyl) phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certillen	res	SCM10.30600	Bromophenyl-phenyl ether (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certined	Yes	SCM10.30650	Butylbenzylphthalate		500 000 000 000
Certified	Yes	SCM10.30700	Caprolactam		SW-846 82/UE
Certified	Yes	SCM10.30750	Carbazole		SW-846 8270E
Certified	Yes	SCM10.30950	Chloroaniline (4-)	GC/MS, Extract of Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.31000	Chlorobenzilate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.31050	Chloronaphthalene (1-)	GC/WG, Extract or Dir Inj, Capillary	SW-846 8270E
			Cilipidiapinialelle (1-)	GC/MS, Extract or Dir Ini. Capillary	CIVI 0 10 00 701





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MT. JULIET TN 37122 12065 LEBANON RD Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001





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Laboratory Name: PACE ANALYTICAL NATIONAL CENTER Laboratory Number: TN002 Activity ID: NLC 230001 12065 LEBANON RD
MT. JULIET TN 37122

Status	Report NJ Data	Code	Parameter	Technique	Approved Methods
Certified	Yes	SCM10.33000	Dinitrobenzene (1.3-)		
Certified	Yes	SCM10.33100	Dinitrophenol (2.4.)		SW-846 8270E
Certified	Yes	SCM10.33150	Distrophenal (5 math.) 4 6 (GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.33200	Districtations (2.4.)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Optified	\	201110.00200	Dillifoldidelle (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.33250	Dinitrotoluene (2,6-)		SWLAAR ROZOE
Certified	Yes	SCM10.33300	Di-n-octyl phthalate		SW-846 8270E
Certified	Yes	SCM10.33350	Dinoseb	COMO Estado Dir Inj. Capillary	SW-846 8270E
Applied	N _o	SCM10.33450	Diphenylhydrazine / Azoboszopo	GC/Mb, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10 33500	Distributor	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10 33000		GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.33050	T aniphor	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	S	COM 10:0000	i do alli e le	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
o difficult	× - c	SCM 10.34000	Fluorene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270F
Calillan	Tes	SCM10.34150	Hexachlorobenzene	GC/MS, Extract or Dir Ini, Capillary	SIM_848 8070E
Certified	Yes	SCM10.34200	Hexachlorobutadiene (1,3-)	GC/MS. Extract or Dir Ini Capillary	SW 040 0270E
Certified	Yes	SCM10.34250	Hexachlorocyclopentadiene		SW-846 82/0E
Certified	Yes	SCM10.34300	Hexachloroethane		SW-846 8270E
Certified	Yes	SCM10.34350	Hexachlorophene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.34400	Hexachloropropens	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.34500	Indene	GC/NS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.34550	Indeno/1 2 3 od/purpo	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10 34600	leadrin	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.34650	Sophoropa	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.34700	leosatrolo (cic.)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10 34800	Konono (cio-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.34900	Nothern C. C.	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.34950	Mother (Emyl-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35000	Mothorisis (Methyl-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
		OC#10.0000	Weniapyllene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E



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Smerc	Report NJ Data	Code	Parameter	Technique	Approved Methods
Certified	Yes	SCM10.35100	Methyl phenol (A-chioro o)		Sported Methods
Certified	Yes	SCM10.35150	Methylcholanthropo (2)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35200	Methylpanhthalana (4)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35250	Methylpanhthalana (2)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35300	Methylphenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35400	Methylphenol (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35450	Naphthalene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35500	Napthoguinone (1.4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35550	Napththylamine (1-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35600	Napththylamine (3)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35650	Nitroaniline (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35700	Nitroaniline (3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35750	Nitroaniline (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35800	Nitrobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35850	Nitrodiphenylamine (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35900	Nitrophenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.35950	Nitrophenol (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.36000	N-Nitrosodiethylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.36050	N-Nitrosodimethylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.36100	N-Nitroso-di-n-butylamine	GC/Mis, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.36150	N-Nitroso-di-n-propylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.36200	N-Nitrosodiphenylamine / Dinhenylamine		SW-846 8270E
Certified	Yes	SCM10.36250	N-Nitrosomethylethylamine		SW-846 8270E
Certified	Yes	SCM10.36300	N-Nitrosomorpholine		SW-846 8270E
Certified	Yes	SCM10.36350	N-Nitrosopiperidine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.36400	N-Nitrosopyrrolidine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.36450	Octadecane (n-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E



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Status	Report NJ Data	Code	Parameter	Technique	Approved Methods
Certified	Yes	SCM10.36500	Parathion	חסוגאס הניים ביים ביים ביים ביים ביים ביים ביים	
Certified	Yes	SCM10.36550	Parathion methyl	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.36950	Pentachlorobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.37000	Pentachloroethane	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.37050	Pentachloronitrohenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.37100	Destachiosophosol	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.37150	Phonocation	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.37200		GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	< :	COM10.37200	rnenanmrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
	ics	OCM10.37250	Phenol	GC/MS, Extract or Dir Inj. Capillary	20209 976 /NS
Certified	Yes	SCM10.37300	Phenylenediamine (1,4-)	CO/Mo Extract of the mily capillary	SVV-846 8270E
Certified	Yes	SCM10.37350	Phenylethylamine (alpha alpha Dimothyl)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.37400	Phorate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.37450	Dhosabarothiosta Wister Do	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
			[Thionazin]	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.37500	Phosphorothioate (O,O,O-triethyl)	GC/MS. Extract or Dir Inj. Capillan.	
Certified	Yes	SCM10.37550	Picoline (2-)	GC/MS Extract or Dir Inj. Capillary	SW-846 82/0E
Certified	Yes	SCM10.37600	Pronamide	Convo, Extract of Dir Iti), Capillary	SW-846 8270E
Certified	Yes	SCM10.37650	Pyrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.37700	Pyridine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.37750	Ouinoline	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10 37800	Oningling A Oning Carrier	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10 37900	Safrola Safrola	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10 37950	S. Hoten	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10 38050	Total	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
1 1	i cc	OCIVI 10.38030	l etrachlorobenzene (1,2,3,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.38100	Tetrachlorobenzene (1,2,3,5-)	GC/MS Extract or Dir Ini Conillon	3VV-040 0Z/UE
Certified	Yes	SCM10.38150	Tetrachlorobenzene (1,2,4,5-)	GC/MS Extract of Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.38200	Tetrachlorophenol (2,3,4,6-)	GC/Ms Extract of Dir Inj, Capillary	SW-846 8270E
Certified	Yes	SCM10.38250	Toluidine (2-) (2-Methylaniline)	GOIMS Extract of Dir Inj, Capillary	SW-846 8270E
		The Control of the Co	(E) (E Nicht) (annual)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E



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	SCM10.38550	Trichlorophenol (2,4,5-) Trichlorophenol (2,4,6-)
	SCM10.38550 SCM10.38650	Trichlorophenol (2,4,6-)
Certified Yes	SCM10.38700	Acenaphthene
Certified Yes	SCM10.38750	Acenaphthylene
Certified Yes	SCM10.38800	Anthracene
Certified Yes	SCM10.38850	Benzo(a)anthracene
Certified Yes	SCM10.38900	Benzo(a)pyrene
Certified Yes	SCM10.38950	Benzo(b)fluoranthene
Certified Yes	SCM10.39000	Benzo(ghi)perylene
Certified Yes	SCM10.39050	Benzo(k)fluoranthene
Certified Yes	SCM10.39100	Chrysene
Certified Yes	SCM10.39150	Dibenzo(a,h)anthracene
Certified Yes	SCM10.39300	Fluoranthene
Yes	SCM10.39350	Fluorene
Yes	SCM10.39400	Hexachlorobenzene
Certified Yes	SCM10.39550	Indeno(1,2,3-cd)pyrene
Certified Yes	SCM10.39600	Methylnaphthalene (1-)
Certified Yes	SCM10.39650	Methylnaphthalene (2-)
Certified Yes	SCM10.39700	Naphthalene
Certified Yes	SCM10.39750	N-Nitrosodimethylamine
Certified Yes	SCM10.39850	Phenanthrene
Certified Yes	SCM10.39900	Pyrene
Certified Yes	SCM10.41550	Gasoline range organic

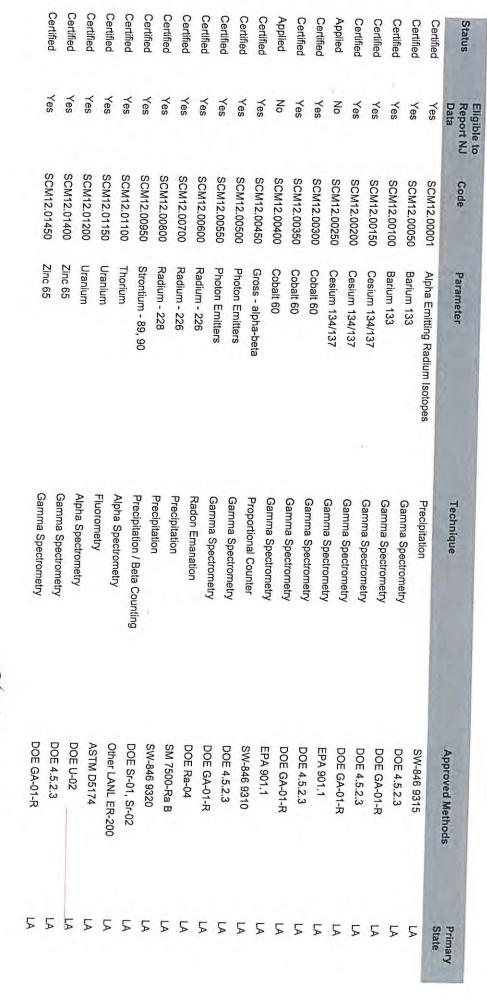


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Category: SCM12--Radiochem. - Radioactivity/Radionuclides



Michele M. Potter, Manager



	<u>UNITS</u>	MDL	<u>RDL</u>	Migration to GW Soil Criterion	Soil Remediation Std Inhal-NonRes	Soil Remediation Std Ingestion- NonRes	Soil Remediation Std Ingestion-Res	Soil Remediation Std Inha
Metals 7471B 6010D								
ALUMINUM	mg/kg	6.080000	20.000000	NA	NA	19.00	78000.00	NA
ANTIMONY	mg/kg	0.544000	2.000000	5.40	NA	260000.00	31.00	NA
ARSENIC	mg/kg	0.518000	2.000000	19.00	5200.00	2600.00	19.00	1100.00
BARIUM	mg/kg	0.085200	0.500000	2100.00	NA	1100.00	16000.00	870000.00
CADMIUM	mg/kg	0.047100	0.500000	1.90	12000.00	52000.00	71.00	2600.00
COBALT	mg/kg	0.081100	1.000000	90.00	2500.00	780.00	23.00	520.00
COPPER	mg/kg	0.400000	2.000000	910.00	NA	800.00	3100.00	NA
LEAD	mg/kg	0.208000	0.500000	90.00	NA	31000.00	400.00	NA
MANGANESE	mg/kg	0.133000	1.000000	NA	400000.00	390.00	1900.00	87000.00
NICKEL	mg/kg	0.132000	2.000000	48.00	NA	26000.00	1600.00	20000.00
SELENIUM	mg/kg	0.764000	2.000000	11.00	93000.00	6500.00	390.00	NA
SILVER	mg/kg	0.127000	1.000000	0.50	NA	6500.00	390.00	NA
VANADIUM	mg/kg	0.506000	2.000000	NA	NA	6500.00	390.00	170000.00
ZINC	mg/kg	0.832000	5.000000	930.00	800000.00	390000.00	23000.00	NA
MERCURY	mg/kg	0.018000	0.040000	1.90	NA	390.00	23.00	520000.00
SVOCs 8270E								
ANTHRACENE	mg/kg	0.002300	0.006000	NA	NA	50000.00	3600.00	NA
ACENAPHTHENE	mg/kg	0.002090	0.006000	NA NA	NA NA	250000.00	18000.00	NA NA
BENZO(A)ANTHRACENE	mg/kg	0.001730	0.006000	0.71	370000.00	23.00	5.10	78000.00
BENZO(A)PYRENE	mg/kg	0.001790	0.006000	NA	16000.00	2.30	0.51	3500.00
BENZO(B)FLUORANTHENE	mg/kg	0.001730	0.006000	NA NA	370000.00	23.00	5.10	78000.00
BENZO(K)FLUORANTHENE BENZO(K)FLUORANTHENE	mg/kg	0.001330	0.006000	NA NA	NA	230.00	51.00	78000.00
CHRYSENE	mg/kg	0.002130	0.006000	NA NA	NA NA	230.00	51.00	780000.00 NA
DIBENZ(A,H)ANTHRACENE	mg/kg	0.002320	0.006000	NA NA	37000.00	2.30	0.51	7800.00
FLUORANTHENE	mg/kg	0.001720	0.006000	NA NA	NA	33000.00	2400.00	NA
FLUORENE		0.002270	0.006000	NA NA	NA NA	33000.00	2400.00	NA NA
	mg/kg	0.002030	0.006000		370000.00			78000.00
INDENO(1,2,3-CD)PYRENE	mg/kg			NA 10.00		23.00	5.10	
NAPHTHALENE	mg/kg	0.004080	0.020000	19.00	27.00	34000.00	2500.00	5.70
PYRENE	mg/kg	0.002000	0.006000	21.00	NA	25000.00	1800.00	NA
STYRENE	mg/kg	0.000223	0.001000	2.10		260000.00	16000.00	***
2-METHYLNAPHTHALENE	mg/kg	0.004270	0.020000	3.10	NA	3300.00	240.00	NA
VOCs 8260D								
ACETONE	mg/kg	0.020700	0.050000	19.00			70000.00	
BENZENE	mg/kg	0.000375	0.001000	0.01	11.00	16.00	3.00	2.20
BROMOCHLOROMETHANE	mg/kg	0.000335	0.001000					
BROMODICHLOROMETHANE	mg/kg	0.000725	0.001000	0.00		59.00	11.00	
BROMOFORM	mg/kg	0.000424	0.001000	0.02		460.00	88.00	
BROMOMETHANE	mg/kg	0.001170	0.005000	0.04	82.00	1800.00	110.00	18.00
CARBON DISULFIDE	mg/kg	0.000700	0.001000	3.70				
CARBON TETRACHLORIDE	mg/kg	0.000248	0.001000	0.01	6.90	40.00	7.60	1.40
CHLOROBENZENE	mg/kg	0.000192	0.001000	0.64		8400.00	510.00	
CHLORODIBROMOMETHANE	mg/kg	0.000224	0.001000	0.00		43.00	8.30	
CHLOROETHANE	mg/kg	0.001000	0.005000					
CHLOROFORM	mg/kg	0.001030	0.005000	0.33		13000.00	780.00	590.00
CHLOROMETHANE	mg/kg	0.000650	0.002500		1200.00			270.00
1,2-DIBROMO-3-CHLOROPROPANE	mg/kg	0.001900	0.005000	0.00	0.12	4.50	0.87	0.03
1,2-DIBROMOETHANE	mg/kg	0.000250	0.001000	0.00	0.41	1.80	0.35	0.09
DICHLORODIFLUOROMETHANE	mg/kg	0.000287	0.005000	38.00		260000.00	16000.00	
1,1-DICHLOROETHANE	mg/kg	0.000268	0.001000	0.24		640.00	120.00	
1,2-DICHLOROETHANE	mg/kg	0.000450	0.001000	0.01	320.00	30.00	5.80	71.00
1,2-DICHLOROBENZENE	mg/kg	0.000425	0.001000	11.00		110000.00	6700.00	
1,3-DICHLOROBENZENE	mg/kg	0.000600	0.001000	11.00		110000.00	6700.00	
1,4-DICHLOROBENZENE	mg/kg	0.000830	0.001000	1.40		13000.00	780.00	
1,1-DICHLOROETHENE	mg/kg	0.000355	0.001000	0.01	240.00	180.00	11.00	52.00
CIS-1,2-DICHLOROETHENE	mg/kg	0.000475	0.001000	0.35		13000.00	780.00	
TRANS-1,2-DICHLOROETHENE	mg/kg	0.000500	0.001000	0.56		22000.00	1300.00	
1,2-DICHLOROPROPANE	mg/kg	0.000164	0.001000	0.01	27.00	98.00	19.00	5.70
CIS-1,3-DICHLOROPROPENE	mg/kg	0.000104	0.001000	5.01	27.00	20.00	15.00	5.70
TRANS-1,3-DICHLOROPROPENE	mg/kg	0.000423	0.001000					
ETHYLBENZENE	mg/kg	0.000300	0.001000	15.00	48.00	130000.00	7800.00	10.00
E I I I LDENZENE					40.00	130000.00	7800.00	10.00
ICODDODVI DENZENE	ma/k~							
ISOPROPYLBENZENE 2-BUTANONE (MEK)	mg/kg mg/kg	0.000425 0.004680	0.001000	22.00 0.98		78000.00	47000.00	

METHYLENE CHLORIDE	mg/kg	0.001000	0.005000	0.01		260.00	50.00	1400.00
4-METHYL-2-PENTANONE (MIBK)	mg/kg	0.000950	0.010000					
METHYL TERT-BUTYL ETHER	mg/kg	0.000350	0.001000	0.25	650.00	13000.00	780.00	140.00
1,1,2,2-TETRACHLOROETHANE	mg/kg	0.000231	0.001000	0.01		18.00	3.50	
TETRACHLOROETHENE	mg/kg	0.000325	0.001000	0.01		1700.00	330.00	47.00
TOLUENE	mg/kg	0.001230	0.005000	7.80		100000.00	6300.00	
1,2,3-TRICHLOROBENZENE	mg/kg	0.000306	0.001000					
1,2,4-TRICHLOROBENZENE	mg/kg	0.000388	0.001000	0.52		13000.00	780.00	94.00
1,1,1-TRICHLOROETHANE	mg/kg	0.000370	0.001000	0.20			160000.00	
1,1,2-TRICHLOROETHANE	mg/kg	0.000425	0.001000	0.02		64.00	12.00	
TRICHLOROETHENE	mg/kg	0.000200	0.001000	0.01	14.00	79.00	15.00	3.00
TRICHLOROFLUOROMETHANE	mg/kg	0.000356	0.005000	29.00		390000.00	23000.00	
1,1,2-TRICHLOROTRIFLUOROETHANE	mg/kg	0.000426	0.001000	1300.00				
VINYL CHLORIDE	mg/kg	0.000226	0.001000	0.01	6.40	5.00	0.97	1.40
XYLENES, TOTAL	mg/kg	0.000500	0.003000	19.00		190000.00	12000.00	
TERT-BUTYL ALCOHOL	mg/kg	0.002500	0.005000	0.32		23000.00	1400.00	
PCBs 8082A								
PCB 1016	mg/kg	0.011822	0.034000					
PCB 1221	mg/kg	0.011822	0.034000					
PCB 1232	mg/kg	0.011822	0.034000					
PCB 1242	mg/kg	0.011822	0.034000	1.60	NA	NA	0.25	1.10
PCB 1248	mg/kg	0.007379	0.017000					
PCB 1254	mg/kg	0.007379	0.017000					
PCB 1260	mg/kg	0.007379	0.017000					
EPH 8270E								
C9-C12 ALIPHATICS	mg/kg	1.680000	20.000000					
C12-C16 ALIPHATICS	mg/kg	1.680000	20.000000					
C16-C21 ALIPHATICS	mg/kg	1.840000	20.000000					
C21-C40 ALIPHATICS	mg/kg	1.840000	20.000000					
C10 - C12 AROMATICS	mg/kg	2.120000	20.000000					
C12-C16 AROMATICS	mg/kg	2.120000	20.000000					
C16-C21 AROMATICS	mg/kg	2.120000	20.000000					
C21-C36 AROMATICS	mg/kg	2.120000	20.000000					
TOTAL EPH	mg/kg		10.000000	NA	NA	75000.00	5300.00	NA

Attachment 4: SOPs The SOPs and the QMP for Pace Analytical, which are protected files and cannot be included in this document, are provided at this link, https://spaces.hightail.com/space/tKeic7zIkq.





E. KEY PERSONNEL, CERTIFICATIONS AND QUALIFICATIONS

CRAIG P. DURAND, LSRP, CHMM PRESIDENT

EXPERIENCE

TTI ENVIRONMENTAL, INC. President

2000 to Present

Management – Responsible for firm's technical operations, financial performance, administration and safety performance. Topics routinely evaluated include financial statements, departmental performance, key projects, proposed capital expenditures, company policies, and business forecast. Manage and coach departmental in each of the technical service lines. Direct safety committee in the development and implementation of standard operating procedures, training and third party communication.

Business Development - Responsible for firm's sales and marketing efforts including developing and implementing marketing strategies, performing direct sales, and client relations activities. Lead sales force consisting of marketing and sales specialists as well as operation directors. Sales are acquired from industry, government, commercial businesses, architectural and engineering firms in the areas of environmental consulting, industrial hygiene, contracting, tank management, engineering and health & safety.

Technical - Support engineers and scientists on principal projects involving multi-location assignments and long term remedial strategies. Activities include review and development of technical work plans and fiscal budgets. Perform License Site Remediation Professional (LSRP) duties on remedial projects for clients. Review technical reports and present findings to clients. Serve as main point of contact for corporate client relationships.

Director of Sales and Marketing

1994 to 2000

Review and prepare technical proposals for all of the firm's services including site, remediation, industrial hygiene, contracting, mechanical integrity, and safety & health.

Develop and manage sales and marketing campaigns that involve mailers, telemarketing, tradeshows, educational seminars, presentations and introductory meetings.

Manage a five (5) person staff consisting of marketing specialists, salespeople and the firm's leading seller/doers. Coach individuals on acquiring business and meeting sales goals.

Create and perform client specific presentations on technical and regulatory topics such as soil/groundwater remedial programs, aboveground storage tank inspection programs, and Brownfield strategies.

Director of Environmental Consulting

1990 to 1994

Responsible for the daily supervision of 12 project managers and technicians. Report to Vice President of Operations. Responsibilities include implementation of department budget, direct sales, monthly invoicing, personnel performance reviews and quality control.



KEY PERSONNEL, CERTIFICATIONS AND QUALIFICATIONS E.

CRAIG P. DURAND, LSRP, CHMM - Continued

Develop and maintain internal operating policies and procedures for technical reporting, data collection and assessment protocol.

Perform technical projects for key clients. Projects include Industrial Site Recovery Act proceedings, due diligence assessments, site investigations, soil and groundwater remediation, storage tank management, emergency response supervision, compliance auditing and RCAMDEN REDEVELOPMENT AGENCY closure.

IN-SITU OXIDATIVE TECHNOLOGIES, INC **Environmental Scientist**

1994 to 1996

Develop and implement pilot programs for the application of in-situ oxidative treatment of soils and groundwater throughout the United States.

Prepare Remedial Action Workplans and Reports for submission to State and Federal environmental agencies.

Supervise the mobilization of equipment, manpower and treatment chemicals to sites throughout the United States for the performance of full scale treatment programs.

Prepare and obtain NPDES Permit-by-Rule approvals and Underground Injection Control permits for treatment of groundwater contaminant plumes.

NORTHEASTERN ANALYTICAL CORPORATION Project Manager

1988 to 1990

Perform subsurface assessments of tank closures in accordance with USEPA, NJDEP, PADEP, NYSDEC and DNREC Guidelines. Conduct environmental site assessments for lending institution and property development clientele. Develop and implement sampling and analytical plans related to RCAMDEN REDEVELOPMENT AGENCY, soil/groundwater remediation programs, potable water studies, waste characterization wastewater monitoring and lake assessments.

CAMDEN COUNTY MUNICIPAL UTILITIES AUTHORITY (CCMUA) Coordinator of Industrial Pretreatment Program

1987 to 1988

Prepare discharge permits for industrial facilities. Perform emergency response actions to illegal and accidental discharges to regional sewerage system.

CERTIFICATIONS & LICENSES

NJDEP Licensed Site Remediation Professional (LSRP No. 573648) NJDEP Subsurface Evaluation License (No. 009985) Certified Hazardous Materials Manager (CHMM), Senior Level, No. 4164 USOSHA 29 CFR 1910.120(e) Hazardous Waste Operations USOSHA Permit Required Confined Space Training Certification USOSHA 10 Hours Construction Safety and Health American Safety & Health Institute CPR Certification



E. KEY PERSONNEL, CERTIFICATIONS AND QUALIFICATIONS

CRAIG P. DURAND, LSRP, CHMM - Continued

PROFESSIONAL AFFILIATIONS

American Coatings Association (ACA), Environmental Committee American Society of Safety Engineers (ASSE), Member License Site Remediation Professional Association (LSRPA), Member Builders League of Southern New Jersey (BLSJ), Member Environmental Bankers Association (EBA), Member Institute of Hazardous Materials Management (CHMM), Member New Jersey Association of School Business Officials (NJASBO), Member Philadelphia Chapter of Academy of Certified Hazardous Material Management (ACHMM), Past President, Chairperson, Member Pennsylvania Chemistry and Industry Council (PCIC), Member Society of American Military Engineers (SAME), Member Society of Women Environment Professionals (SWEP), Member

PRESENTATIONS

"Tank Integrity Regulatory Requirements and Industry Standards" ASSE Professional Development Conference, New Orleans, Louisiana, June 2005

"Tank Integrity Inspections: SPCC & Beyond", U.S. EPA Region III Emergency Preparedness and Prevention Conference, Philadelphia, Pennsylvania, December 2005

"American Society for Non-Destructive Testing's Role in Spill Prevention", Greater Philadelphia Section American Society for Nondestructive Testing, Philadelphia, Pennsylvania, January 2004

"Complying with SPCC's New Tank Inspection Requirements", ACHMM 2004 National Conference, Las Vegas, Nevada, August 2004.

"Mold Control: How To Identify, Cost Effectively Remediate & Prevent Mold Problems", cosponsored with Capehart & Scatchard, P. A., New Jersey Builders Association, Cherry Hill, New Jersey, December 2003

Lunch & Learn for Environmental Bankers Seminars, Presented by TTI Environmental 2011, 2013, 2014, 2015, and 2016. Topics include:

- ASTM
- · Act 2 Land Recycling the Pennsylvania Way
- · Due Diligence
- SBA Lending
- LSRP Program, Case Studies
- Non-Scope Environmental Risks and Case Studies
- Vapor Intrusion / Vapor Encroachment
- Recognized Areas of Environmental Concern

- Reliance on State Regulatory Closures
- Onsite Site Screening Tools
- Restricted Use Sites Ongoing Obligations and Responsibilities
- Phase II Drivers / REC vs HREC



KEY PERSONNEL, CERTIFICATIONS AND QUALIFICATIONS

CRAIG P. DURAND, LSRP, CHMM - Continued

E.

"Environmental Consulting – Focus on Site Remediation", Cherry Hill High School West, Cherry Hill, NJ February 2016

"Routine/Monthly AST Inspection Training" Webinar presented by TTI Environmental, national attendance, March 2016

EDUCATION

Bachelor of Science, 1987, Environmental Science, Water Resources - Rutgers, The School of Environmental and Biological Sciences

RECENT COURSES

Practical Environmental Professional Ethics, LSRPA, October 2012
Regulatory Training in Underground Storage Tanks, Rutgers, May 2013
Environmental Law for LSRP's, Rutgers, February, February 2014
NJDEP Vapor Intrusion Guidance, Rutgers, April 2014
Remedial Action Permit Training, NJDEP, June 2014
GIS Geographic Information Systems, American Institute of Professional Geologists/LSRPA, May 2015
Combining Engineered Contaminant Source Area Treatment Technologies, Rutgers, October 2015
NJDEP Case Studies for LSRP's, Rutgers, October 2015
Advanced Tools In situ Remediation, USEPA, February 2016

VOLUNTEER AFFILIATIONS & ACTIVITIES

Delaware Estuary Environmental Bankers Association Give Back Cherry Hill Public Schools Career Day Westside Youth Wrestling Coach



KEY PERSONNEL, CERTIFICATIONS AND QUALIFICATIONS

KRISTIN M. HEIMBURGER, LSRP DIRECTOR OF ENVIRONMENTAL CONSULTING

E.

EXPERIENCE

- Director of Environmental Consulting (2015 Present). Ms. Heimburger manages complex projects in addition to managing the Environmental Consulting Division. She is responsible for distribution of projects, project coordination and management, budgeting, managing employees and sales/proposals.
- Environmental Project Supervisor for TTI Environmental Inc. (2002 2015). Ms. Heimburger provided senior level consulting services for a wide range of industrial, commercial, and residential clients. Consulting service areas included oversight of due diligence projects including Phase I & II Environmental Assessments and management of multi-level environmental investigation/remediation projects at federal facilities, gas stations, and commercial/industrial sites. Ms. Heimburger's responsibilities specifically included:
 - Oversight of New Jersey Site Remediation Program cases including Preliminary Assessments, Site Investigation, Remedial Investigations and Remedial Actions in accordance with the NJDEP's Technical Requirements for Site Remediation and Site Remediation Reform Act (SRRA).
 - Management and review of all Phase I/II assessments prepared in accordance with American Society for Testing and Materials (ASTM) standards.
 - Field supervision of site investigation activities such as soil, groundwater, vapor, and ecological sampling in accordance with applicable Quality Assurance Project Plans and objectives.
 - Management of day care recertification projects performed in accordance with NJDEP.
 - Oversight of regulated and unregulated underground storage tank (UST) closures in NY, PA, NJ, DE, MD, & VA.
 - Preparation and oversight of site remediation projects, industrial demolitions, and gas station closures in accordance with state requirements.
 - Trainer in OSHA refresher courses.
 - Preparation of Environmental Health and Safety plans/projects.
- Intern, Pennsylvania Small Business Development Center's Environmental Management Assistance Program (2001 2002). Ms. Heimburger assisted a Regional Environmental Specialist with many environmental consulting projects focusing on energy efficiency. Some of her responsibilities included:
 - Site visits to small businesses to investigate problems related to energy inefficiency, air quality, soil quality, water quality, and waste disposal.
 - Researched Federal, State, and Local regulations for compliance standards.
 - Located financial help for clients seeking greener alternatives.
 - Compiled all recommendations and information into confidential reports.



E. KEY PERSONNEL, CERTIFICATIONS AND QUALIFICATIONS

KRISTIN M. HEIMBURGER, LSRP - Continued

EDUCATION/CERTIFICATIONS

- Bachelor of Science, Environmental Science University of Scranton, Scranton, Pennsylvania, May, 2002
- NJDEP Case Study Training for LSRPs, February 2014, Rutgers
- Practical Applications of the New Jersey Site Remediation Program, February 2012, Rutgers
- OSHA 40 Hour Hazardous Waste Training, January 2003
- OSHA 10 Hour Construction Safety & Health Outreach Program. February 2011
- EPA/AHERA/Pennsylvania Asbestos Building Inspector, April 2003
- New Jersey Certification No. 236270, UST Closure and Subsurface Evaluation
- New Jersey Licensed Site Remediation Professional (LSRP No. 628897)

PRESENTATIONS

"Careers in Environmental Consulting", Stockton University, November 2015

"Environmental Lunch and Learn for Lenders" Reliance on Past NFAs, A Case Study, Moorestown Community Center, March 2015

"Environmental Lunch and Learn for Lenders" The New ASTM Standard, Moorestown Community Center, March 2014

"Petroleum Discharges and Mold Contamination" Review and Update of NJDEP Policies Related to Petroleum Discharges, Travelers Insurance Company, Baltimore, MD, July 2007

PROFESSIONAL AFFILIATIONS

- Society of American Military Engineers
- Builders League of South Jersey
- Philadelphia Chamber of Commerce
- Society of Women Environmental Professionals
- Fuel Merchants Association
- Environmental Business Council of New Jersey
- Licensed Site Remediation Professionals Association



E. KEY PERSONNEL, CERTIFICATIONS AND QUALIFICATIONS

ANDREW R. BASEHOAR, LSRP, P.G. SENIOR PROJECT MANAGER

EXPERIENCE

- Senior Project Manager for TTI Environmental Inc. (October 2013 Present) Mr. Basehoar provides senior level consulting services for a wide range of industrial, commercial, and residential clients. Consulting service areas include oversight of due diligence projects including Phase I & II Environmental Assessments and management of multi-level environmental investigation/remediation projects at federal facilities, gas stations, and commercial/industrial sites. Mr. Basehoar 's responsibilities specifically include:
 - Specialized services in New Jersey and Pennsylvania include Preliminary Assessments, Site Investigation, Remedial Investigations and Remedial Actions in accordance with the NJDEP's Technical Requirements for Site Remediation and Site Remediation Reform Act (SRRA) and PADEP's Land Recycling Program (Act 2).
 - Management and review of all Phase I/II assessments prepared in accordance with current Small Business Administration (SBA) and American Society for Testing and Materials (ASTM) standards.
 - Field supervision of site investigation activities such as soil, groundwater, vapor, and ecological sampling.
 - Experienced in regulated and unregulated underground storage tank (UST) closures in PA, & NJ.
 - Preparation and oversight of site remediation projects, industrial demolitions, and gas station closures in accordance with state requirements.
 - Performance of sales presentations for large-scale clients.

Senior Environmental Specialist for SSM Group Inc. (January 2008 – October 2013) Mr. Basehoar conducted Phase I and Phase II Environmental Site Assessments, including historic records review, site reconnaissance, soil boring investigations and preparation of reports for state, municipal, and private clients. Mr. Basehoar was involved in all aspects of PADEP Act 2 projects from initial site characterization through final report preparation and submission. Mr. Basehoar coordinated drinking water and process water well installations including well siting through fracture trace analysis, supervision of drilling activities, aquifer testing, and permitting through PADEP, SRBC, and DRBC.

EDUCATION

Bachelor of Science, Environmental Science/Geology – Kutztown University, Kutztown, Pennsylvania, December 2007

CERTIFICATIONS

- NJ Licensed Site Remediation Professional (LSRP) No. 837642
- Pennsylvania Professional Geologist (PG005181)
- OSHA 40 Hour Hazardous Waste Training, 2012, 8-hour refresher 2013.
- ASTM International Phase I and Phase II Environmental Site Assessment Process Training, 2013
- Permitted Confined Spaces Certification



E. KEY PERSONNEL, CERTIFICATIONS AND QUALIFICATIONS

MATTHEW SCOTT, ENVIRONMENTAL PROFESSIONAL PROJECT MANAGER

EXPERIENCE

Project Manager for TTI Environmental, Inc. Mr. Scott assists in all aspects of Phase I Environmental Assessments, site sampling and clean-up of wastes. Mr. Scott's responsibilities include:

- Field screening of soils and sample collection for Site Investigation/Remediation Investigation (SI/RI) projects in accordance with N.J.A.C. 7:26E.
- Sampling of groundwater monitoring wells and reporting of depths of water, conductivity, pH, etc.
- Conducting environmental assessments for real estate transactions, including historical, regulatory and aerial photograph reviews.
- Preparation of Underground Storage Tanks (UST) Closure Reports.
- Oversight/performance of vapor intrusion evaluations including soil gas & indoor air sampling.

Field Technician for Lewis Environmental Inc (September 2011 – January 2012)

- 24 hour emergency spill response and clean up
- · Hazardous site remediation
- Confined space entry work for tank cleanings and removal
- Contaminated water filtration using Gak units and Adler tanks

Land Surveyor for Scott Engineering Inc. (June 2009 – August 2011)

Rodman for mortgage surveys, flood certifications, property boundary delineation, topographic surveys and deed surveys

EDUCATION

Bachelor of Science, Engineering Technology – University of Delaware. May 2009

CERTIFICATIONS

- OSHA 10-hour Construction Industry Outreach. February 2012
- OSHA 40-hour Hazwoper Training. September 2011
- Confined Space Awareness. September 2011
- EPA/AHERA/Pennsylvania Asbestos Building Inspector. April 2016



E. KEY PERSONNEL, CERTIFICATIONS AND QUALIFICATIONS

RENEE MICHALAK PROJECT SCIENTIST

EXPERIENCE

Project Scientist for TTI Environmental, Inc. (March 2015 – Present) Ms. Michalak assists in all aspects of Phase I Environmental Assessments, site sampling and state regulated remediations. Ms. Michalak's responsibilities include:

- Field screening of soils and sample collection for Site Investigation/Remediation Investigation (SI/RI) projects in accordance with N.J.A.C. 7:26E.
- Sampling of groundwater monitoring wells and reporting of depths of water, conductivity, pH, etc.
 Conducting environmental assessments for real estate transactions, including historical, regulatory and aerial photograph reviews.
- Oversight/performance of vapor intrusion evaluations including soil gas & indoor air sampling.

Environmental Scientist 2 for ARCADIS U.S., Inc. (January 2010 – February 2015)

- Oversight of field activities including monitoring well installations, soil borings, waste disposal activities, and utility clearance.
- Assist in preparing site specific reports and documents for Clients in order to comply with NJDEP regulations and requirements. Reports include Remedial Investigation Reports, Remedial Action Reports, Workplans, Annual and Semi-Annual Monitoring Reports.
- Organize and analysis of data collected in the field. Generate figures, tables and reports.
- Collect environmental samples including groundwater, soil, vapor and surface water.

EDUCATION

Bachelor of Science, Environmental Science – Rutgers University. December 2009

CERTIFICATIONS

- OSHA 10-hour Construction Safety and Health Training, 2011
- OSHA 40-hour Hazwoper 29 CFR 1910.120((e)), 2009 (refreshed annually)
- Permit Required Confined Space Training, 2011



E. KEY PERSONNEL, CERTIFICATIONS AND QUALIFICATIONS

DAVID DIPASCALE ENVIRONMENTAL ASSOCIATE II

EXPERIENCE:

Environmental Associate II for TTI Environmental, Inc. Mr. DiPascale assists in all aspects of Phase I Environmental Assessments, site sampling and clean-up of wastes. Mr. DiPascale's responsibilities include:

- Field screening of soils and sample collection for Site Investigation/Remediation Investigation (SI/RI) projects in accordance with N.J.A.C. 7:26E.
- Sampling of groundwater monitoring wells and reporting of depths of water, conductivity, pH, etc.
- Conducting environmental assessments for real estate transactions, including historical, regulatory and aerial photograph reviews.
- Preparation of Underground Storage Tanks (UST) Closure Reports.

Intern for TTI Environmental, Inc. (May 2013 – January 2014)

- Provide assistance with reports for Above Ground Storage Tank Inspections department as well as the Industrial Hygiene department.
- Provide assistance with the company Health and Safety Program to make sure the program were in compliance with OSHA Standards.

EDUCATION/CERTIFICATIONS:

- Bachelor of Science, Integrated Science and Technology James Madison University. May 2014
- OSHA 40-hour Hazwoper Training. October 2014



E. KEY PERSONNEL, CERTIFICATIONS AND QUALIFICATIONS

ALEC HALBRUNER ENVIRONMENTAL ASSOCIATE 1

EXPERIENCE

Environmental Associate 1 for TTI Environmental, Inc. Mr. Halbruner assists with site due diligence, soil and groundwater sampling, and evaluations of sites for potential hazardous materials. Mr. Halbruner's responsibilities include:

- Preparation of Phase I and Phase II Environmental Site Assessments under the oversite of an Environmental Professional
- Assisting with NJDEP Site Remediation Program site activities including Preliminary Assessments, Site Investigations, Remedial Investigations, and Remedial Actions in accordance with N.J.A.C. 7:26E.
- Assisting with PA Act 2 Site activities and reporting
- Sampling of groundwater monitoring wells via low flow methodology and/or volume-based purging and collection of immediate analysis parameters including depths to water, conductivity, pH, temperature, turbidity, etc.

Field Technician for Saltmarsh Habitat and Avian Research Program (SHARP)

- Used real-time kinetics (RTK) technology to collect elevation data relevant to salt marsh ecological health studies
- Recorded prominence of various marsh plant species using Trimble Geo equipment to collect GPS data
- Assisted in writing data reports communicating findings in the field

EDUCATION

Bachelor of Science, Environmental Science – University of Delaware. December 2015.

CERTIFICATIONS

. OSHA 40-hour Hazwoper Training, May 2017



E. KEY PERSONNEL, CERTIFICATIONS AND QUALIFICATIONS

KEVIN CARR ENVIRONMENTAL ASSOCIATE 1

EXPERIENCE

Environmental Associate 1 for TTI Environmental, Inc. Mr. Carr assists with site due diligence, soil and groundwater sampling, and evaluations of sites for potential hazardous materials. Mr. Carr's responsibilities include:

- Preparation of Phase I and Phase II Environmental Site Assessments under the oversite of an Environmental Professional
- Assisting with NJDEP Site Remediation Program site activities including Preliminary Assessments, Site Investigations, Remedial Investigations, and Remedial Actions in accordance with N.J.A.C. 7:26E
- . Assisting with PA Act 2 Site activities and reporting
- . Soil and groundwater sampling in accordance with state regulations

Field Geologist (September 5, 2016 – December 11, 2016) Stockton University – Galloway, NJ

- Used aerial maps to navigate within a field site and a Brunton compass to collect attitude data of exposed bedrock
- Used knowledge of surface geology and exposed outcrops to create assumptions about the study area
- Created diagrams, maps, and cross sections of field areas with reference to collected data, such as strike and dip of bedrock using InkScape and Adobe Illustrator
- Wrote field reports on the study area, which included observations of the field site, collected data, results, and conclusions

EDUCATION

Bachelor of Science, Environmental Science – Stockton University. May 2018

· Minor in Geology

SKILLS

- . Microsoft Office Proficient in Word, Excel, and PowerPoint
- Experience in ArcGIS ArcMap (GIS, Advanced GIS) and ArcGIS Pro
- Geological mapping using Brunton Pocket Transit (Brunton Compass)
- InkScape and Adobe Illustrator



E. KEY PERSONNEL, CERTIFICATIONS AND QUALIFICATIONS

AUSTIN FALCIANI ENVIRONMENTAL ASSOCIATE 1

EXPERIENCE

Environmental Associate 1 for TTI Environmental, Inc. Mr. Falciani assists with site due diligence, soil and groundwater sampling, and evaluations of sites for potential hazardous materials. Mr. Falciani's responsibilities include:

- Preparation of Phase I and Phase II Environmental Site Assessments under the oversite of an Environmental Professional
- Assists with NJDEP Site Remediation Program site activities including Preliminary Assessments, Site Investigations, Remedial Investigations, and Remedial Actions in accordance with N.J.A.C. 7:26E. Assisting with PA Act 2 Site activities and reporting
- Sampling of groundwater monitoring wells via low flow methodology and/or volume-based purging and collection of immediate analysis parameters including depths to water, conductivity, pH, temperature, turbidity, etc.

Staff Scientist for Handex Consulting and Remediation

- Experience with groundwater, surface water, potable water system, soil and sediment sampling techniques in accordance with the NJDEP Field Sampling Procedures manual.
- Competency in preparation of remedial reports including tables, texts, and figures,
- Mastery of data analysis for report writing and sampling strategy plans.
- Proficiency organizing monthly system discharge reports for NJPDES program

Lab Assistant for Rutgers University Turf Grass Entomology

- Experienced eyed for detail by searching for annual bluegrass weevil larvae in soil cores and counting individual Japanese beetles in batches of up to 500
- Maintained ethics in following standard operating procedures
- Organized and cleaned lab equipment: glassware, forceps, large plastic containers

George H Cook Honors Thesis for Rutgers University Department of Microbiology and Biochemistry

- Conducted research including a research proposal, write up of lab protocols, final document, and defense of thesis.
- Technical lab skills: anaerobic techniques, preparation of defined media, preparation of biodegradation microcosms, chemical analytics (preparation of standard curve, preparation of stock solutions, use of HPLC to analyze samples)

EDUCATION

. Bachelor of Science in Environmental Science, Rutgers University, January 2017

CERTIFICATIONS

. HAZWOPER Training, March 2020