FY 26 USMC Barracks 2030 – MCB Camp Lejeune P1634

Site Characterization Report (SCR)

Jacksonville, NC

March 30, 2026 | Terracon Project No. K625P194

Prepared for:

Clark Nexsen/Michael Baker JV
111 Metropolitan Ave, Suite 333
Charlotte, NC 28204

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March 30, 2026

Clark Nexsen/Michael Baker JV
111 Metropolitan Ave, Suite 333
Charlotte, NC 28204

Attn: Joe Blickenderfer
P: 412-269-6144
E: jblickenderfer@mbakerintl.com

Re: Site Characterization Report (SCR)
FY 26 USMC Barracks 2030 – MCB Camp Lejeune P1634
Marine Corps Base Camp Lejeune
Jacksonville, NC
Terracon Project No. K625P194

Dear Mr. Blickenderfer:

We have completed the scope of Site Characterization services for the above referenced project in general accordance with Terracon Proposal No. PK3255140 R1 dated September 8, 2025. This report presents the findings of the subsurface exploration for the proposed project site.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,

Terracon

NORTH CAROLINA PROFESSIONAL SEAL 048285 ENGINEER MARC S. NELLIS

Marc S. Nellis, PE
Senior Geotechnical Engineer
Registered, NC 048285

Chris M. Caton, PE, PG, PMP
Senior Principal
Registered, NC 038365

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Note: This report was originally delivered in a web-based format. **Blue Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the terracon logo will bring you back to this page. For more interactive features, please view your project online at **client.terracon.com**.

Refer to each individual Attachment for a listing of contents.

Introduction

This report presents the results of our subsurface exploration and site characterization services performed for the proposed new Bachelor Enlisted Quarters (BEQ) to be located at Marine Corps Base Camp Lejeune in Jacksonville, NC. The purpose of these services was to provide the following information:

- A site vicinity map.
- Location plan showing of all testing and sampling points relative to local site features. Include road names, building numbers, north arrow, etc.
- Logs of the subsurface explorations performed.
- Subsurface profiles delineating designated stratigraphy and other pertinent geotechnical data.
- Description of regional geologic information including descriptions of manmade and naturally deposited geologic formations per the state geological survey and site boring or historical data, and natural geologic hazards (landslide, seismic, etc.).
- Summary of the site's history and past development activities based on review of historical data.
- Detailed description of near surface soil conditions.
- Field and laboratory test results to include discussion on source of data, delineation of data, and statistical evaluation.
- Discussion of the current site conditions, ground water elevations including seasonal high water table, interpreted subsurface conditions underlying the project site.
- Analytical lab results for soil and groundwater.

The subsurface exploration Scope of Services for this project included the advancement of test borings, laboratory testing, and preparation of this SCR.

Drawings showing the site and boring locations are shown on the **Site Location** and **Exploration Plan**, respectively. The results of the laboratory testing performed on soil samples obtained from the site during our field exploration are included on the boring logs, summary of laboratory results, and as separate graphs in the **Exploration and Laboratory Results** attachment.

Project Description

Our initial understanding of the project was provided in our proposal and was discussed during project planning. A period of collaboration has transpired since the project was initiated, and our final understanding of the project conditions is as follows:

Item	Description
Information Provided	An email request for proposal was provided by Mr. Joe Blickenderfer of Michael Baker Intl. on August 11, 2025. The request included a description of the project, a preliminary scope request, and NAVFAC SAES Attachments 6, 8, 12, 13 and 14 detailing the project scope and site locations. Follow up email correspondence and a telephone conversation occurred between Mr. Joe Blickenderfer and Mr. Marc Nellis on August 12, 2025 to further discuss the project scope and review the entire SAES package. Multiple meetings occurred between Terracon and Clark Nexsen/Michael Baker JV (CN/MBJV) after award. These meetings consisted of discussions regarding scoping changes, project schedule, and project deliverables.
Project Description	The project includes developing a Lean Design Build RFP for MCB Camp Lejeune which will include the demolition of five (5) existing BEQs, located throughout MCB Camp Lejeune, and replacement by reconstruction.

Terracon should be notified if any of the above information is inconsistent with the planned construction, as modifications to our report may be necessary.

Site Conditions

The following description of site conditions is derived from our site visit in association with the field exploration and our review of publicly available geologic and topographic maps.

Item	Description
Parcel Information	MCB Camp Lejeune, Jacksonville, NC 34.648216°, -77.333936° See **Site Location**
Existing Improvements	The site is currently occupied by an existing structure and parking lot to the southwest corner of the site. The remaining portion is wooded with an active roadway running through the site. Existing buildings, a water tower and parking lots are also located on the site but outside of the project boundary. Underground utilities are present on the site.
Current Ground Cover	Existing structure, parking lot, trees, and grass
Existing Topography	Based on the project specific topographic survey, the existing site grades range from approximately 16 to 25 NAVD 88.

Geotechnical Characterization

We have developed a general characterization of the subsurface conditions based upon our review of the subsurface exploration, laboratory data, geologic setting and our understanding of the project. This characterization, termed GeoModel, forms the basis of our geotechnical evaluation of the site. Conditions observed at each exploration point are indicated on the individual logs. The individual logs can be found in the **Exploration and Laboratory Results** and the GeoModel can be found in the **Figures** attachment of this report.

As part of our analyses, we identified the following model layers within the subsurface profile. For a more detailed view of the model layer depths at each boring location, refer to the GeoModel.

Model Layer	Layer Name	General Description
1	Surficial Material	2 to 7 inches of Surficial, Organic Laden Soil
2	Uncontrolled Fill Material	Sampled as SAND (SM) with varying amounts of silt, clay, and brick fragments
3	Upper Sand	Very Loose to Medium Dense, SAND (SP, SP-SM, SM, SC) with varying amounts of clay, silt, and organics *Borings CL-P1634-SPT-04, CL-P1634-SPT-05, CL-P1634-SPT-06, CL-P1634-SPT-07, CL-P1634-SPT-08, CL-P1634-SPT-09, CL-P1634-SPT-10, CL-P1634-SPT-11, CL-P1634-CPT-01s, CL-P1634-CPT-03s, and CL-P1634-CPT-04s were terminated within this layer*
4	Clay	Very Soft to Soft, CLAY (CL, CH) with varying amounts of sand, organics, and interbedded layers of Very Loose SAND (SC)
5	Middle Sand	Very Loose to Medium Dense, SAND (SC) with varying amounts of clay and organics
6	Lower Sand	Very Loose to Very Dense, SAND (SP-SM, SM, SC) with varying amounts of silt, clay, marine shell fragments, and cemented sand *Borings CL-P1634-SPT-01, CL-P1634-SPT-02, CL-P1634-SPT-03, CL-P1634-CPT-01, CL-P1634-CPT-02, CL-P1634-CPT-03, and CL-P1634-CPT-04 were terminated within this layer*

Groundwater Conditions

The initial groundwater depth was estimated at the Standard Penetration Test (SPT) boring locations as observed through the relative wetness of the recovered soil samples during the drilling operations. At the time of drilling, the initial groundwater depth at the project site was estimated to occur at approximately 9 to 11.5 feet below existing site grades at the boring locations, corresponding to an elevation of approximately 5 to 15 feet NAVD 88. Due to the high fines content of the near surface sands and clays, perched water conditions may be encountered above the noted groundwater depths.

The borings were advanced using a "mud" rotary drilling technique, which introduces drilling fluids (a water and bentonite slurry) into the SPT boreholes. This drilling fluid potentially impairs the ability to accurately determine the groundwater depths at the time of drilling. One (1) temporary groundwater monitoring well was installed within the project site boundary. The temporary groundwater monitoring well was installed using hollow steam auger drilling techniques, to obtain relatively stabilized groundwater reading. The groundwater information obtained from this monitoring well is provided in the following Table. At the time of this report, the monitoring well has been abandoned at the project site.

Temporary Monitoring Well Location	Initial Groundwater Reading [1]		First Groundwater Reading	
	Depth (ft) [2]	Elevation (NAVD 88)	Depth (ft) [2]	Elevation (NAVD 88)
CL-P1634-SPT-10	11 [3]	5.0 [3]	8.8 [4]	7.2 [4]

1. At the time of drilling, based on the relative wetness of the recovered samples.
2. Depth below existing site grades.
3. December 17, 2025
4. January 6, 2026

The Estimated Seasonal High Water Table (ESHWT) can fluctuate from year to year depending on many factors that include, but are not limited to, natural drainage, man-made drainage, surrounding development, frequency and magnitude of rainfall patterns, and, most specifically for this project site, tidal patterns. Historically, the ESHWT is expected to occur within the "wetter" months of the year, typically November through April. However, periods of high groundwater tables are expected to occur at other times of the year (usually associated with major weather events). A few indicators of ESHWT include hydric soil indicators (color patterns and shades), variation in density of the soils within the presumed fluctuation zone, and current and historical monitoring well data. Of the three listed, analyzing data obtained from current and historical groundwater monitoring programs tends to be the most reliable indicator of the ESHWT. Soil coloring (redoximorphic features, mottling, etc.) is the result of saturation cycles over numerous years. Hydric indicators and relying on density variations can lead to false readings as development and added drainage features continue to alter the fluctuation zones.

The ESHWT was evaluated by a North Carolina Licensed Professional by observing variations of soil texture, chroma, and moisture content of soil profile. The Stormwater Soil Evaluation Report is included in the **Exploration and Laboratory Results** attachment of this report. The ESHWT for the remaining borings was interpreted from the information contained in the Soil Evaluation Report. The ESHWT elevation at the boring locations is recorded on the attached boring logs.

Groundwater conditions may differ at the time of construction because of seasonal variations in rainfall, runoff, and other conditions not apparent at the time of drilling. We recommend the contractor determine the actual groundwater depths at the time of construction to determine any impact on construction.

Geologic Setting

The project site is located within the Atlantic Coastal Plain physiographic province of North Carolina. Bedrock of Late Mesozoic age generally occurs at depths greater than 1,500 feet and is overlain by a sequence of Lower and Upper Cretaceous, Tertiary, Pleistocene, and Recent sediments.

The Late Cretaceous-aged Black Creek Formation unconformably overlies the basement rock beneath Jacksonville[1], consists of lignitic sand and clay, and is documented to occur as shallow as 700 feet in New Hanover County[2]. The Peedee Formation conformably overlies the Black Creek Formation with similar age and appearance, consisting of greenish-gray to olive-black, glauconitic and locally fossiliferous sand, clayey sand, and clay. The Tertiary-aged Castle Hayne Formation then conformably overlies the Peedee Formation[3] and generally consists of sand and clay with gravel consisting of cemented sand and shell fragments, typically occurring in lenses, with rigid limestone deposits occurring primarily at the bottom, and southern portion of the formation towards the Cape Fear Peninsula[4]. Calcareous sandstone within these formations are the principal freshwater aquifers in eastern North Carolina.

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[1] U.S. Geological Survey. (2012). *Camp Lejeune Groundwater Level and Conductance Monitoring Network: Project Overview*. South Atlantic Water Science Center. https://nc.water.usgs.gov/www2/projects/lejeune/overview.html

[2] Bain, G. L. (1970). *Geology and ground-water resources of New Hanover County, North Carolina* (Ground Water Bulletin No. 17). United States Geological Survey, in cooperation with the New Hanover County Board of Commissioners and the North Carolina Department of Water and Air Resources.

[3] Cardinell, A. P., Berg, S. A., & Lloyd, O. B. (1993). *Hydrogeologic framework of U.S. Marine Corps Base at Camp Lejeune, North Carolina* (Water-Resources Investigations Report 93-4049). U.S. Geological Survey. https://www.usgs.gov/publications/hydrogeologic-framework-us-marine-corps-base-camp-lejeune-north-carolina

[4] Bain, G. L. (1970). *Geology and ground-water resources of New Hanover County, North Carolina* (Ground Water Bulletin No. 17). United States Geological Survey, in cooperation with the New Hanover County Board of Commissioners and the North Carolina Department of Water and Air Resources.

The upper Castle Hayne Formation in Onslow County is generally consistent with (and overlain by) the River Bend and Belgrade Formations[5]. The Belgrade Formation is the uppermost well-documented geologic formation beneath the site and generally consists of oyster shell mounds and gray to brown, fossiliferous, clayey sand[6].

In more recent geological history, the Belgrade Formation is then overlain by the recent sediments encountered in the exploration, most of which are believed to have been deposited during the Pleistocene Epoch.

[5] Ward, L. W., Lawrence, D. R., & Blackwelder, B. W. (1978). Stratigraphic revision of the middle Eocene, Oligocene, and lower Miocene; Atlantic Coastal Plain of North Carolina. In *Contributions to stratigraphy, 1979* (U.S. Geological Survey Bulletin 1457-F, 23 pp.). U.S. Geological Survey. https://ngmdb.usgs.gov/Geolex/UnitRefs/BelgradeRefs_374.html

[6] U.S. Geological Survey. (2025). *Belgrade Formation* (Geologic Names Lexicon record). National Geologic Map Database (Geolex). https://ngmdb.usgs.gov/Geolex/UnitRefs/BelgradeRefs_374.html

Site History

Based on a review of historical aerial images and historical topographic maps, the project site has been wooded since at least 1993 with the exception of the existing structure and parking lot on the southwest corner of the site which was there prior to 1993. Construction consisting of the installation of an extension to Conner Street and the installation of base utilities along the existing roadways has occurred from 1998 until present day. The project site topography has remained generally consistent to the current elevations from 1948 until present day.

A review of available historical topographic mapping and aerial imagery provides no evidence that the project site is situated within an area of reclaimed or otherwise man-made ground.

Shear Wave Velocity Testing

In-situ soil shear wave velocity testing was performed at Cone Penetration Test (CPT) sounding location CL-P1634-CPT-02. The shear wave velocity test was performed at 1-meter intervals to the sounding termination depth.

The recorded shear wave velocities ranged from approximately 435 to 1107 feet per second (fps) with an average of 846 fps.

The in-situ soil shear wave velocity are provided in the **Exploration and Laboratory Results** attachment of this report.

Infiltration Testing

A soil scientist licensed in the State of North Carolina was contracted to evaluate Seasonal-High Water Table (SHWT) and perform infiltration testing at each temporary monitoring well location. Constant-Head Borehole Permeameter Infiltration testing was performed at the most restrictive layer within two (2) feet of the SHWT within the vicinity of boring location CL-P1634-SPT-10. Our testing procedure is outlined in the **Exploration and Testing Procedures** attachment.

The hydraulic conductivity test result is presented in the **Exploration and Laboratory Results** attachment of this report.

Corrosivity Testing

One (1) composite soil sample was collected at CL-P1634-SPT-02, over a depth interval of 1 to 6 feet below existing grades for analysis regarding soil corrosiveness and aggressiveness potential.

The comprehensive soil corrosivity results are provided in the **Exploration and Laboratory Results** attachment of this report.

Analytical Testing

Per the SAES for this project, composite soil samples, groundwater samples, and solid and liquid Investigation Derived Waste (IDW) were collected and tested as outlined below.

Composite Soil Samples: Three (3) composite soil samples were collected from the project site for analytical testing. The composite samples were obtained from (and blended over) depths of 1 foot to 6 feet at the following locations:

- CL-P1634-SPT-02
- CL-P1634-SPT-05
- CL-P1634-SPT-10

The samples were submitted to Pace Analytical to test for Total Petroleum Hydrocarbons (TPH) in Diesel-Range Organics (DRO) and Gasoline-Range Organics (GRO), Per- and Polyfluoroalkyl Substances (PFAS), and TCLP analysis including Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), pesticides, herbicides, metals, and Polychlorinated Biphenyls (PCBs).

Groundwater Samples: One (1) groundwater sample was collected from the temporary monitoring well installed at the project site, corresponding to the following location:

- CL-P1634-SPT-10

The groundwater sample was submitted to Pace Analytical to test for TAL metals, TCL VOCS, TCL SVOCs, TPH-DRO, TPH-GRO, and PFAS.

Investigation Derived Waste (IDW): All excess spoils and drilling fluids generated during the exploration were containerized in 55-gallon drums and transported to designated holding locations in coordination with MCB Camp Lejeune. Liquid and solid IDW were containerized separately.

One (1) solid and one (1) liquid sample were submitted for analytical screening for disposal. The solid and liquid IDW were subjected to testing for TPH-DRO, TPH-GRO, BTEX, PFAS, ignitability, reactivity, corrosivity, paint filter, and Full TCLP including VOCs, SVOCs, herbicides, pesticides, RCRA metals, and PCBs.

These test results are provided in the **Exploration and Laboratory Results** attachment of this report.

General Comments

Our analyses and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction.

Our Scope of Services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly affect excavation cost. Any parties charged with estimating excavation costs should seek their own site characterization for specific purposes to obtain the specific level of detail necessary for costing. Site safety and cost estimating including excavation support and dewatering requirements/design are the responsibility of others. Construction and site development have the potential to affect adjacent properties. Such impacts can include damages due to vibration, modification of groundwater/surface water flow during construction, foundation movement due to undermining or subsidence from excavation, as well as noise or air quality concerns. Evaluation of these items on nearby properties are commonly associated with contractor means and methods and are not addressed in this report. The owner and contractor should consider a preconstruction/precondition survey of surrounding development. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing.

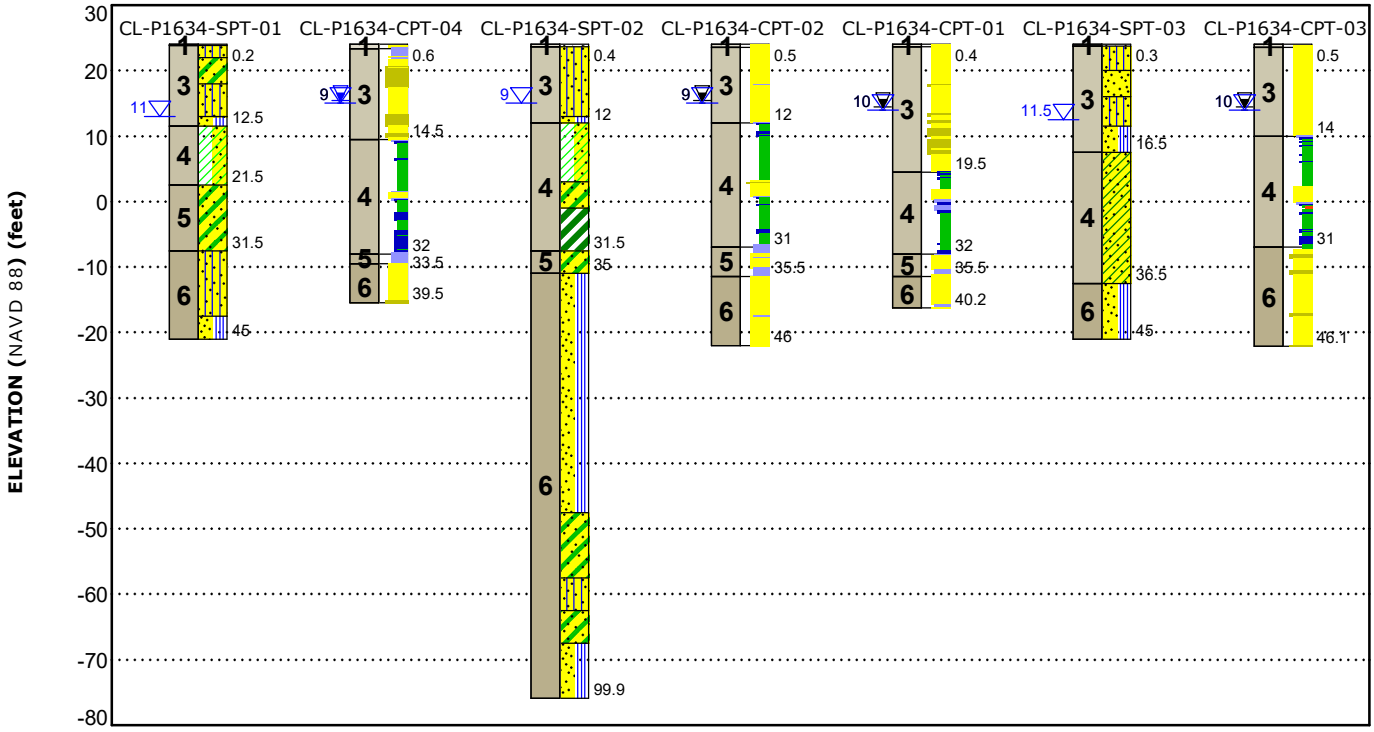
Figures

Contents:

GeoModel
Generalized Soil Profile

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

GeoModel



This is not a cross section. This is intended to display the Geotechnical Model only. See individual logs for more detailed conditions.

Model Layer	Layer Name	General Description
1	**Surficial Material**	2 to 7 inches of Surficial, Organic Laden Soil
2	**Uncontrolled Fill Material**	Sampled as SAND with varying amounts of silt, clay, and brick fragments
3	**Upper Sand**	Very Loose to Medium Dense, SAND (SP, SP-SM, SM, SC) with varying amounts of clay, silt, and organics
4	**Clay**	Very Soft to Soft, CLAY (CL, CH) with varying amounts of sand, organics, and interbedded layers of Very Loose SAND (SC)
5	**Middle Sand**	Very Loose to Medium Dense, SAND (SC) with varying amounts of clay and organics
6	**Lower Sand**	Very Loose to Very Dense, SAND (SP-SM, SM, SC) with varying amounts of silt, clay, marine shell fragments, and cemented sand

Legend

- Topsoil
- Silty Sand
- Clayey Sand
- Poorly-graded Sand with Silt
- Lean Clay with Sand
- Fat Clay
- Poorly-graded Sand
- Sandy Lean Clay

Soil Behavior Type (SBT)

- **7 Gravelly sand to dense sand**
- **8 Very stiff sand to clayey sand**
- **3 Clay - silty clay to clay**
- **1 Sensitive, fine grained**
- **2 Organic soils - clay**
- **6 Sands - clean sand to silty sand**
- **4 Silt mixtures - clayey silt to silty clay**
- **5 Sand mixtures - silty sand to sandy silt**
- **9 Very stiff fine grained**

CPT Assumed Water Depth

First Water Observation
Second Water Observation

Groundwater levels are temporal. The levels shown are representative of the date and time of our exploration. Significant changes are possible over time.
Water levels shown are as measured during and/or after drilling. In some cases, boring advancement methods mask the presence/absence of groundwater. See individual logs for details.

NOTES:
Layering shown on this figure has been developed by the geotechnical engineer for purposes of modeling the subsurface conditions as required for the subsequent geotechnical engineering for this project.
Numbers adjacent to soil column indicate depth below ground surface.

Terracon
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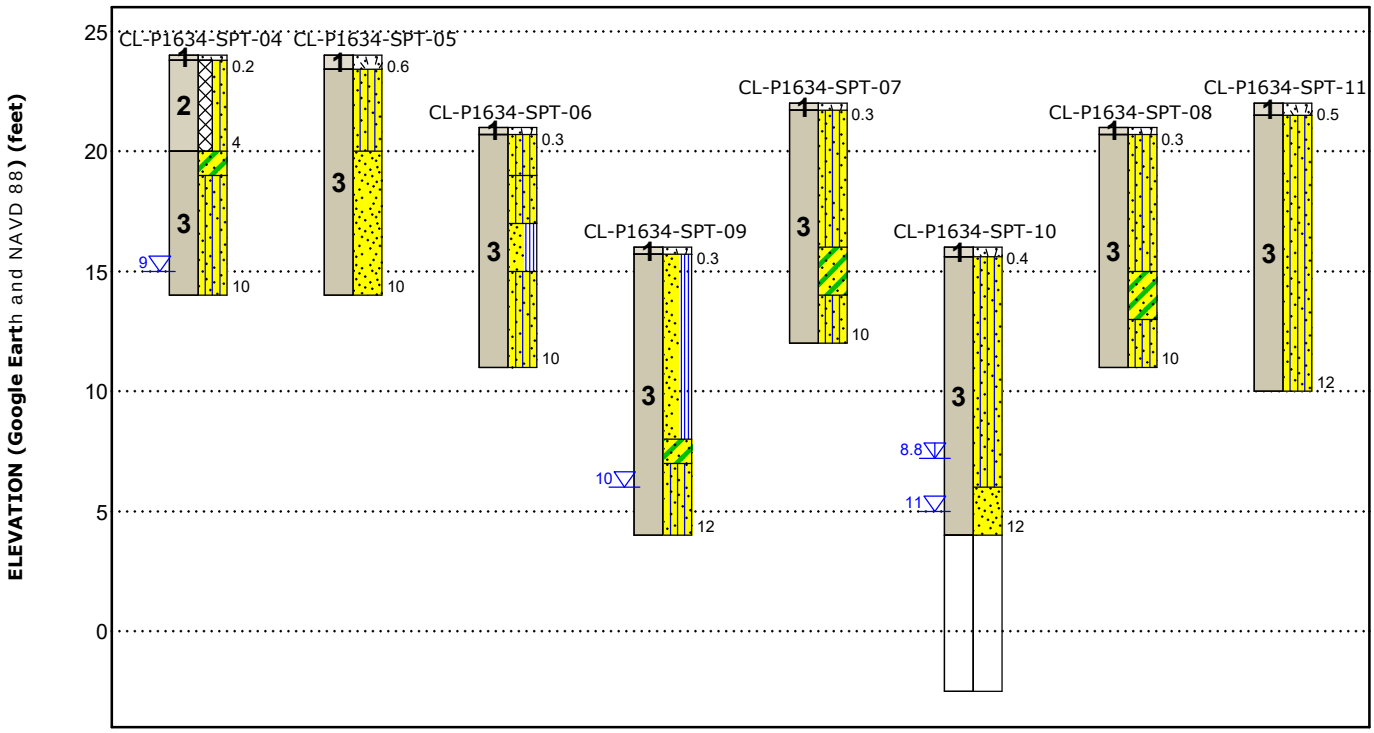
GeoModel



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5	**Middle Sand**	Very Loose to Medium Dense, SAND (SC) with varying amounts of clay and organics
6	**Lower Sand**	Very Loose to Very Dense, SAND (SP-SM, SM, SC) with varying amounts of silt, clay, marine shell fragments, and cemented sand

Legend

- Topsoil
- Silty Sand
- Clayey Sand
- Poorly-graded Sand
- Poorly-graded Sand with Silt

First Water Observation
Second Water Observation

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Terracon Project No. K625P194

Subsurface Profile

Section A-A'

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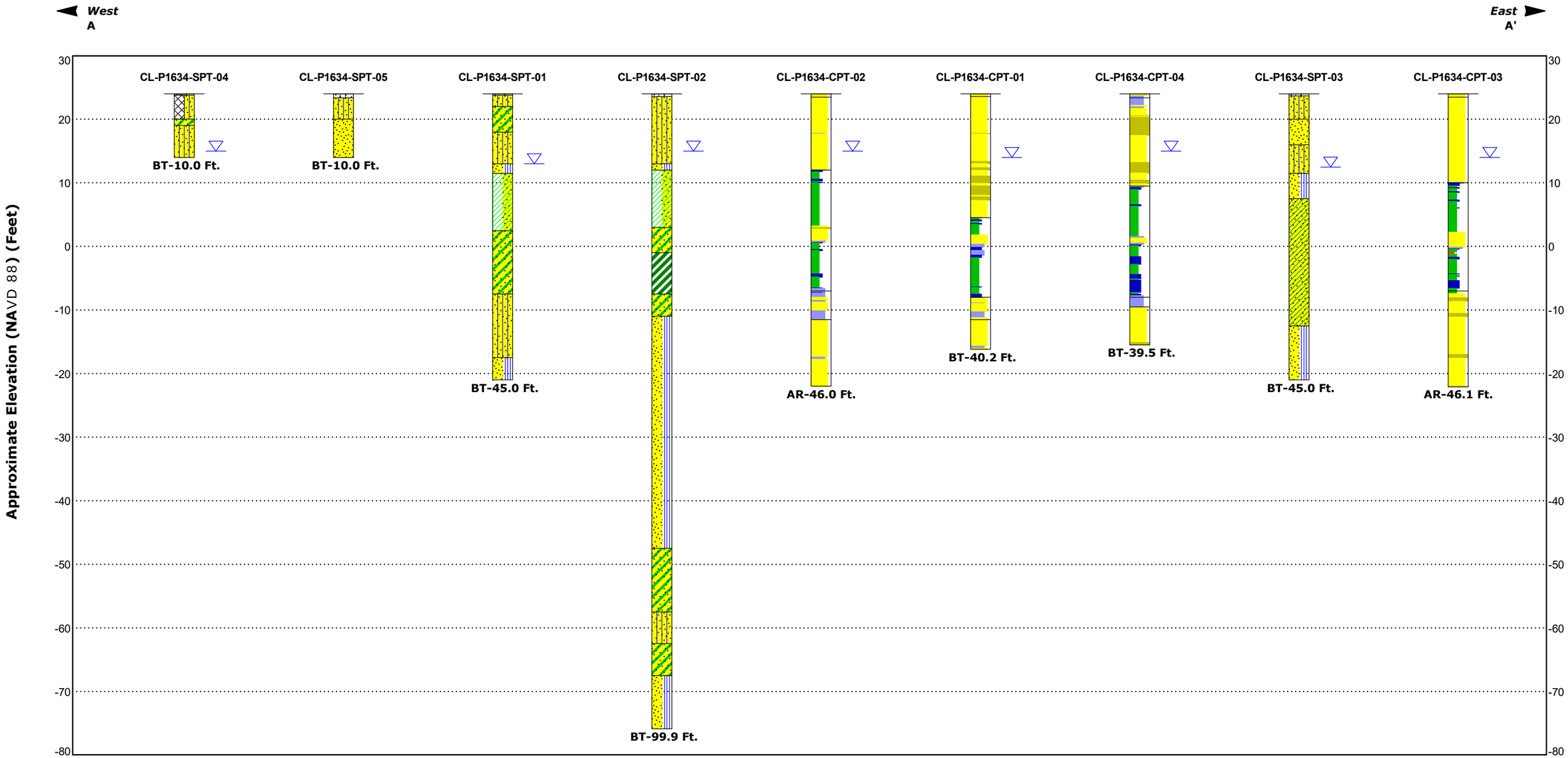

Notes	Water Level Observations	Explanation	Material Legend	CPT Soil Classification Graphic Color Code
See Exploration Plan for orientation of soil profile. See General Notes in Supporting Information for symbols and soil classifications. Soils profile provided for illustration purposes only. Soils between borings may differ AR - Auger Refusal BT - Boring Termination	Water Level Reading at time of drilling. Water Level Reading after drilling.	CL-P1634-SPT-02 — Borehole Number Moisture Content — %w LL PL — Liquid and Plastic Limits Sampling (See General Notes) Borehole Lithology AR BT — Borehole Termination Type	Topsoil Silty Sand Clayey Sand Poorly-graded Sand with Silt Lean Clay with Sand Fat Clay Poorly-graded Sand Sandy Lean Clay	1 Sensitive, fine grained 2 Organic soils - clay 3 Clay - silty clay to clay 4 Silt mixtures - clayey silt to silty clay 5 Sand mixtures - silty sand to sandy silt 6 Sands - clean sand to silty sand 7 Gravelly sand to dense sand 8 Very stiff sand to clayey sand 9 Very stiff fine grained

FY26 USMC Barracks 2030 - P-1634 & P-1636
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Subsurface Profile

Section B-B'

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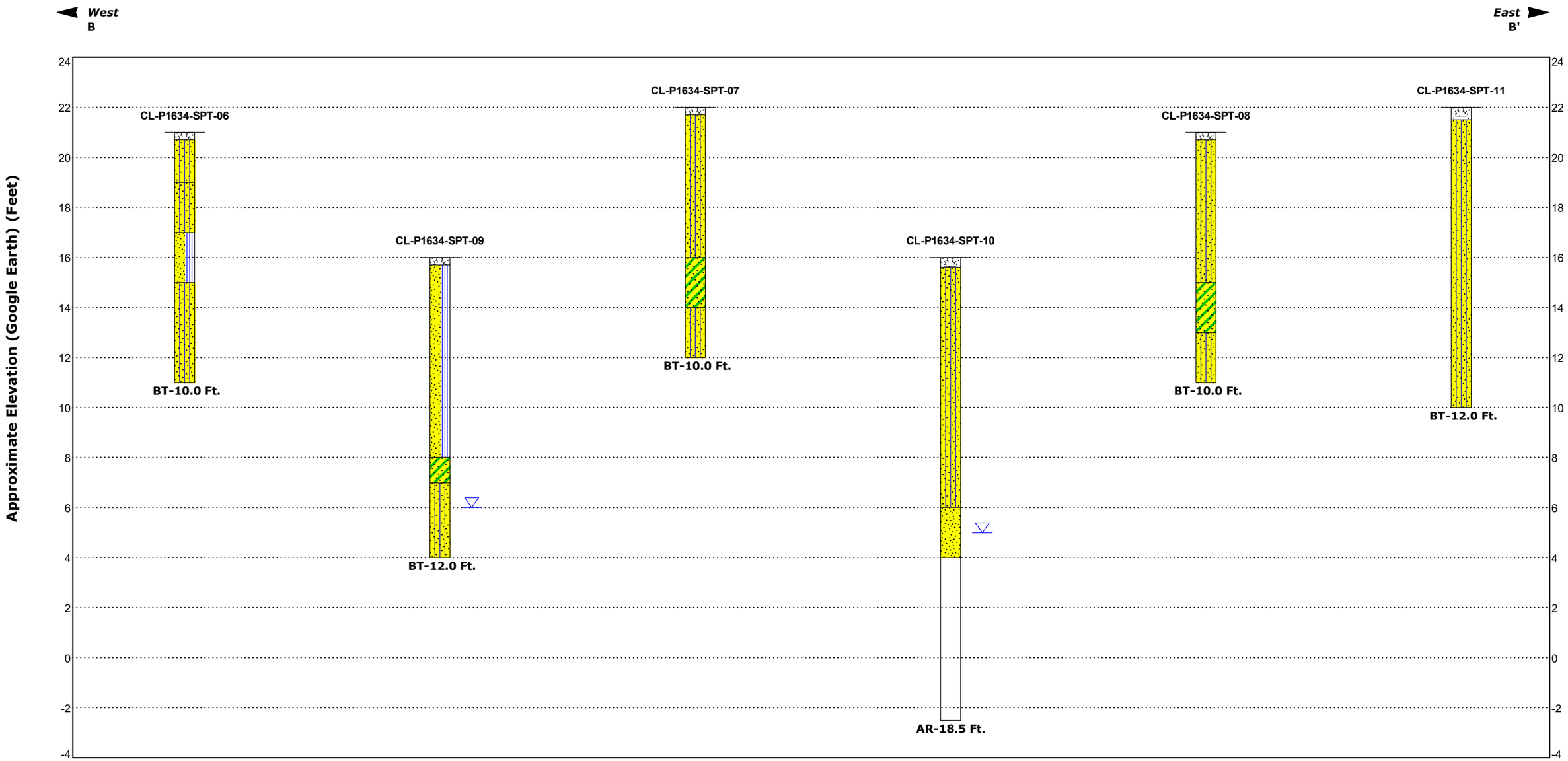


Notes	Water Level Observations	Explanation	Material Legend	CPT Soil Classification Graphic Color Code
See Exploration Plan for orientation of soil profile. See General Notes in Supporting Information for symbols and soil classifications. Soils profile provided for illustration purposes only. Soils between borings may differ AR - Auger Refusal BT - Boring Termination	Water Level Reading at time of drilling. Water Level Reading after drilling.	CL-P1634-SPT-06 Borehole Number Moisture Content %w LL PL Liquid and Plastic Limits Sampling (See General Notes) Borehole Lithology AR BT Borehole Termination Type	Topsoil Silty Sand Poorly-graded Sand with Silt Clayey Sand Poorly-graded Sand	1 Sensitive, fine grained 2 Organic soils - clay 3 Clay - silty clay to clay 4 Silt mixtures - clayey silt to silty clay 5 Sand mixtures - silty sand to sandy silt 6 Sands - clean sand to silty sand 7 Gravelly sand to dense sand 8 Very stiff sand to clayey sand 9 Very stiff fine grained

Attachments

Contents:

Exploration and Laboratory Testing Procedures
Site Location and Exploration Plans
Exploration and Laboratory Results
Supporting Information

Exploration and Testing Procedures

Field Exploration

Boring ID	Approximate Boring Depth (feet)	Type
CL-P1634-SPT-01 through CL-P1634-SPT-11	10 to 100	SPT
CL-P1634-CPT-01 through CL-P1634-CPT-04	39.5 to 46.1 (cone refusal depth)	CPT
CL-P1634-SPT-10	15	Temporary Monitoring Well

Boring Layout and Elevations: The boring locations were established by **Terracon** and confirmed with the Client and NAVFAC prior to mobilizing to the project site. **Terracon** personnel provided the boring layout using handheld GPS equipment and referencing existing site features. The coordinates for boring locations that were adjusted in the field due to utility conflicts or field obstructions were captured in the field using a handheld GPS and updated on the boring logs. The approximate boring locations are shown in the **Site Location and Exploration Plans** attachment.

Approximate ground surface elevations were obtained by interpolation from the project specific Topographic Survey to the nearest 0.5 feet. All location coordinates were recorded in WGS 84 latitude and longitude to the accuracy available to the handheld GPS. The completed locations coordinates were converted to state Plane northing and easting US Survey feet.

Prior to mobilization, utility clearance was obtained at each location through NC811 and using a **Terracon** private subsurface utility locator utilizing Ground Penetrating Radar (GPR), Electromagnetic (EM) locating, and metal detecting. All existing subsurface utilities were marked within a 25-foot radius of each proposed field exploration location.. No subsurface explorations were conducted within 5 feet (horizontal distance) of existing utility lines or site environmental monitoring wells. The private utility locator competency letter, photo-documentation, and subsurface utility plan is provided in the **Supporting Information** attachment.

Subsurface Exploration Procedures: The SPT borings were performed using a track-mounted rotary drill rig with the use of rotary wash "mud" or continuous flight augers (hollow stem, for the temporary well locations) drilling procedures in general accordance with ASTM D 1586. The tests were performed continuously from the existing ground surface to a depth of 10 to 12 feet and at intervals of 5 feet, starting at a depth of 13 feet The soil samples were obtained with a standard 1.4" I.D., 2" O.D., 30" long split-spoon sampler. The sampler was driven into the ground 24 inches with blows of a 140 lb. hammer falling 30 inches, using an automatic hammer. The number of blows required to drive the sampler each 6-inch increment of penetration was recorded and is shown on the boring logs. The sum of the second and third penetration increments is termed the SPT N-value (uncorrected for automatic hammer and overburden). A representative portion of each disturbed split-spoon sample was collected for each boring, placed in a glass jar, sealed, labeled, and returned to our laboratory for review and testing.

During boring and sampling operations, hand pocket penetrometer (PP) unconfined compressive strength testing was performed on the split-spoon cohesive soil samples. Each soil interval was screened in the field for organic vapors using a photo-ionization detector (PID). The results of the PP and the PID readings are included on the boring logs located in the **Exploration and Laboratory Results** attachment.

We also observed the boreholes while drilling for the presence of groundwater. The observed groundwater levels are shown on the attached boring logs. All boreholes were backfilled upon completion with the soil cutting mixed with bentonite grout using the tremie method in general accordance with the industry standard of care. The surplus soil cuttings, decontamination water, purged groundwater, and slurry (Investigation Derived Waste – IDW) were containerized within DOT-approved 55-gallon, chemical resistant drums, and were properly labeled and temporarily stored at NAVFAC pre-approved staging area.

All soil boring and sampling operations were monitored and logged on-site by a full-time experienced Geotechnical Engineer who prepared field boring logs as part of the field operations. The sampling depths, penetration distances, and other sampling information (PP, PID, and groundwater depths) were recorded on the field boring logs. These field logs included visual classifications of the materials observed during drilling and our interpretation of the subsurface conditions between samples. Final boring logs were prepared from the field logs. The final boring logs represent the Geotechnical Engineer's interpretation of the field logs and include modifications based on observations and tests of the samples in our laboratory.

In addition to the SPT testing the following additional field activities were performed:

Hand Penetrometer: Hand Penetrometer (HP) testing was performed on split spoon samples obtained from the SPT borings in accordance with ASTM D4648. This test involves pressing a calibrated penetrometer into the soil sample to measure its resistance and provide estimates of soil cohesion in fine-grained soils. These test results are provided in the **Exploration and Laboratory Results** attachment of this report.

Undisturbed Shelby Tubes: Undisturbed Shelby Tube samples were collected (3" diameter thin-walled tubes) from the soft clay layers encountered at the site, and returned to our laboratory for extrusion and one dimensional consolidation testing. The Shelby tube samples were hydraulically pushed into the soil with the SPT rig and extracted using a GUS sampler. These test results are provided in the **Exploration and Laboratory Results** attachment of this report.

Bulk Soil Sampling: Bulk soil samples were obtained from the existing subgrade soils at depths ranging from 1 to 3 feet below existing grades, depending on surficial material thicknesses. The samples were manually excavated, containerized, and transported to our laboratory where they were subjected to California Bearing Ratio testing, Standard Proctor testing, and grain size analysis. These test results are provided in the **Exploration and Laboratory Results** attachment of this report.

Investigation Derived Waste (IDW): Solid and liquid IDW generated from the drilling process was containerized separately, in 55-gallon drums. A representative solid sample and liquid sample, if applicable, was collected for every five (5) IDW drums for soils and liquids The composite samples were placed in clean, laboratory supplied containers, packed with ice, and shipped to the contracted laboratory under chain-of custody for analysis. These test results are provided in the **Exploration and Laboratory Results** attachment of this report.

Composite Soil Sampling: Composite soil samples for analytical and corrosion potential testing were collected from the site using a manual hand auger with a 3.25 inch diameter bucket. The hand auger was advanced from the existing ground surface to a maximum depth of 6 feet below existing ground surface. A continuous sample was collected from 1 to 6 feet. The recovered soils were blended over the entire depth, a composite sample was then placed in a clean, laboratory supplied container, packed on ice, and shipped to the contracted laboratory under chain-of-custody for analysis. The hand auger was decontaminated between boring using a non-phosphate industrial grade detergent and distilled water. These test results are provided in the **Exploration and Laboratory Results** attachment of this report.

Temporary Monitoring Wells: The temporary monitoring well was installed using 3.25 I.D. hollow stem auger and constructed of 2-inch diameter, Schedule 40 PVC materials with a 5-foot slotted section at the bottom end and a solid section extending above the ground surface. The well screen interval was set at an appropriate depth to capture the soil/groundwater interface. The borehole annulus was backfilled with filter sand (silica sand with 10-20 mesh size) to 1 foot above the well screen and sealed with bentonite pellets to the ground surface. The temporary monitoring well was abandoned by removing piping and backfilling with bentonite grout in accordance with Installation, State, and Federal requirements. The ground surface was than regraded.

Groundwater Sampling: A groundwater sample was collected from the water column of the temporary monitoring well. The temporary monitoring well was developed using a peristaltic pump and disposable tubing to remove groundwater for a minimum of three well volumes or until the turbidity was decreased significantly and water ran clear. Low flow purging and sampling techniques (i.e., <250 milliliters per minute) were used for the temporary monitoring well to collect a representative sample, reduce turbidity, and minimize purge water volume. The groundwater sample was collected after stabilization of field parameters (e.g., pH and specific conductance) and reduction of turbidity to below approximately 10 nephelometric turbidity units. The groundwater sample was placed in clean, laboratory supplied containers, packed with ice, and shipped to the contracted laboratory under chain-of-custody for analysis. Any reused equipment was decontaminated prior to collection of any subsequent well sample. These test results are provided in the **Exploration and Laboratory Results** attachment of this report.

Infiltration Testing: Constant-Head Borehole Permeameter Infiltration testing (shallow well pump-in technique and bore hole permeameter method) was performed. This method was performed in accordance with the procedure outlined within Methods of Soil Analysis, Part 1., Chapter 29 – Hydraulic Conductivity of Saturated Soils: Field Methods, 29 – 3.2 Shallow Well Pump In Method, pp. 758-763 and in the Soil Science Society of America Journal, Vol. 53, no. 5, Sept. – Oct. 1989, "A Constant-head Permeameter for Measuring Saturated Hydraulic Conductivity of the Vadose Zone" and "Comparison of the Glover Solution with the Simultaneous – Equations Approach for Measuring Hydraulic Conductivity". The test was performed within the vicinity of the temporary monitoring well location and at the most restrictive layer within 2 feet of the ESHWT per the NC Division of Environmental Quality (NCDEQ).

The hydraulic conductivity test result is presented in the **Exploration and Laboratory Results** attachment of this report.

Cone Penetration Test (CPT) Soundings: The CPT hydraulically pushes an instrumented cone through the soil while nearly continuous readings are recorded to a portable computer. No soil samples are gathered through this subsurface investigation technique. The cone is equipped with electronic load cells to measure tip resistance and sleeve resistance and a pressure transducer to measure the generated ambient pore pressure. These measurements are correlated to various soil properties used for geotechnical design based on the correlations presented by Robertson & Cabal (2022) and Mayne et. Al (2023). These correlations are summarized in the CPT General Notes in the **Supporting Information** attachment. These test results are provided in the **Exploration and Laboratory Results** attachment of this report.

The CPT rig and piezocone used for this project have the following specifications:

- Tip Area: 10-15 square-centimeters (cm^2)
- Sleeve Area: 150-225 cm^2
- Cone Apex Angle: 60°
- Pore Pressure Transducer Location: U_2
- Net Area Ratio: See logs
- Push Rate: 2 centimeters per second (cm/s)
- Reading Frequency: 1 reading per second (or, 1 reading per centimeter)

Calibration reports for the CPT rig used at the site can be provided upon request. CPT testing is conducted in general accordance with ASTM D5778 "Standard Test Method for Performing Electronic Friction Cone and Piezocone Penetration Testing of Soils." Upon completion, the data collected was downloaded and processed by the project engineer.

The following tests were performed supplemental to the CPT soundings:

Shear Wave Velocity Testing: Shear wave velocity testing is a supplement to the CPT with added instrumentation used to determine shear wave velocity with depth. This additional information is collected via an accelerometer placed above the instrumented cone. A shear wave is generated at the ground surface, such as a hammer striking a steel plate on the end, which propagates through the soil and is recorded by the geophone at selected intervals (typically 1 meter). From this data, the interval shear wave velocities of the soil are calculated. These interval velocities can be used to develop the shear wave velocity profile for the site and can be used to determine a seismic site classification. These test results are provided in the **Exploration and Laboratory Results** attachment of this report.

Pore Pressure Dissipation (PPD) Testing: PPD testing was performed in accordance with ASTM D6067. This test involves pausing the penetration of the CPT piezocone and allowing the excess pore pressure (generated by advancing the cone) to dissipate. During this process, pore pressure readings are taken at one-second intervals, and the rate of dissipation is recorded over time. The results of this test can be used to estimate a coefficient of consolidation for fine-grained soils, C_V, and ultimately predict the time rate of consolidation. These test results are provided in the **Exploration and Laboratory Results** attachment of this report.

Soil Classification and Index Testing

Soil testing provided by **Terracon** was performed in accordance with American Society for Testing and Materials (ASTM) standards. All soils and materials tests were performed in our American Association of State Highway and Transportation Officials (AASHTO re:source) and US Army Corps of Engineers certified laboratory.

Representative portions of all soil samples collected during drilling operations were labeled, preserved, and transferred to our laboratory in accordance with ASTM D4220 for classification and analysis. Soil descriptions on the boring logs are provided using visual-manual methods in general accordance with ASTM D2488 using the Unified Soil Classification System (USCS).

Soil samples that were selected for index testing were classified in general accordance with ASTM D2487. It should be noted that some variation can be expected between samples classified using the visual-manual procedure (ASTM D2488) and the USCS (ASTM D2487). A summary of the soil classification system is provided in the **Supporting Information** attachment.

Laboratory Testing

Representative split-spoon soil samples were selected and subjected to laboratory testing in order to corroborate the visual classification. These test results, along with the soil test boring logs, are presented in the **Exploration and Laboratory Results** attachment of this report.

The laboratory testing program included the following types of tests:

- Moisture Content (ASTM D2216)
- Atterberg Limits (ASTM D4318)
- No. 200 Wash (ASTM D1140)
- Sieve Analysis (ASTM D6913)
- Pocket Penetrometer Testing on Cohesive Soils
- Consolidation Testing (ASTM D2435)
- Moisture Density Relationship (Proctor Testing) (ASTM D698)
- California Bearing Ratio (CBR) Testing (ASTM D1883)

The laboratory testing program often included examination of soil samples by an engineer. Based on the results of our field and laboratory programs, we described and classified the soil samples in accordance with the Unified Soil Classification System.

Site Location and Exploration Plans

Contents:

State Geologic Map
Site Location Plan
Historical Aerial Site Images
Exploration Plan

USGS Geologic Map

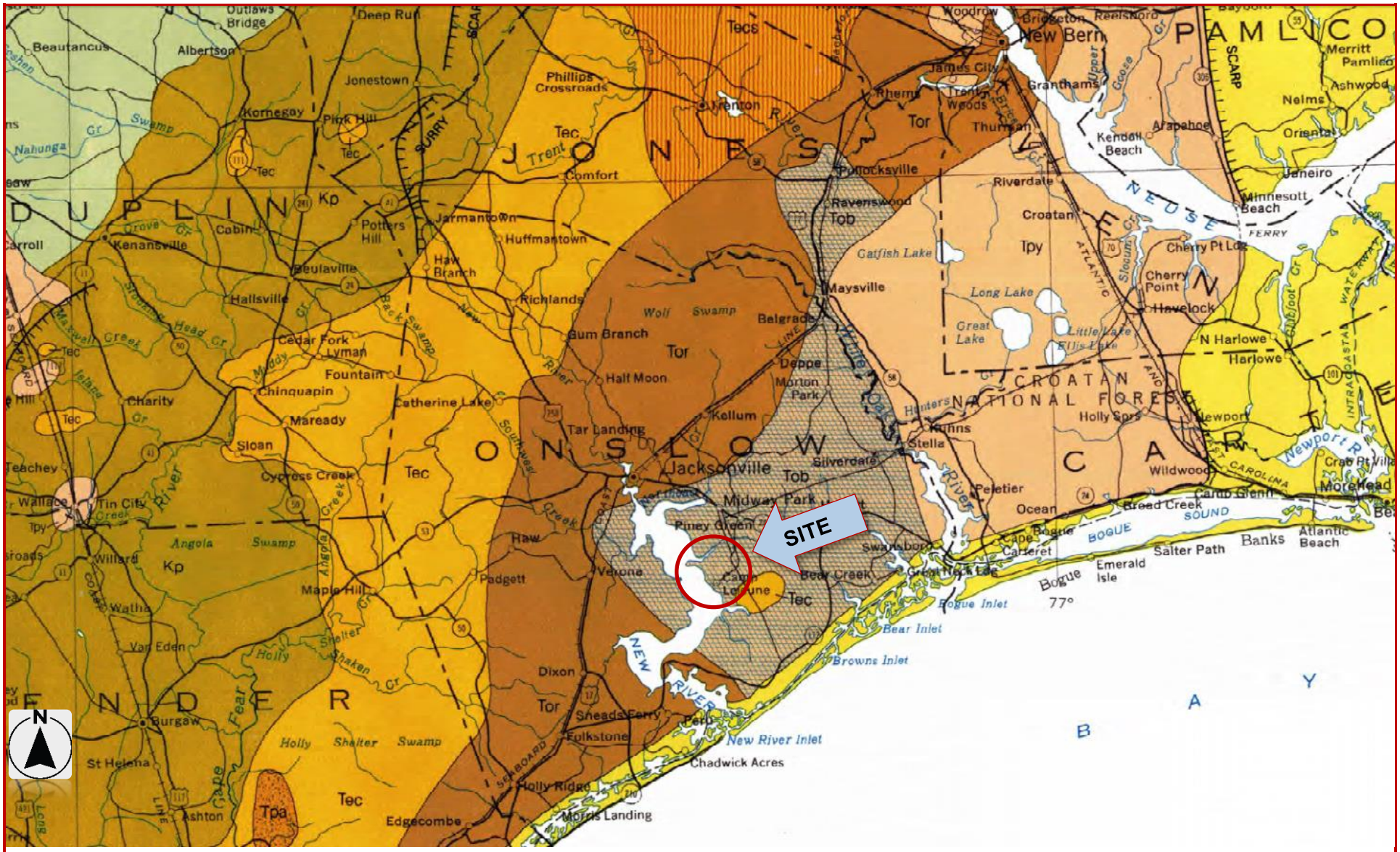


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Geologic Map of North Carolina 1985

Site Location

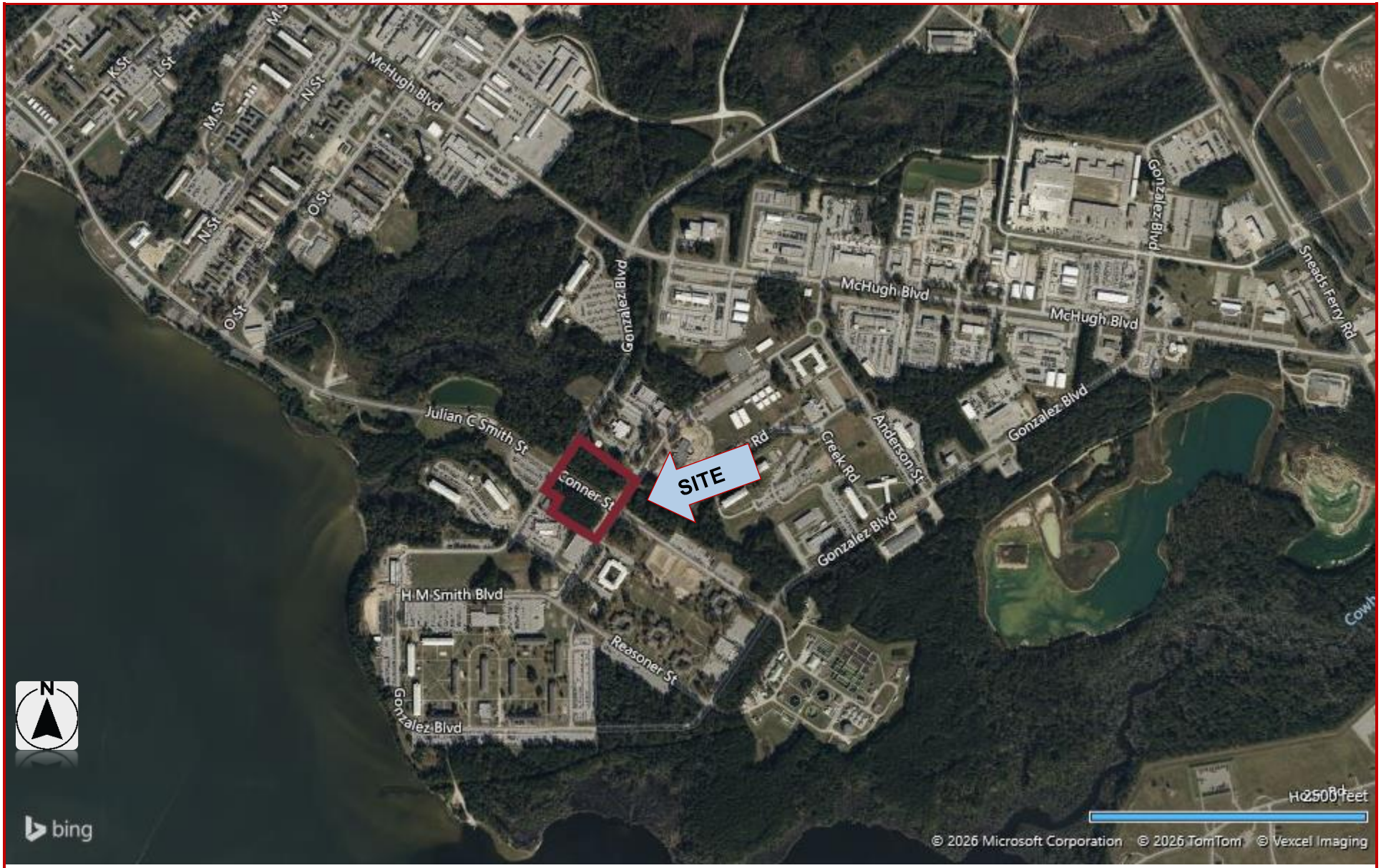


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

Historical Aerial Image - 1993

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Google Earth Image

Historical Aerial Image - 2005

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

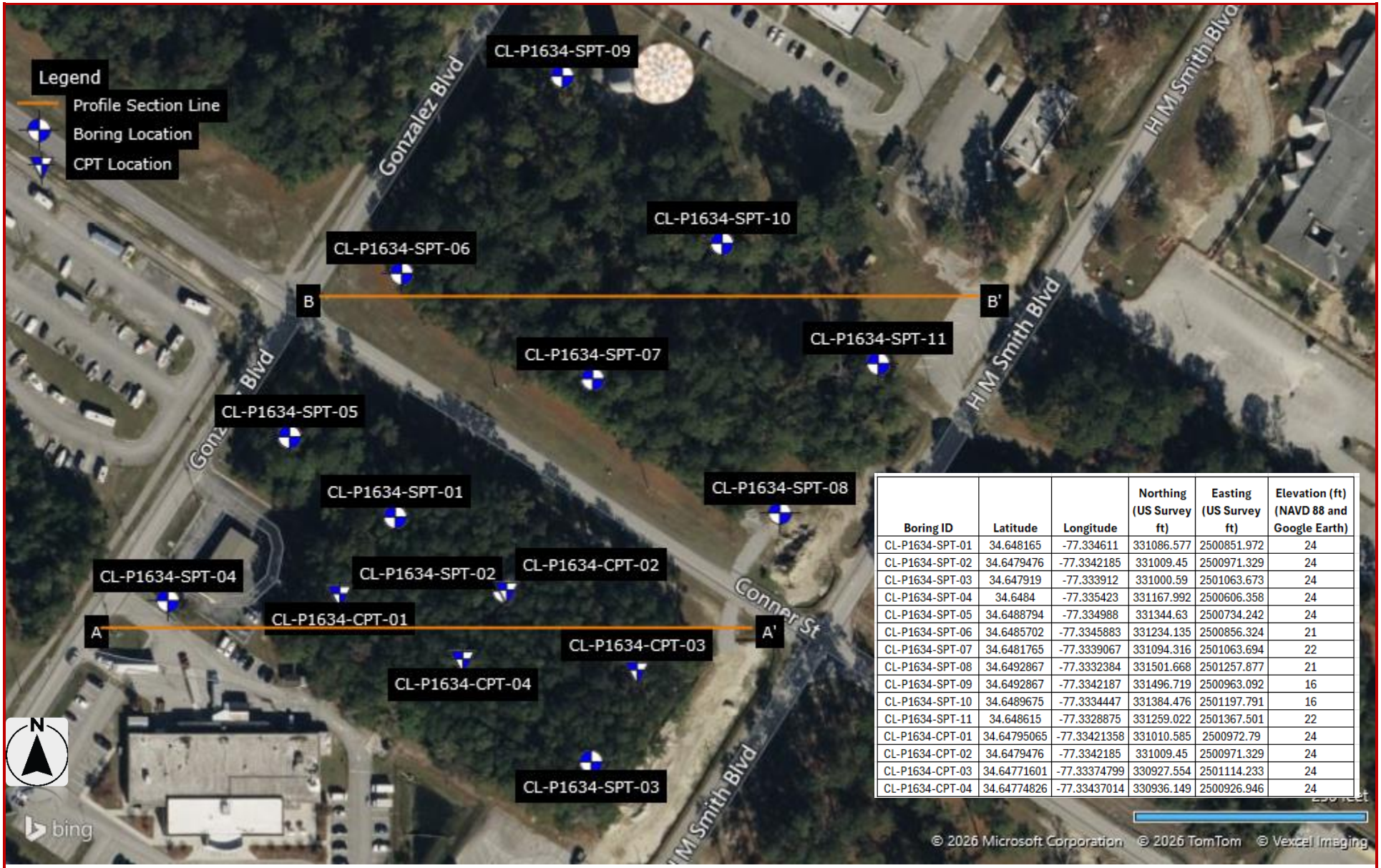
Google Earth Image

Historical Aerial Image – 2023`

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Google Earth Image

Exploration Plan



Boring ID	Latitude	Longitude	Northing (US Survey ft)	Easting (US Survey ft)	Elevation (ft) (NAVD 88 and Google Earth)
CL-P1634-SPT-01	34.648165	-77.334611	331086.577	2500851.972	24
CL-P1634-SPT-02	34.6479476	-77.3342185	331009.45	2500971.329	24
CL-P1634-SPT-03	34.647919	-77.333912	331000.59	2501063.673	24
CL-P1634-SPT-04	34.6484	-77.335423	331167.992	2500606.358	24
CL-P1634-SPT-05	34.6488794	-77.334988	331344.63	2500734.242	24
CL-P1634-SPT-06	34.6485702	-77.3345883	331234.135	2500856.324	21
CL-P1634-SPT-07	34.6481765	-77.3339067	331094.316	2501063.694	22
CL-P1634-SPT-08	34.6492867	-77.3332384	331501.668	2501257.877	21
CL-P1634-SPT-09	34.6492867	-77.3342187	331496.719	2500963.092	16
CL-P1634-SPT-10	34.6489675	-77.3334447	331384.476	2501197.791	16
CL-P1634-SPT-11	34.648615	-77.3328875	331259.022	2501367.501	22
CL-P1634-CPT-01	34.64795065	-77.33421358	331010.585	2500972.79	24
CL-P1634-CPT-02	34.6479476	-77.3342185	331009.45	2500971.329	24
CL-P1634-CPT-03	34.64771601	-77.33374799	330927.554	2501114.233	24
CL-P1634-CPT-04	34.64774826	-77.33437014	330936.149	2500926.946	24

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

Exploration and Laboratory Results

Contents:

Boring Logs
(CL-P1634-SPT-01 through CL-P1634-SPT-11)
CPT Logs
(CL-P1634-CPT-01 through CL-P1634-CPT-04)
Summary of Laboratory Results
Atterberg Limits
Grain Size Distribution
Consolidation
CBR Package
Infiltration Testing
Corrosivity Testing
Analytical Testing
IDW Analytical Testing

Boring Logs

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-01

Location: See Exploration Plan

Latitude: 34.6482° Longitude: -77.3346°
Northing: 331086.577 Easting: 2500851.972

Depth (Ft.) Approximate Elevation: 24 (Ft.)

Model Layer	Graphic Log	Description	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
1		0.2 **SURFICIAL, ORGANIC-LADEN SOIL**, 2 inches 23.8										
		2.0 **SILTY SAND (SM)**, trace clay, fine to medium, light brown, moist, very loose 22				20	2-1-1-1 N=2, N60=3	0	--			
		CLAYEY SAND (SC), fine to medium, light gray mottled yellow-brown, moist, medium dense				24	5-5-6-6 N=11, N60=15	0	--	10.1		26.2
			5			16	4-6-10-9 N=16, N60=22	0	--			
		6.0 18										
3		**SILTY SAND (SM)**, trace clay, fine to medium, light gray mottled yellow-brown, moist, medium dense				18	9-11-9-9 N=20, N60=27	0	--			
						22	10-10-10-7 N=20, N60=27	0	--	5.7		
		11.0 13	10									
		POORLY GRADED SAND WITH SILT (SP-SM), fine to medium, light gray mottled orange-brown, wet, medium dense 11.5				24	10-10-7-8 N=17, N60=23	0	--	23.0		
		12.5 **LEAN CLAY WITH SAND (CL)**, dark gray, wet, very soft to soft										
4						24	2-1-1-1 N=2, N60=3	0	0.086	33.5		
			15									
						24	WOH/24" N=0, N60=0	0	0.070	57.9	47-23-24	83.2
			20									
		21.5 2.5										
5		**CLAYEY SAND (SC)**, fine to medium, dark gray, wet, very loose										
						22	1-2-0-1 N=2, N60=3	0	--			
			25									
						24	WOH/18"-1 N=0, N60=0	0	0.094	32.9		30.2
			30									
		31.5 -7.5										
6		**SILTY SAND (SM)**, fine to medium, dark gray, wet, medium dense										
						12	12-12-15-16 N=27, N60=37	0	--			
			35									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevation Reference: Elevations were interpolated from a topographic site plan.

Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
While drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes
WOH = Weight of Hammer
Hand Penetrometer readings were corrected for foot adapter
Shelby Tube samples were collected from an offset hole
CBR Grab Sample was collected from 1 foot to 3 feet
ESHWT at 7 feet below existing grades

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-18-2025

Boring Completed
12-18-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-01

Location: See Exploration Plan

Latitude: 34.6482° Longitude: -77.3346°
Northing: 331086.577 Easting: 2500851.972

Depth (Ft.) Approximate Elevation: 24 (Ft.)

Model Layer	Graphic Log	Description	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
6		**SILTY SAND (SM)**, fine to medium, dark gray, wet, medium dense *(continued)*										
					X	12	6-6-8-7 N=14, N60=19	0	--			
			40									
		41.5 -17.5										
		POORLY GRADED SAND WITH SILT (SP-SM), with marine shell fragments and cemented sands, fine to coarse, light gray, wet, medium dense										
					X	12	11-12-15-17 N=27, N60=37	0	--			
		45.0 -21	45									
		Boring Terminated at 45 Feet										

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.
Elevation Reference: Elevations were interpolated from a topographic site plan.
Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
While drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-18-2025

Boring Completed
12-18-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-02

Location: See Exploration Plan

Latitude: 34.6479° Longitude: -77.3342°
Northing: 331009.45 Easting: 2500971.329

Depth (Ft.) Approximate Elevation: 24 (Ft.)

Model Layer	Graphic Log	Description	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
1		0.4 **SURFICIAL, ORGANIC-LADEN SOIL**, 5 inches 23.6										
3		**SILTY SAND (SM)**, fine to medium, light brown, moist to wet, loose to medium dense				16	2-2-3-3 N=5, N60=7	0	--			
						24	4-4-4-4 N=8, N60=11	0	--	9.8	NP	18.9
		Trace fibrous organic matter encountered to 4 feet	5			24	5-6-7-4 N=13, N60=18	0	--			
		Color change to light gray mottled yellow-brown at 6 feet				20	5-7-7-6 N=14, N60=19	0	--	4.9		
		Color change to light gray at 8 feet		▽		22	4-4-6-5 N=10, N60=14	0	--	12.4		
		11.0 13	10			23	7-6-8-14 N=14, N60=19	0	--	24.2		
		12.0 **POORLY GRADED SAND WITH SILT (SP-SM)**, fine to medium, light gray mottled orange-brown, wet, medium dense 12										
4		**LEAN CLAY WITH SAND (CL)**, dark gray, wet, very soft				24	WOH/24" N=0, N60=0	0	0.070	36.6		
			15									
						24	WOH/24" N=0, N60=0	0	0.039			
		21.0 3	20									
		CLAYEY SAND (SC), fine to medium, dark gray-brown, wet, very loose				20	4-1-1-1 N=2, N60=3	0	--			
		25.0 -1	25									
		FAT CLAY (CH), with organics, dark gray, wet, very soft				24	WOH/12"-1-2 N=2, N60=3	0	--	70.0	64-20-44	96.5
			30									
		31.5 -7.5										
5		**CLAYEY SAND (SC)**, trace organics, fine to medium, dark gray, wet, medium dense				18	4-5-7-4 N=12, N60=16	0	--			
		35.0 -11	35									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevation Reference: Elevations were interpolated from a topographic site plan.

Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
▽ While drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes
WOH = Weight of Hammer
Hand Penetrometer readings were corrected for foot adapter
Shelby Tube samples were collected from an offset hole
CBR Grab Sample was collected from 1 foot to 3 feet
Composite samples collected from 1 foot to 6 feet for corrosivity and chemical analytical testing
ESHWT at 5 feet below existing grades

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-18-2025

Boring Completed
12-18-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-02

Location: See Exploration Plan

Latitude: 34.6479° Longitude: -77.3342°
Northing: 331009.45 Easting: 2500971.329

Depth (Ft.) Approximate Elevation: 24 (Ft.)

Model Layer	Graphic Log	Description	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
6		**POORLY GRADED SAND WITH SILT (SP-SM)**, trace clay, fine to medium, light gray, wet, very loose to dense										
						16	10-12-10-6 N=22, N60=30	0	--	23.8		6.5
			40									
		Circulation loss				18	1-WOH/18" N=0, N60=0	0	--			
			45									
						23	16-14-18-22 N=32, N60=44	0	--			
			50									
						20	15-15-13-13 N=28, N60=38	0	--			
			55									
						18	12-15-15-15 N=30, N60=41	0	--			
			60									
						14	9-12-10-9 N=22, N60=30	0	--			
			65									
						16	15-10-11-12 N=21, N60=29	0	--			
			70									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.
Elevation Reference: Elevations were interpolated from a topographic site plan.
Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
While drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes
WOH = Weight of Hammer

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-18-2025

Boring Completed
12-18-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-02

Location: See Exploration Plan

Latitude: 34.6479° Longitude: -77.3342°
Northing: 331009.45 Easting: 2500971.329

Depth (Ft.) Approximate Elevation: 24 (Ft.)

Model Layer	Graphic Log	Description	Depth (Ft.)	Sample Type	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
		71.5 -47.5 **CLAYEY SAND (SC)**, with marine shell fragments, fine to medium, greenish gray, wet, medium dense									
					24	10-5-8-10 N=13, N60=18	0	--			
			75								
					24	8-11-16-14 N=27, N60=37	0	--	22.3		24.6
			80								
		81.5 -57.5 **SILTY SAND (SM)**, with marine shell fragments, fine to medium, greenish gray, wet, dense									
6					22	22-21-23-17 N=44, N60=60	0	--			
			85								
		86.5 -62.5 **CLAYEY SAND (SC)**, with marine shell fragments, fine to medium, greenish gray, wet, very dense									
					24	15-25-26-50/5" N=51, N60=69	0	--			
			90								
		91.5 -67.5 **POORLY GRADED SAND WITH SILT (SP-SM)**, with marine shell fragments, fine to medium, greenish gray, wet, very dense									
					16	32-40-50/5" N=100, N60=136	0	--			
			95								
					6	30-40-45-50/5" N=85, N60=116	0	--			
		99.9 -75.9 ***Boring Terminated at 99.9 Feet***									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevation Reference: Elevations were interpolated from a topographic site plan.

Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
While drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-18-2025

Boring Completed
12-18-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-03

Location: See Exploration Plan

Latitude: 34.6479° Longitude: -77.3339°
Northing: 331000.59 Easting: 2501063.673

Depth (Ft.) Approximate Elevation: 24 (Ft.)

Model Layer	Depth (Ft.)	Description	Depth (Ft.)	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
1	0.3	**SURFICIAL, ORGANIC-LADEN SOIL**, 3 inches	23.7							
		SILTY SAND (SM), fine to medium, gray-brown, moist, very loose to medium dense		10	1-1-2-4 N=3, N60=4	0	--			
	4.0		20	24	3-5-5-6 N=10, N60=14	0	--	7.6	NP	22.4
		POORLY GRADED SAND (SP), trace clay, fine to medium, light gray-brown, moist, medium dense	5	20	6-6-7-8 N=13, N60=18	0	--			
		Trace fibrous organic matter encountered from 6 to 8 feet		20	5-7-11-12 N=18, N60=24	0	--	4.5		
	8.0		16							
3		**SILTY SAND (SM)**, trace clay, fine to medium, light gray mottled yellow-brown, moist to wet, loose to medium dense		20	8-9-9-8 N=18, N60=24	0	--	4.6		
			10	22	4-4-4-3 N=8, N60=11	0	--	21.0		
	12.5		11.5							
		POORLY GRADED SAND WITH SILT (SP-SM), trace clay, fine to medium, light gray mottled yellow-brown, wet, medium dense		12	7-10-14-12 N=24, N60=33	0	--	21.8		
			15							
	16.5		7.5							
4		**SANDY LEAN CLAY (CL)**, dark gray, wet, very soft		24	WOH/24" N=0, N60=0	0	0.078	35.9		
			20							
				24	WOH/24" N=0, N60=0	0	0.078	40.1	33-22-11	54.1
			25							
				24	WOH/12"-1-2 N=1, N60=1	0	0.125			
			30							
				24	WOH/12"-1-2 N=1, N60=1	0	0.094			
			35							

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevation Reference: Elevations were interpolated from a topographic site plan.

Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
While drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes
WOH = Weight of Hammer
Hand Penetrometer readings were corrected for foot adapter
ESHWT at 8 feet below existing grades

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-19-2025

Boring Completed
12-19-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-03

Location: See Exploration Plan

Latitude: 34.6479° Longitude: -77.3339°
Northing: 331000.59 Easting: 2501063.673

Depth (Ft.) Approximate Elevation: 24 (Ft.)

Model Layer	Graphic Log	Description	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
4		**SANDY LEAN CLAY (CL)**, dark gray, wet, very soft *(continued)* 36.5 -12.5										
6		**POORLY GRADED SAND WITH SILT (SP-SM)**, fine to coarse, gray, wet, loose to medium dense	40			24	3-2-4-6 N=6, N60=8	0	--			
		Contains marine shell fragments and cemented sands from 43 to 45 feet 45.0 -21	45			16	9-11-17-20 N=28, N60=38	0	--	12.6		10.6
		Boring Terminated at 45 Feet										

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.
Elevation Reference: Elevations were interpolated from a topographic site plan.
Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
While drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-19-2025

Boring Completed
12-19-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-04

Location: See Exploration Plan

Latitude: 34.6484° Longitude: -77.3354°
Northing: 331167.992 Easting: 2500606.358

Approximate Elevation: 24 (Ft.)

Model Layer	Graphic Log	Depth (Ft.)	Description	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
1		0.2	**SURFICIAL, ORGANIC-LADEN SOIL**, 2 inches (23.8)										
2		4.0 (20)	**UNCONTROLLED FILL MATERIAL - SILTY SAND**, trace clay nodules, fine to medium, gray-brown to light brown, moist, contains brick fragments				24	4-5-5-5 N=10, N60=14	0	--	10.2	NP	21.3
							8	3-2-4-4 N=6, N60=8	0	--			
3		5.0 (19)	**CLAYEY SAND (SC)**, fine to medium, gray-brown mottled orange-brown, moist, medium dense	5			24	10-11-12-9 N=23, N60=31	0	1.75			
			SILTY SAND (SM), fine to medium, light gray, moist to wet, medium dense				24	5-10-10-10 N=20, N60=27	0	--	9.6		
		10.0 (14)			▽		24	9-7-6-5 N=13, N60=18	0	--	26.2		
			Boring Terminated at 10 Feet	10									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevation Reference: Elevations were interpolated from a topographic site plan.

Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
▽ While drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes
Hand Penetrometer readings were corrected for foot adapter
CBR Grab Sample was collected from 1 foot to 3 feet
ESHWT at 5 feet below existing grades

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-19-2025

Boring Completed
12-19-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-05

Location: See Exploration Plan

Latitude: 34.6489° Longitude: -77.3350°
Northing: 331344.63 Easting: 2500734.242

Depth (Ft.) Approximate Elevation: 24 (Ft.)

Model Layer	Graphic Log	Description	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
1		0.6 **SURFICIAL, ORGANIC-LADEN SOIL**, 7 inches 23.4										
3		**SILTY SAND (SM)**, fine to medium, light brown, moist, very loose to medium dense				20	1-2-1-2 N=3, N60=4	0	--	9.5		16.7
		Trace clay encountered from 2 to 4 feet 4.0 20				18	4-6-6-8 N=12, N60=16	0	--			
		POORLY GRADED SAND (SP), trace clay, fine to medium, light gray, moist to wet, medium dense	5			20	7-10-12-11 N=22, N60=30	0	--			
						16	14-14-13-11 N=27, N60=37	0	--	3.1		
		10.0 14				22	12-14-11-14 N=25, N60=34	0	--	6.5		
		Boring Terminated at 10 Feet	10									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevation Reference: Elevations were interpolated from a topographic site plan.

Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
Groundwater not encountered at the time of drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes
Composite sample collected from 1 foot to 6 feet for chemical analytical testing
ESHWT at 7 feet below existing grades

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-19-2025

Boring Completed
12-19-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-06

Location: See Exploration Plan

Latitude: 34.6486° Longitude: -77.3346°
Northing: 331234.135 Easting: 2500856.324

Approximate Elevation: 21 (Ft.)

Model Layer	Graphic Log	Depth (Ft.)	Description	Elevation	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
1		0.3	**SURFICIAL, ORGANIC-LADEN SOIL**, 3 inches	20.7										
		2.0	**SILTY SAND (SM)**, with organics, fine, gray and black, moist, very loose	19				20	1-1-2-3 N=3, N60=4	0	--			
		4.0	**SILTY SAND (SM)**, trace clay, fine to medium, light brown, moist, medium dense	17				24	6-6-8-9 N=14, N60=19	0	--			
3		6.0	**POORLY GRADED SAND WITH SILT (SP-SM)**, trace organics, fine to medium, brown, moist, medium dense	15	5			20	6-6-9-9 N=15, N60=20	0	--	6.6	NP	10.8
			SILTY SAND (SM), fine to medium, light gray, moist to wet, loose to medium dense					18	6-9-7-6 N=16, N60=22	0	--	5.4		
		10.0	Trace clay and organics encountered from 8 to 10 feet	11	10			20	4-3-4-5 N=7, N60=10	0	--	6.7		

Boring Terminated at 10 Feet

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevation Reference: Elevations obtained from Google Earth

Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
Groundwater not encountered at the time of drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes
WOH = Weight of Hammer
CBR Grab Sample was collected from 1 foot to 3 feet
ESHWT at 5.5 feet below existing grades

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-17-2025

Boring Completed
12-17-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-07

Location: See Exploration Plan

Latitude: 34.6482° Longitude: -77.3339°
Northing: 331094.316 Easting: 2501063.694

Depth (Ft.) Approximate Elevation: 22 (Ft.)

Model Layer	Graphic Log	Description	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
1		0.3 **SURFICIAL, ORGANIC-LADEN SOIL**, 4 inches 21.7										
3		**SILTY SAND (SM)**, fine to medium, light brown, moist, loose Fibrous organic matter encountered to 4 feet				20	2-3-4-4 N=7, N60=10	0	--			
						24	3-2-2-1 N=4, N60=5	0	--	9.8		14.8
			5			14	2-2-2-3 N=4, N60=5	0	--			
		6.0 16 **CLAYEY SAND (SC)**, fine to medium, light brown mottled orange-brown, moist, loose				24	3-3-4-6 N=7, N60=10	0	--	9.2		
		8.0 14 **SILTY SAND (SM)**, fine to medium, light gray, moist to wet, medium dense				22	6-7-7-7 N=14, N60=19	0	--	5.2		
		10.0 12 ***Boring Terminated at 10 Feet***	10									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevation Reference: Elevations obtained from Google Earth

Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
Groundwater not encountered at the time of drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes
ESHWT at 6 feet below existing grades

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-17-2025

Boring Completed
12-17-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-08

Location: See Exploration Plan

Latitude: 34.6493° Longitude: -77.3332°
Northing: 331501.668 Easting: 2501257.877

Depth (Ft.) Approximate Elevation: 21 (Ft.)

Model Layer	Graphic Log	Description	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
1		0.3 **SURFICIAL, ORGANIC-LADEN SOIL**, 4 inches 20.7										
3		**SILTY SAND (SM)**, fine to medium, gray-brown, moist, loose				20	2-4-3-4 N=7, N60=10	0	--			
		Color change to gray and black at 2 feet				24	4-3-2-3 N=5, N60=7	0	--	17.4		30.1
		Color change to black at 4 feet Root fragment encountered from 4 to 6 feet	5			18	3-4-3-2 N=7, N60=10	0	--			
		6.0 15 **CLAYEY SAND (SC)**, fine to medium, dark gray, moist, loose				20	2-2-2-3 N=4, N60=5	0	--	16.3		
		8.0 13 **SILTY SAND (SM)**, fine to medium, light gray, moist to wet, medium dense				24	6-7-8-8 N=15, N60=20	0	--	11.7		
		10.0 11 ***Boring Terminated at 10 Feet***	10									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevation Reference: Elevations obtained from Google Earth

Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
Groundwater not encountered at the time of drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes
WOH = Weight of Hammer
CBR Grab Sample was collected from 1 foot to 3 feet
ESHWT at 6 feet below existing grades

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-17-2025

Boring Completed
12-17-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-09

Location: See Exploration Plan

Latitude: 34.6493° Longitude: -77.3342°
Northing: 331496.719 Easting: 2500963.092

Depth (Ft.) Approximate Elevation: 16 (Ft.)

Model Layer	Graphic Log	Description	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
1		0.3 **SURFICIAL, ORGANIC-LADEN SOIL**, 3 inches (15.7)										
3		**POORLY GRADED SAND WITH SILT (SP-SM)**, fine to medium, dark brown, moist, very loose to loose Color change to light gray at 2 feet				20	2-1-2-2 N=3, N60=4	0	--			
						23	3-3-2-3 N=5, N60=7	0	--	9.7		5.7
			5			18	2-3-3-3 N=6, N60=8	0	--			
						2	2-3-3-2 N=6, N60=8	0	--	9.7		
		8.0 (8) **CLAYEY SAND (SC)**, trace organics, fine to medium, light brown, moist, loose (7)				24	5-3-4-5 N=7, N60=10	0	--	13.9		
		9.0 **SILTY SAND (SM)**, fine to medium, light gray, moist to wet, loose to medium dense	10	▽		24	5-6-5-7 N=11, N60=15	0	--	22.7		
		12.0 (4) ***Boring Terminated at 12 Feet***										

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.
Elevation Reference: Elevations obtained from Google Earth
Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
▽ While drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes
ESHWT at 7.5 feet below existing grades

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-17-2025

Boring Completed
12-17-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-10

Location: See Exploration Plan

Latitude: 34.6490° Longitude: -77.3334°
Northing: 331384.476 Easting: 2501197.791

Elevation: 16 (Ft.) +/-

Depth (Ft.)	Description	Installation Details
0.4	**SURFICIAL, ORGANIC-LADEN SOIL**, 5 inches (15.6)	Stickup = 18"
	SILTY SAND (SM), fine to medium, gray, moist, very loose to loose Trace fibrous organic matter encountered to 2 feet Color change to light brown	2-inch solid pipe from 0-13.5'; bentonite seal from 0-12.5', sand pack from 12.5-13.5'
10.0 (6)	**POORLY GRADED SAND (SP)**, fine to medium, light gray, wet, medium dense	
12.0 (4)	**SPT Sampling Terminated At 12 Feet**	2-inch slotted pipe with sand pack from 13.5-18.5'
18.5 (-2.5)	***Bottom Of Moitoring Well at 18.5 Feet***	

Model Layer: 1, 3

Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Laboratory HP (tsf)	PID Reading (ppm)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
			16	1-WOH/6"-1-1 N=1, N60=1	--	0			
			21	2-1-1-1 N=2, N60=3	--	0	15.1	NP	15
5			18	2-2-3-2 N=5, N60=7	--	0	10.3		
			14	2-2-2-3 N=4, N60=5	--	0	8.6		
	▽		22	4-4-5-4 N=9, N60=12	--	0	13.2		
10	▽		24	4-6-6-5 N=12, N60=16	--	0	22.2		5
15									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.
Elevation Reference: Elevations obtained from Google Earth
Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025
Temporary piezometer installed 17DEC2025, sampled 06JAN2026, abandoned 15JAN2026

Water Level Observations
▽ While drilling
▽ 06JAN2026

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes
Infiltration Rate (Ksat) = 19.33 in/hr, tested between 74 inches and 80 inches beneath existing grade
WOH = Weight of Hammer
CBR Grab Sample was collected from 1 foot to 3 feet
Composite sample collected from 1 foot to 6 feet for chemical analytical testing
ESHWT at 8.7 feet below existing grades

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-17-2025

Boring Completed
12-17-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-SPT-11

Location: See Exploration Plan

Latitude: 34.6486° Longitude: -77.3329°
Northing: 331259.022 Easting: 2501367.501

Depth (Ft.) Approximate Elevation: 22 (Ft.)

Model Layer	Graphic Log	Description	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	PID Reading (ppm)	HP (tsf)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
1		0.5 **SURFICIAL, ORGANIC-LADEN SOIL**, 6 inches 21.5										
3		**SILTY SAND (SM)**, fine to medium, light brown, moist to wet, loose				20	2-4-3-2 N=7, N60=10	0	--			
						12	3-3-3-3 N=6, N60=8	0	--			
			5			20	4-4-4-3 N=8, N60=11	0	--	9.6	NP	19.4
						18	2-3-3-4 N=6, N60=8	0	--	9.4		
						20	4-4-4-5 N=8, N60=11	0	--	11.2		
		Color change to light gray at 10 feet	10									
		Trace clay encountered from 10 to 12 feet 12.0 10				23	4-3-3-4 N=6, N60=8	0	--	15.8		
		Boring Terminated at 12 Feet										

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.
Elevation Reference: Elevations obtained from Google Earth
Hammer Efficiency Rating, ER = 81.6%; calibrated 05DEC2025

Water Level Observations
Groundwater not encountered at the time of drilling

Drill Rig
CME-55/Rig No. 1051

Hammer Type
Automatic

Driller
T. Donahue

Notes
ESHWT at 8.5 feet below existing grades

Advancement Method
Mud Rotary

Abandonment Method
Boring was backfilled with spoils and cement-bentonite grout

Logged by
S. O'Brien

Boring Started
12-17-2025

Boring Completed
12-17-2025

CPT Logs

FY26 USMC Barracks 2030 - P-1634 & P-1636
MCB Camp Lejeune | Jacksonville, NC
Terracon Project No. K625P194

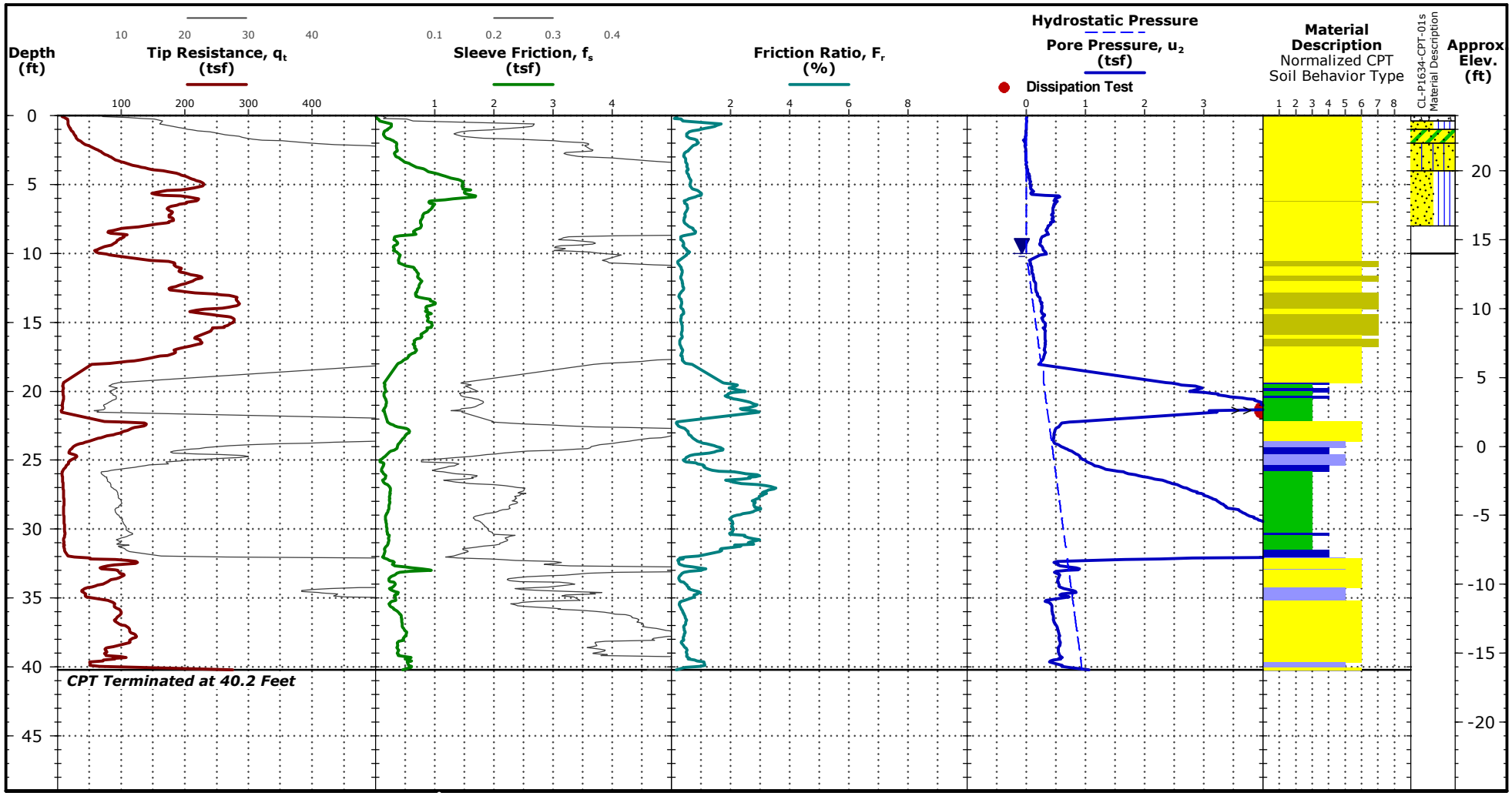
CPT Sounding ID CL-P1634-CPT-01

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Latitude: 34.6480° Longitude: -77.3342°
North: 331010.585 East: 2500972.79

Elevation: 24 (ft) +/-
Elevation Reference: Elevations were interpolated from a topographic site plan.

CPT Started: 12/23/2025
CPT Completed: 12/23/2025



See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data, if any.

See Supporting Information for explanation of symbols and abbreviations.

Notes

Test Location: See Exploration Plan

See CL-P1634-CPT-01s for the adjacent test's full details.

Surface Materials: 5 inches Surficial, Organic-Laden Soil

Cave-In Depth: 10 feet (dry)

CPT Equipment

CPT Rig: Geoprobe 3126GT

Operator: T. Whitehead

Dead weight of rig used as reaction force

CPT sensor calibration reports available upon request

Probe No. 8126 with net area ratio of .852

Manufactured by Geotech A.B.- Calibrated 7/8/2025

Tip and sleeve areas of 15 cm^2 and 225 cm^2

Water Level Observation

10 ft estimated water depth

(used in normalizations and correlations)

Normalized Soil Behavior Type
(Robertson 1990)

1 Sensitive, fine grained
2 Organic soils - clay
3 Clay - silty clay to clay
4 Silt mixtures - clayey silt to silty clay
5 Sand mixtures - silty sand to sandy silt
6 Sands - clean sand to silty sand
7 Gravelly sand to dense sand
8 Very stiff sand to clayey sand
9 Very stiff fine grained

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-CPT-01s

Location: See Exploration Plan

Latitude: 34.6480° Longitude: -77.3342°
Northing: 331010.585 Easting: 2500972.79

Approximate Elevation: 24 (Ft.)

Model Layer	Graphic Log	Depth (Ft.)	Description	Elevation	Depth (Ft.)	Water Level Observations	Sample Type	PID Reading (ppm)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
1		0.4	**SURFICIAL, ORGANIC-LADEN SOIL**, 5 inches	23.6							
3		1.0	**POORLY GRADED SAND (SP-SM)**, fine to medium, tan, moist	23							
		2.0	**CLAYEY SAND (SC)**, fine to medium, brown, moist	22					13.3	25-13-12	30.0
		4.0	**SILTY SAND (SM)**, trace clay, fine to medium, gray and orange, moist	20				0			
		8.0	**POORLY GRADED SAND WITH SILT (SP-SM)**, fine to medium, gray and orange, moist Color change to gray and white	16	5			0	6.0		
		10.0	**NO RECOVERY**	14	10						
			Boring Terminated at 10 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevation Reference: Elevations were interpolated from a topographic site plan.

Water Level Observations
While drilling

Drill Rig
Geoprobe 3126GT

Hammer Type
N/A

Driller
T. Whitehead

Notes
ESHWT at 6.5 feet below existing grades

Advancement Method
Direct Push

Abandonment Method
Test hole was backfilled with cement-bentonite grout upon completion

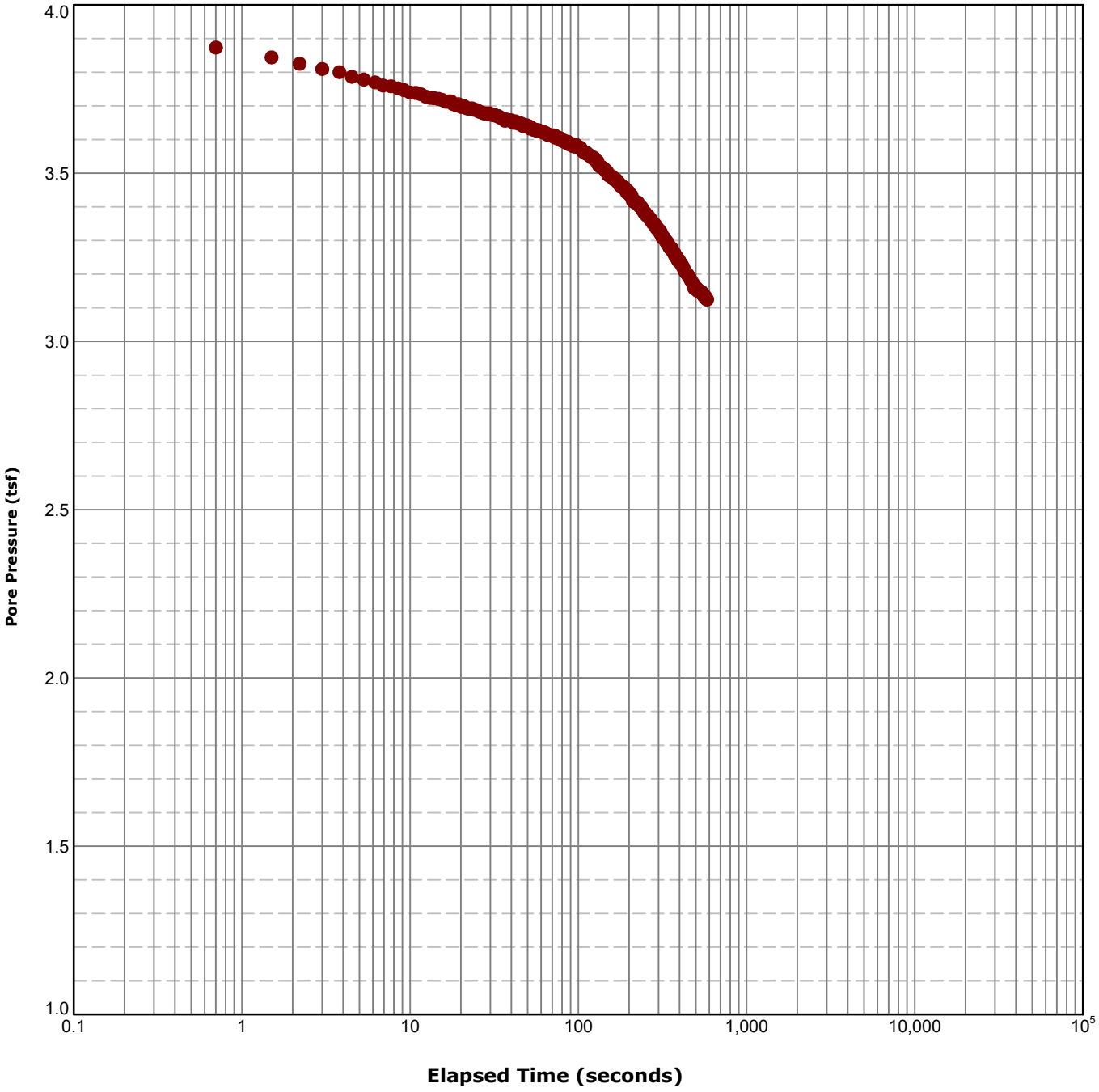
Logged by
G. Inman

Boring Started
12-23-2025

Boring Completed
12-23-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Pore Pressure Dissipation Test Results



TEST: CL-P1634-CPT-01

TEST DEPTH: 21.375 ft

TEST DURATION: 582 sec

FY26 USMC Barracks 2030 - P-1634 & P-1636
MCB Camp Lejeune | Jacksonville, NC
Terracon Project No. K625P194

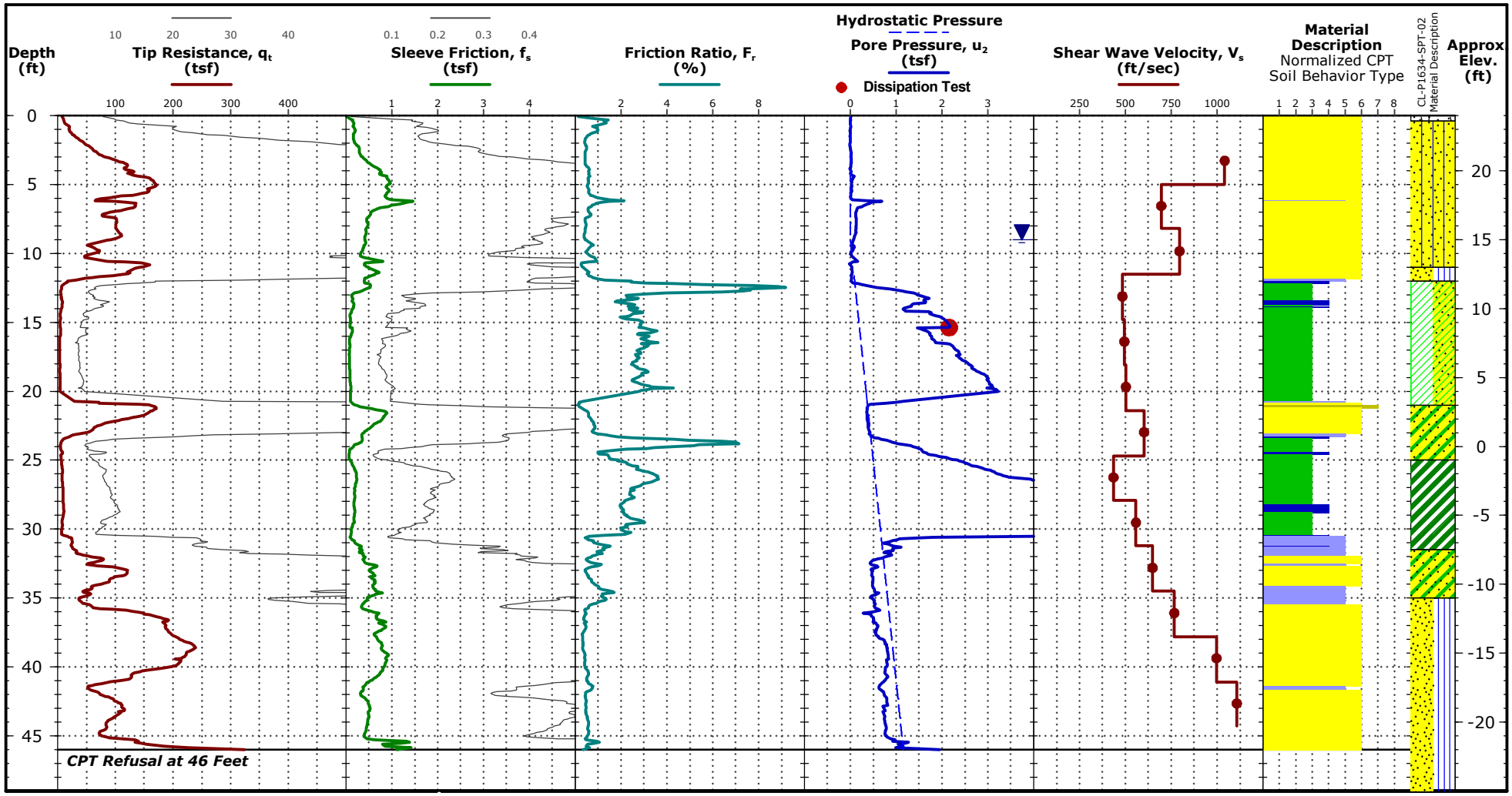
CPT Sounding ID CL-P1634-CPT-02

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Latitude: 34.6479° Longitude: -77.3342°
North: 331009.45 East: 2500971.329

Elevation: 24 (ft) +/-
Elevation Reference: Elevations were interpolated from a topographic site plan.

CPT Started: 12/24/2025
CPT Completed: 12/24/2025



See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data, if any.

See Supporting Information for explanation of symbols and abbreviations.

Notes

Test Location: See Exploration Plan

See CL-P1634-SPT-02 for the adjacent test's full details.

Surface Materials: 6 inches Surficial, Organic-Laden Soil

Cave-In Depth: 9 feet (dry)

CPT Equipment

CPT Rig: Geoprobe 3126GT

Operator: T. Whitehead

Dead weight of rig used as reaction force

CPT sensor calibration reports available upon request

Probe No. 8126 with net area ratio of .852

Manufactured by Geotech A.B.- Calibrated 7/8/2025

Tip and sleeve areas of 15 cm^2 and 225 cm^2

Water Level Observation

9 ft estimated water depth

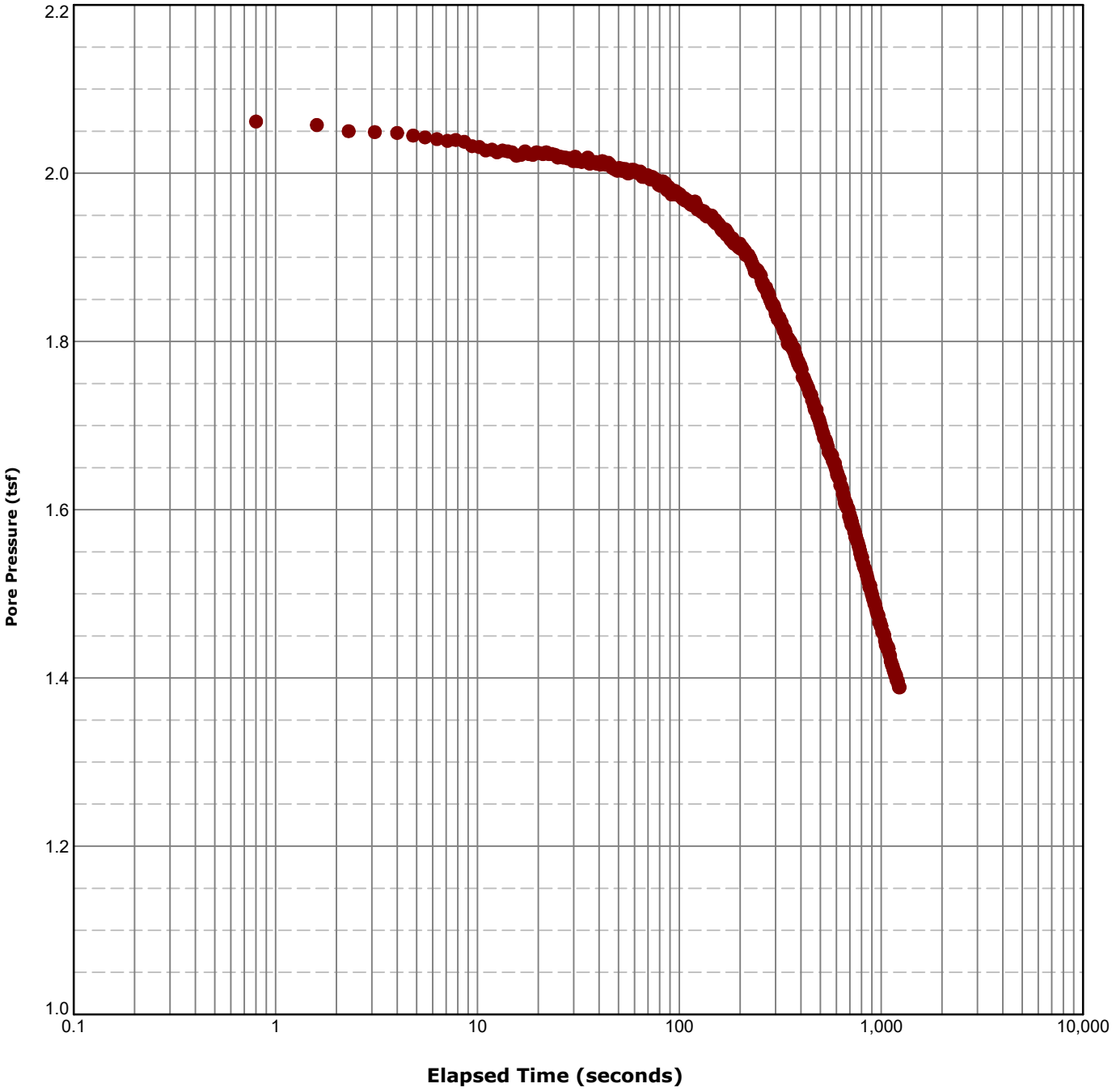
(used in normalizations and correlations)

Normalized Soil Behavior Type
(Robertson 1990)

1 Sensitive, fine grained
2 Organic soils - clay
3 Clay - silty clay to clay
4 Silt mixtures - clayey silt to silty clay
5 Sand mixtures - silty sand to sandy silt
6 Sands - clean sand to silty sand
7 Gravelly sand to dense sand
8 Very stiff sand to clayey sand
9 Very stiff fine grained

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Pore Pressure Dissipation Test Results



TEST: CL-P1634-CPT-02

TEST DEPTH: 15.377 ft

TEST DURATION: 1234.4 sec

FY26 USMC Barracks 2030 - P-1634 & P-1636
MCB Camp Lejeune | Jacksonville, NC
Terracon Project No. K625P194

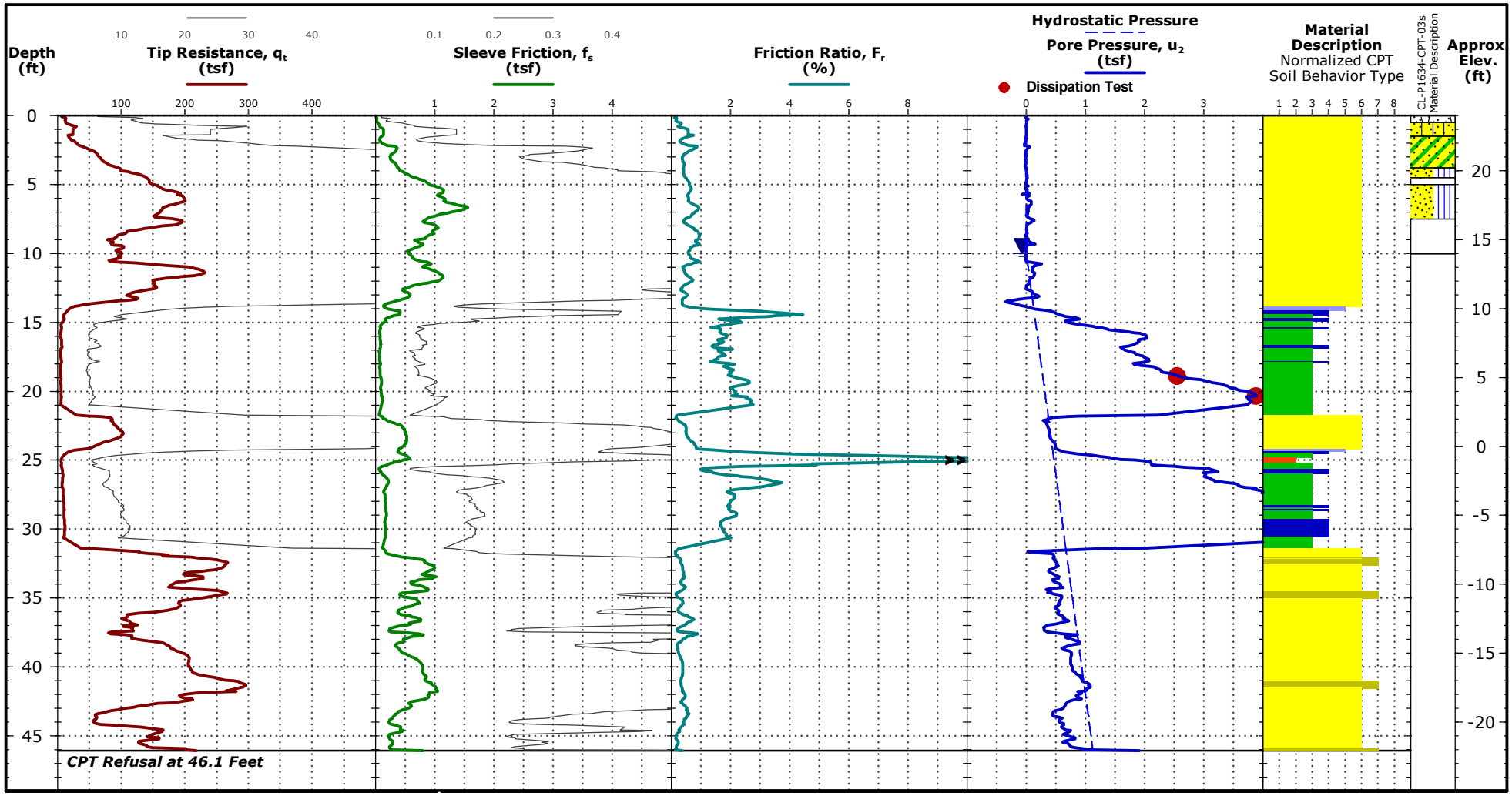
CPT Sounding ID CL-P1634-CPT-03

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Latitude: 34.6477° Longitude: -77.3337°
North: 330927.554 East: 2501114.233

Elevation: 24 (ft) +/-
Elevation Reference: Elevations were interpolated from a topographic site plan.

CPT Started: 12/23/2025
CPT Completed: 12/23/2025



See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data, if any.

See Supporting Information for explanation of symbols and abbreviations.

Notes

Test Location: See Exploration Plan

See CL-P1634-CPT-03s for the adjacent test's full details.

Surface Materials: 6 inches Surficial, Organic-Laden Soil

Cave-In Depth: 10 feet (dry)

CPT Equipment

CPT Rig: Geoprobe 3126GT

Operator: T. Whitehead

Dead weight of rig used as reaction force

CPT sensor calibration reports available upon request

Probe No. 8126 with net area ratio of .852

Manufactured by Geotech A.B.- Calibrated 7/8/2025

Tip and sleeve areas of 15 cm^2 and 225 cm^2

Water Level Observation

10 ft estimated water depth

(used in normalizations and correlations)

Normalized Soil Behavior Type
(Robertson 1990)

1 Sensitive, fine grained
2 Organic soils - clay
3 Clay - silty clay to clay
4 Silt mixtures - clayey silt to silty clay
5 Sand mixtures - silty sand to sandy silt
6 Sands - clean sand to silty sand
7 Gravelly sand to dense sand
8 Very stiff sand to clayey sand
9 Very stiff fine grained

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-CPT-03s

Location: See Exploration Plan

Latitude: 34.6477° Longitude: -77.3337°
Northing: 330927.554 Easting: 2501114.233

Depth (Ft.) | Approximate Elevation: 24 (Ft.)

Model Layer	Graphic Log	Description	Depth (Ft.)	Elevation (Ft.)	Water Level Observations	Sample Type	PID Reading (ppm)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
1		**SURFICIAL, ORGANIC-LADEN SOIL**, 6 inches	0.5	23.5						
3		**SILTY SAND (SM)**, fine to medium, tan and brown, moist	1.5	22.5						
		CLAYEY SAND (SC), fine to medium, gray and brown, moist	3.8	20.2			0	12.8	24-18-6	33.7
		POORLY GRADED SAND WITH SILT (SP-SM), fine to medium, tan and white, moist	4.5	19.5						
		NO RECOVERY	5.0	19						
		POORLY GRADED SAND WITH SILT (SP-SM), fine to medium, white, orange, and tan, moist	7.5	16.5			0	9.4		
		NO RECOVERY	10.0	14						
		Boring Terminated at 10 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.
Elevation Reference: Elevations were interpolated from a topographic site plan.

Water Level Observations
While drilling

Drill Rig
Geoprobe 3126GT

Hammer Type
N/A

Driller
T. Whitehead

Notes
ESHWT at 7 feet below existing grades

Advancement Method
Direct Push

Abandonment Method
Test hole was backfilled with cement-bentonite grout upon completion

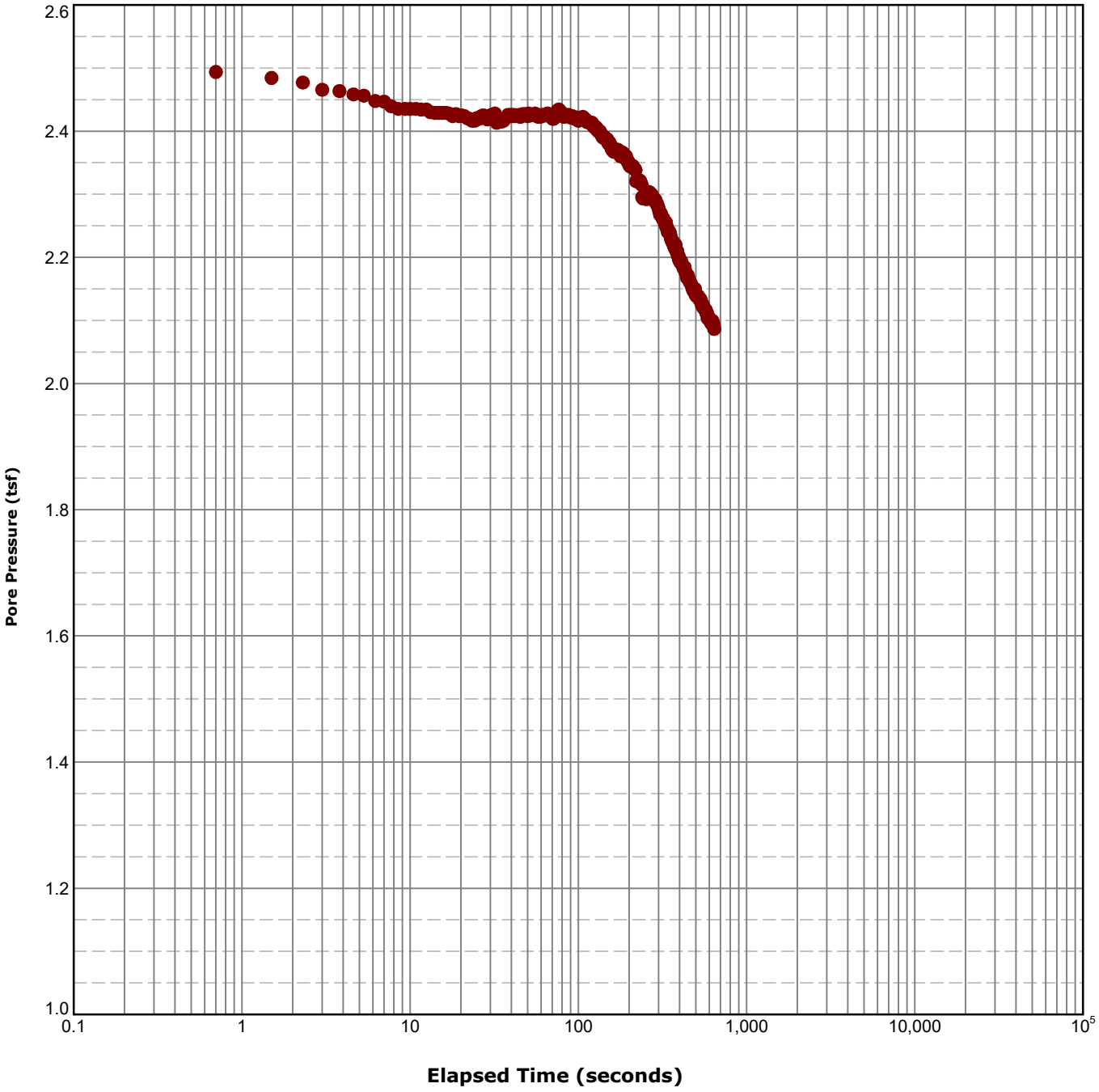
Logged by
G. Inman

Boring Started
12-23-2025

Boring Completed
12-23-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Pore Pressure Dissipation Test Results



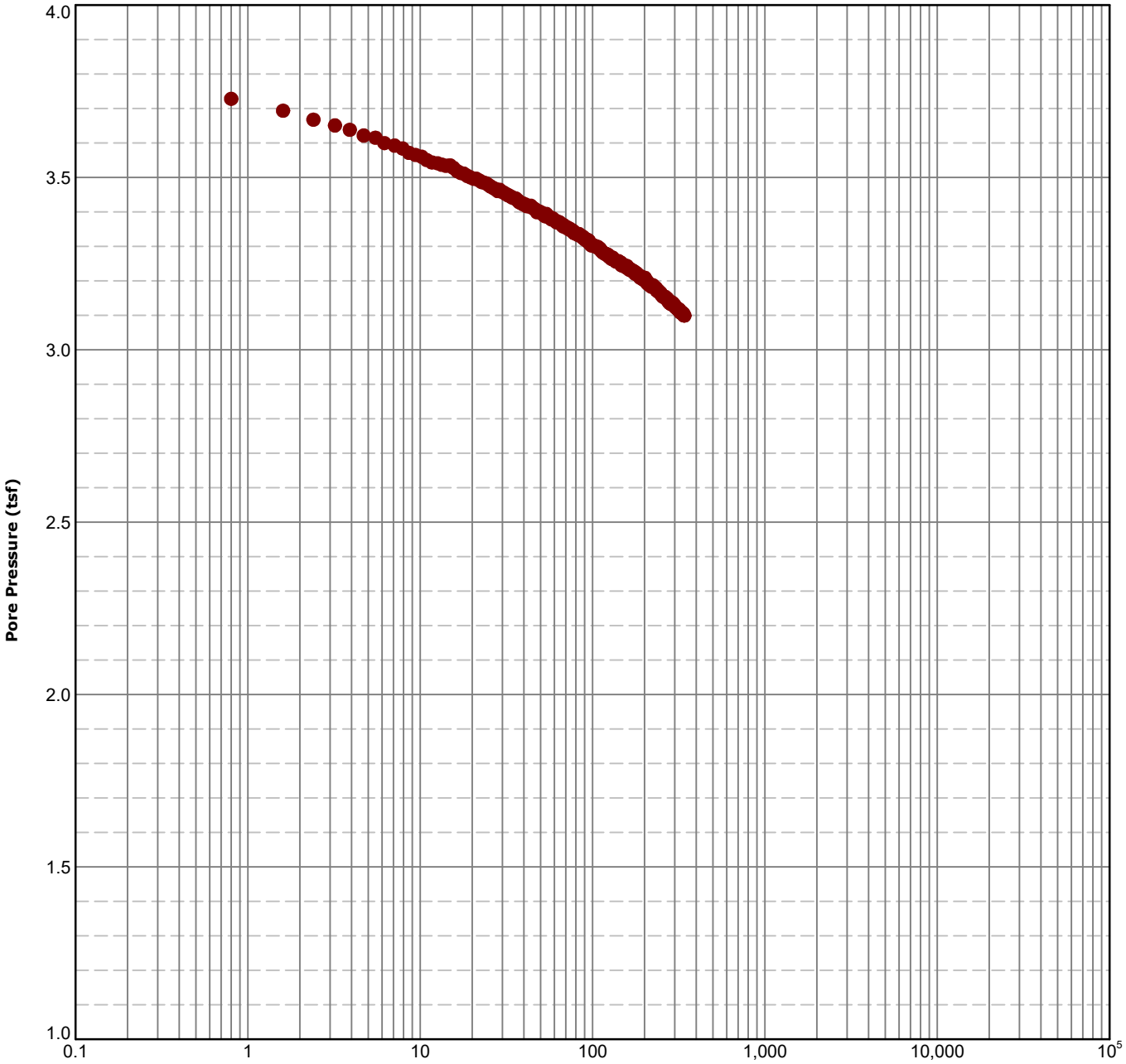
TEST: CL-P1634-CPT-03

TEST DEPTH: 18.888 ft

TEST DURATION: 642.1 sec

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Pore Pressure Dissipation Test Results



TEST: CL-P1634-CPT-03

TEST DEPTH: 20.341 ft

TEST DURATION: 341.4 sec

FY26 USMC Barracks 2030 - P-1634 & P-1636
MCB Camp Lejeune | Jacksonville, NC
Terracon Project No. K625P194

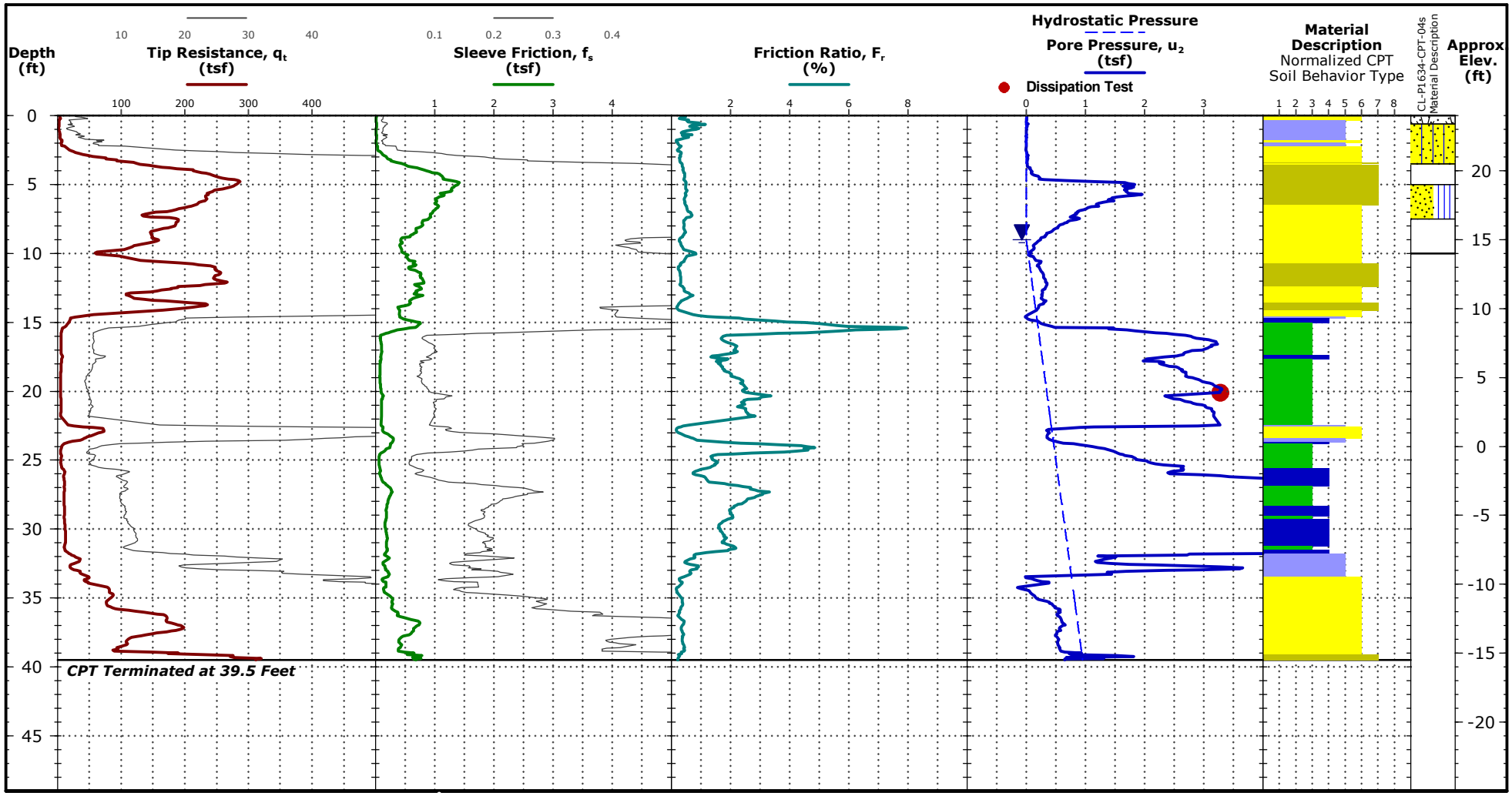
CPT Sounding ID CL-P1634-CPT-04

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Latitude: 34.6477° Longitude: -77.3344°
North: 330936.149 East: 2500926.946

Elevation: 24 (ft) +/-
Elevation Reference: Elevations were interpolated from a topographic site plan.

CPT Started: 12/23/2025
CPT Completed: 12/23/2025



See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data, if any.

See Supporting Information for explanation of symbols and abbreviations.

Notes

Test Location: See Exploration Plan

See CL-P1634-CPT-04s for the adjacent test's full details.

Surface Materials: 7 inches Surficial, Organic-Laden Soil

Cave-In Depth: 9 feet

CPT Equipment

CPT Rig: Geoprobe 3126GT

Operator: T. Whitehead

Dead weight of rig used as reaction force

CPT sensor calibration reports available upon request

Probe No. 8126 with net area ratio of .852

Manufactured by Geotech A.B.- Calibrated 7/8/2025

Tip and sleeve areas of 15 cm^2 and 225 cm^2

Water Level Observation

9 ft measured water depth

(used in normalizations and correlations)

Normalized Soil Behavior Type
(Robertson 1990)

1 Sensitive, fine grained
2 Organic soils - clay
3 Clay - silty clay to clay
4 Silt mixtures - clayey silt to silty clay
5 Sand mixtures - silty sand to sandy silt
6 Sands - clean sand to silty sand
7 Gravelly sand to dense sand
8 Very stiff sand to clayey sand
9 Very stiff fine grained

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Boring Log No. CL-P1634-CPT-04s

Location: See Exploration Plan

Latitude: 34.6477° Longitude: -77.3344°
Northing: 330936.149 Easting: 2500926.946

Depth (Ft.) | Approximate Elevation: 24 (Ft.)

Model Layer	Graphic Log	Description	Depth (Ft.)	Water Level Observations	Sample Type	PID Reading (ppm)	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
1		**SURFICIAL, ORGANIC-LADEN SOIL**, 7 inches (0.6 – 23.4)							
3		**SILTY SAND (SM)**, trace clay, fine to medium, tan and brown, moist (3.5 – 20.5)							
		Root fragments encountered at 1.5 feet							
		Color change to brown and gray				0	7.7		17.4
		NO RECOVERY (5.0 – 19)							
3		**POORLY GRADED SAND WITH SILT (SP-SM)**, fine to medium, white and orange, moist (7.5 – 16.5)	5						
		Color change to white							
		NO RECOVERY (10.0 – 14)		▽		0			
		Boring Terminated at 10 Feet	10						

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.
Elevation Reference: Elevations were interpolated from a topographic site plan.

Water Level Observations
▽ While drilling

Drill Rig
Geoprobe 3126GT

Hammer Type
N/A

Driller
T. Whitehead

Notes
ESHWT at 6 feet below existing grades

Advancement Method
Direct Push

Abandonment Method
Test hole was backfilled with cement-bentonite grout upon completion

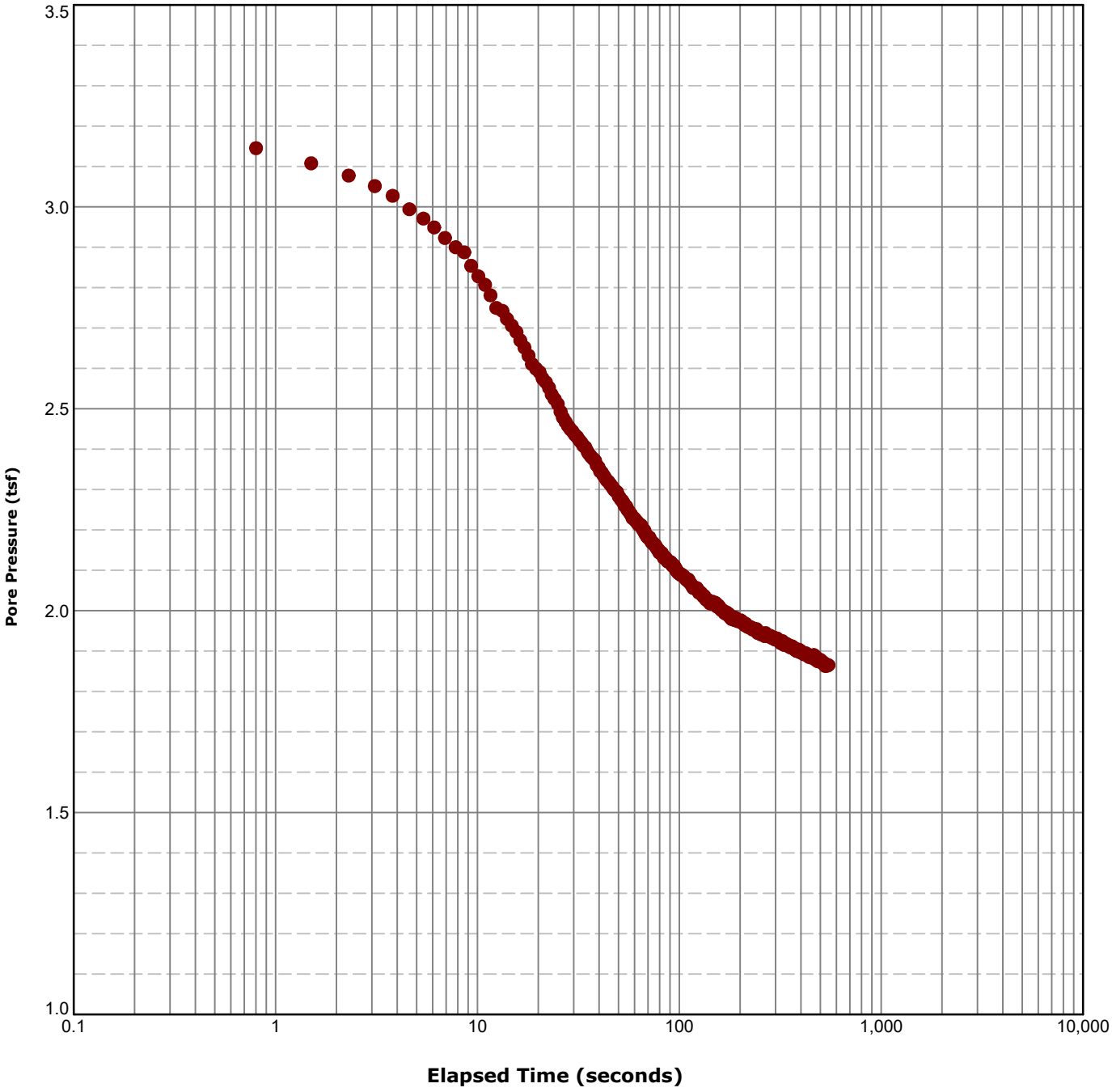
Logged by
G. Inman

Boring Started
12-23-2025

Boring Completed
12-23-2025

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Pore Pressure Dissipation Test Results



TEST: CL-P1634-CPT-04

TEST DEPTH: 20.102 ft

TEST DURATION: 547.6 sec

Summary of Laboratory Results

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Summary of Laboratory Results

Boring ID	Depth (Ft.)	Soil Classification USCS	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Fines	Organic Content (%)
CL-P1634-SPT-01	2-4		10.1				26.2	
CL-P1634-SPT-01	8-10		5.7					
CL-P1634-SPT-01	10-12		23.0					
CL-P1634-SPT-01	13-15		33.5					
CL-P1634-SPT-01	18.01-20	LEAN CLAY WITH SAND(CL)	57.9	47	23	24	83.2	
CL-P1634-SPT-01	28-30		32.9				30.2	
CL-P1634-SPT-02	2-4	SILTY SAND(SM)	9.8	NP	NP	NP	18.9	
CL-P1634-SPT-02	6-8		4.9					
CL-P1634-SPT-02	8-10		12.4					
CL-P1634-SPT-02	10-12		24.2					
CL-P1634-SPT-02	13-15		36.6					
CL-P1634-SPT-02	28-30	FAT CLAY(CH)	70.0	64	20	44	96.5	
CL-P1634-SPT-02	38-40		23.8				6.5	
CL-P1634-SPT-02	78-80		22.3				24.6	
CL-P1634-SPT-03	2-4	SILTY SAND(SM)	7.6	NP	NP	NP	22.4	
CL-P1634-SPT-03	6-8		4.5					
CL-P1634-SPT-03	8-10		4.6					
CL-P1634-SPT-03	10-12		21.0					
CL-P1634-SPT-03	13-15		21.8					

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Summary of Laboratory Results

Boring ID	Depth (Ft.)	Soil Classification USCS	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Fines	Organic Content (%)
CL-P1634-SPT-03	18-20		35.9					
CL-P1634-SPT-03	23-25	SANDY LEAN CLAY(CL)	40.1	33	22	11	54.1	
CL-P1634-SPT-03	43-45		12.6				10.6	
CL-P1634-SPT-04	1-3	SILTY SAND(SM)	10.2	NP	NP	NP	21.3	
CL-P1634-SPT-04	6-8		9.6					
CL-P1634-SPT-04	8-10		26.2					
CL-P1634-SPT-05	0.6-2		9.5				16.7	
CL-P1634-SPT-05	6-8		3.1					
CL-P1634-SPT-05	8-10		6.5					
CL-P1634-SPT-06	4-6	POORLY GRADED SAND WITH SILT(SP-SM)	6.6	NP	NP	NP	10.8	
CL-P1634-SPT-06	6-8		5.4					
CL-P1634-SPT-06	8-10		6.7					
CL-P1634-SPT-07	2-4		9.8				14.8	
CL-P1634-SPT-07	6-8		9.2					
CL-P1634-SPT-07	8-10		5.2					
CL-P1634-SPT-08	2-4		17.4				30.1	4.4
CL-P1634-SPT-08	6-8		16.3					
CL-P1634-SPT-08	8-10		11.7					
CL-P1634-SPT-09	2-4		9.7				5.7	

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Summary of Laboratory Results

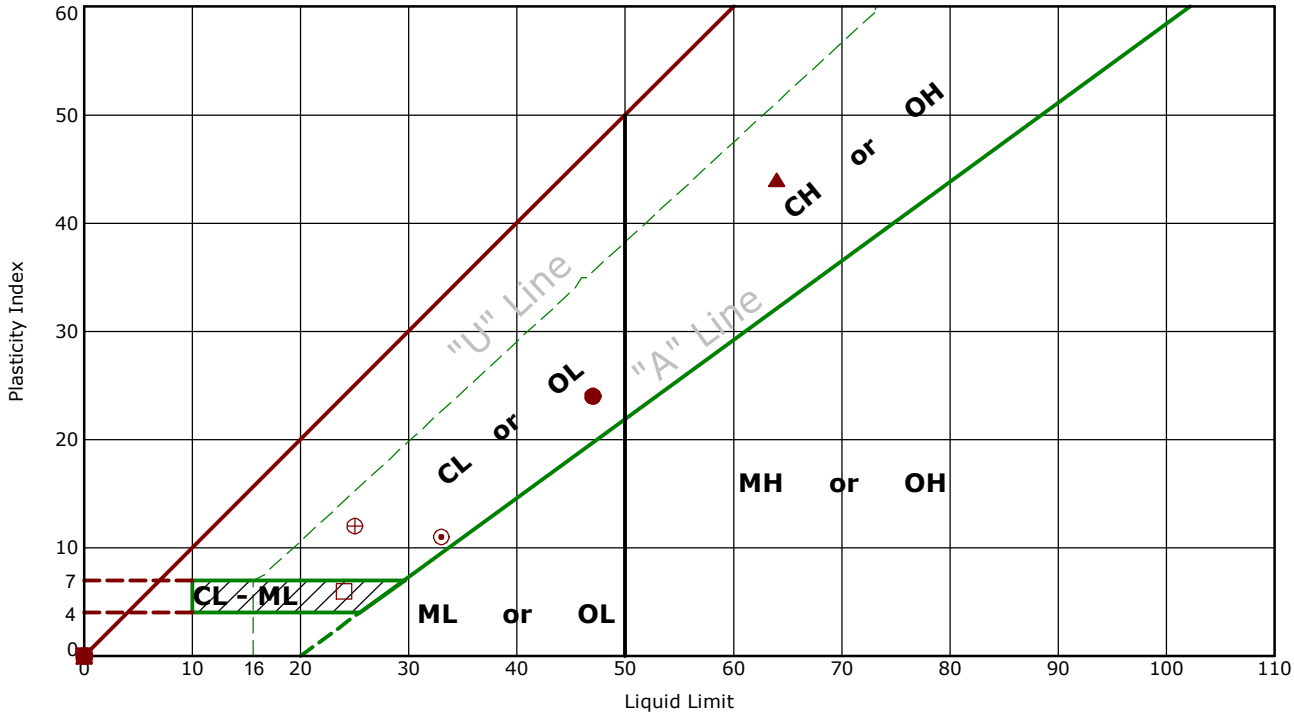
Boring ID	Depth (Ft.)	Soil Classification USCS	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Fines	Organic Content (%)
CL-P1634-SPT-09	6-8		9.7					
CL-P1634-SPT-09	8-10		13.9					
CL-P1634-SPT-09	10-12		22.7					
CL-P1634-SPT-10	1-3	SILTY SAND(SM)	15.1	NP	NP	NP	14.9	
CL-P1634-SPT-10	4-6		10.3					
CL-P1634-SPT-10	6-8		8.6					
CL-P1634-SPT-10	8-10		13.2					
CL-P1634-SPT-10	10-12		22.2				4.8	
CL-P1634-SPT-11	4-6	SILTY SAND(SM)	9.6	NP	NP	NP	19.4	
CL-P1634-SPT-11	6-8		9.4					
CL-P1634-SPT-11	8-10		11.2					
CL-P1634-SPT-11	10-12		15.8					
CL-P1634-CPT-01s	1-2	CLAYEY SAND(SC)	13.3	25	13	12	30.0	
CL-P1634-CPT-01s	5.01-5.5		6.0					
CL-P1634-CPT-03s	1.5-2.5	SILTY, CLAYEY SAND(SC-SM)	12.8	24	18	6	33.7	
CL-P1634-CPT-03s	5.01-6		9.4					
CL-P1634-CPT-04s	2-3		7.7				17.4	

Atterberg Limits

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Atterberg Limit Results

ASTM D4318



	Boring ID	Depth (Ft)	LL	PL	PI	Fines	USCS	Description
●	CL-P1634-SPT-01	18 - 20	47	23	24	83.2	CL	LEAN CLAY with SAND
⊠	CL-P1634-SPT-02	2 - 4	NP	NP	NP	18.9	SM	SILTY SAND
▲	CL-P1634-SPT-02	28 - 30	64	20	44	96.5	CH	FAT CLAY
★	CL-P1634-SPT-03	2 - 4	NP	NP	NP	22.4	SM	SILTY SAND
⊙	CL-P1634-SPT-03	23 - 25	33	22	11	54.1	CL	SANDY LEAN CLAY
✿	CL-P1634-SPT-04	1 - 3	NP	NP	NP	21.3	SM	SILTY SAND
○	CL-P1634-SPT-06	4 - 6	NP	NP	NP	10.8	SP-SM	POORLY GRADED SAND with SILT
△	CL-P1634-SPT-10	1 - 3	NP	NP	NP	14.9	SM	SILTY SAND
⊗	CL-P1634-SPT-11	4 - 6	NP	NP	NP	19.4	SM	SILTY SAND
⊕	CL-P1634-CPT-01s	1 - 2	25	13	12	30.0	SC	CLAYEY SAND
□	CL-P1634-CPT-03s	1.5 - 2.5	24	18	6	33.7	SC-SM	SILTY, CLAYEY SAND

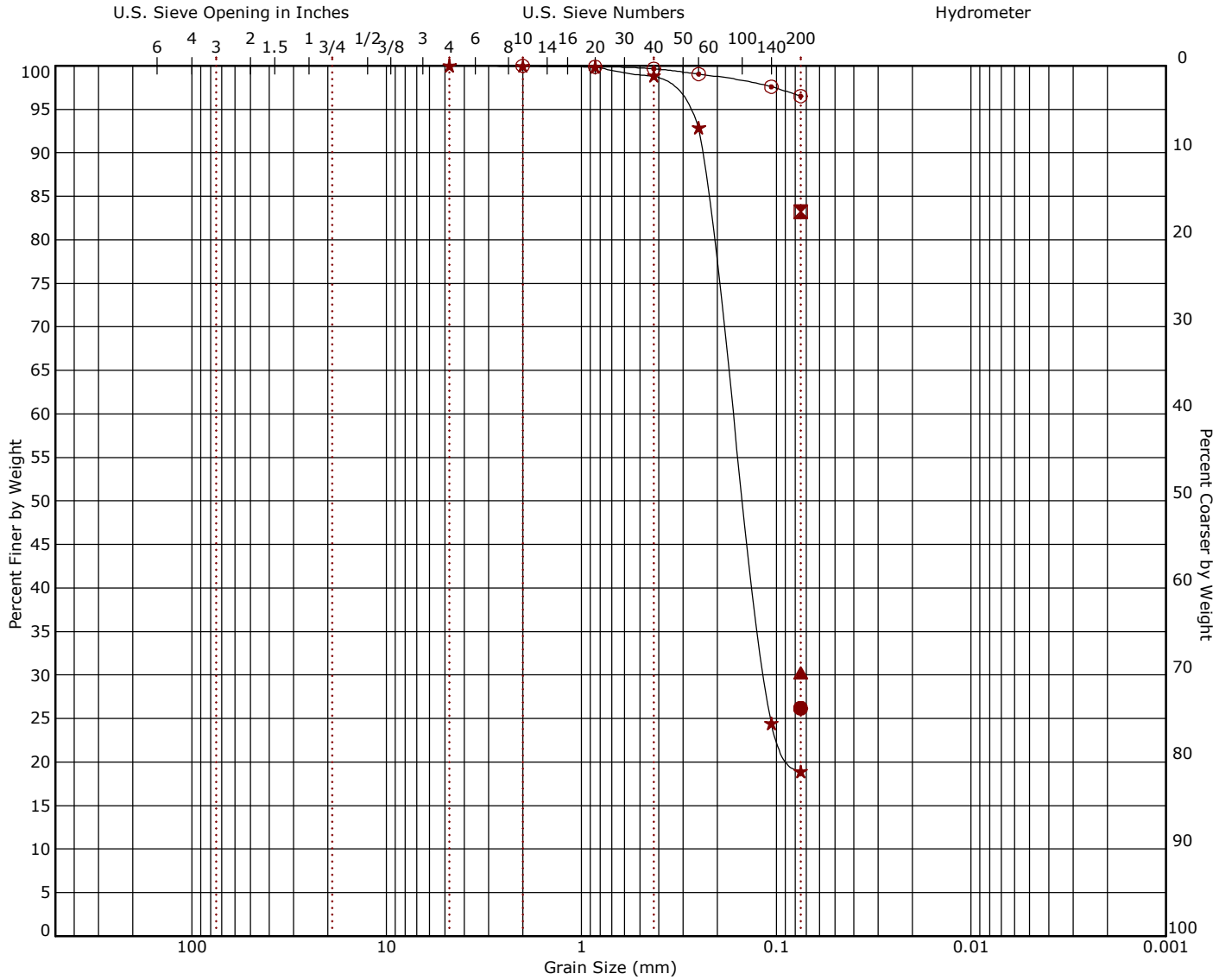
Grain Size Distribution

FY26 USMC Barracks 2030 - P-1634 & P-1636
MCB Camp Lejeune | Jacksonville, NC
Terracon Project No. K625P194

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

Grain Size Distribution

ASTM D422 / ASTM C136



Cobbles	Gravel		Sand			Silt or Clay
	coarse	fine	coarse	medium	fine	

Boring ID	Depth (Ft)	Description	USCS	LL	PL	PI	Cc	Cu
● CL-P1634-SPT-01	2 - 4							
⊠ CL-P1634-SPT-01	18 - 20	LEAN CLAY with SAND	CL	47	23	24		
▲ CL-P1634-SPT-01	28 - 30							
★ CL-P1634-SPT-02	2 - 4	SILTY SAND	SM	NP	NP	NP		
⊙ CL-P1634-SPT-02	28 - 30	FAT CLAY	CH	64	20	44		

Boring ID	Depth (Ft)	D_{100}	D_{60}	D_{30}	D_{10}	%Cobbles	%Gravel	%Sand	%Fines	%Silt	%Clay
● CL-P1634-SPT-01	2 - 4	0.075							26.2		
⊠ CL-P1634-SPT-01	18 - 20	0.075							83.2		
▲ CL-P1634-SPT-01	28 - 30	0.075							30.2		
★ CL-P1634-SPT-02	2 - 4	4.75	0.166	0.114		0.0	0.0	81.1	18.9		
⊙ CL-P1634-SPT-02	28 - 30	2				0.0	0.0	3.5	96.5		

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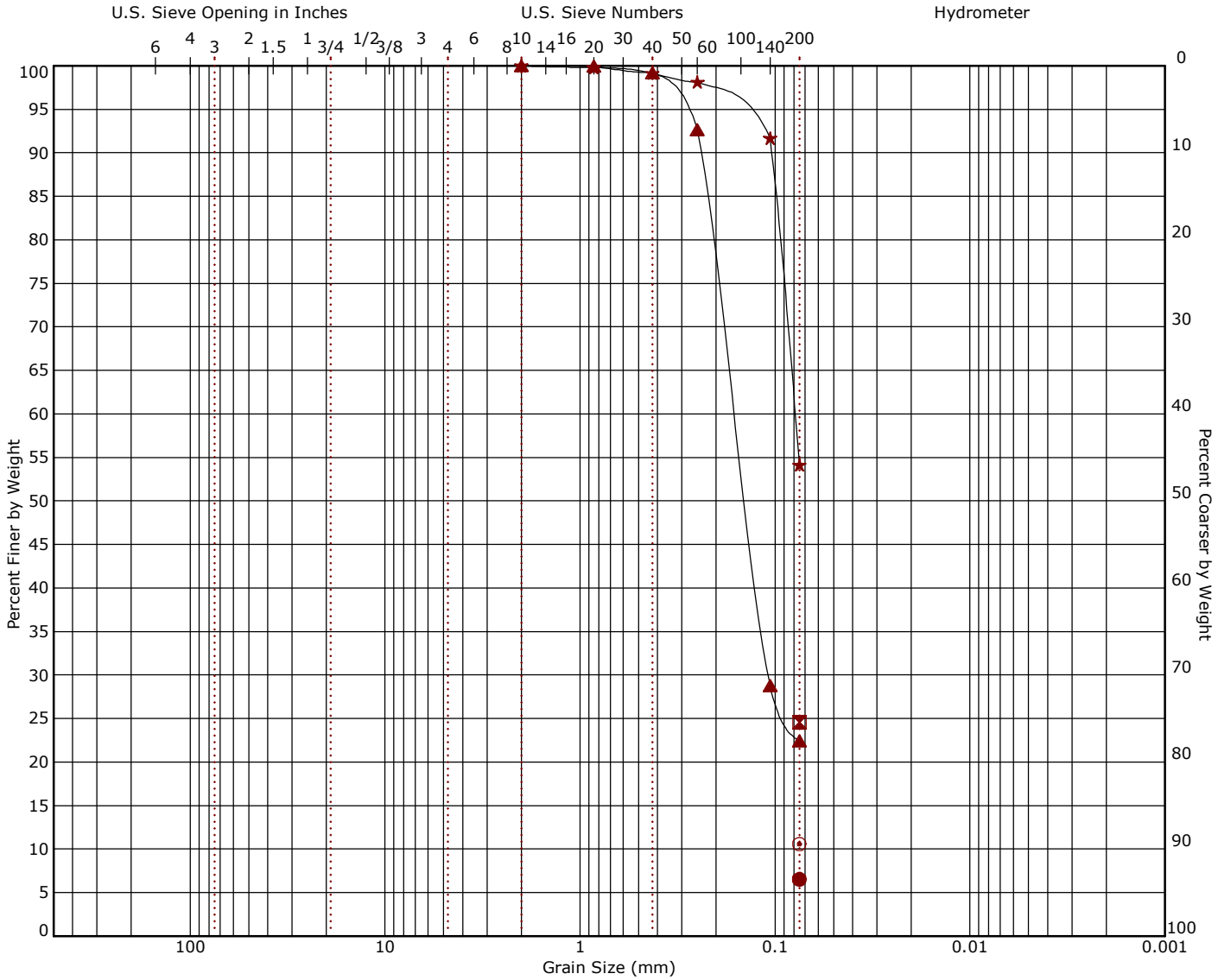
Grain Size Distribution

ASTM D422 / ASTM C136



Cobbles	Gravel		Sand			Silt or Clay
	coarse	fine	coarse	medium	fine	

Boring ID	Depth (Ft)	Description	USCS	LL	PL	PI	Cc	Cu
● CL-P1634-SPT-02	38 - 40							
⊠ CL-P1634-SPT-02	78 - 80							
▲ CL-P1634-SPT-03	2 - 4	SILTY SAND	SM	NP	NP	NP		
★ CL-P1634-SPT-03	23 - 25	SANDY LEAN CLAY	CL	33	22	11		
⊙ CL-P1634-SPT-03	43 - 45							

Boring ID	Depth (Ft)	D_{100}	D_{60}	D_{30}	D_{10}	%Cobbles	%Gravel	%Sand	%Fines	%Silt	%Clay
● CL-P1634-SPT-02	38 - 40	0.075							6.5		
⊠ CL-P1634-SPT-02	78 - 80	0.075							24.6		
▲ CL-P1634-SPT-03	2 - 4	2	0.161	0.108		0.0	0.0	77.6	22.4		
★ CL-P1634-SPT-03	23 - 25	2	0.079			0.0	0.0	45.9	54.1		
⊙ CL-P1634-SPT-03	43 - 45	0.075							10.6		

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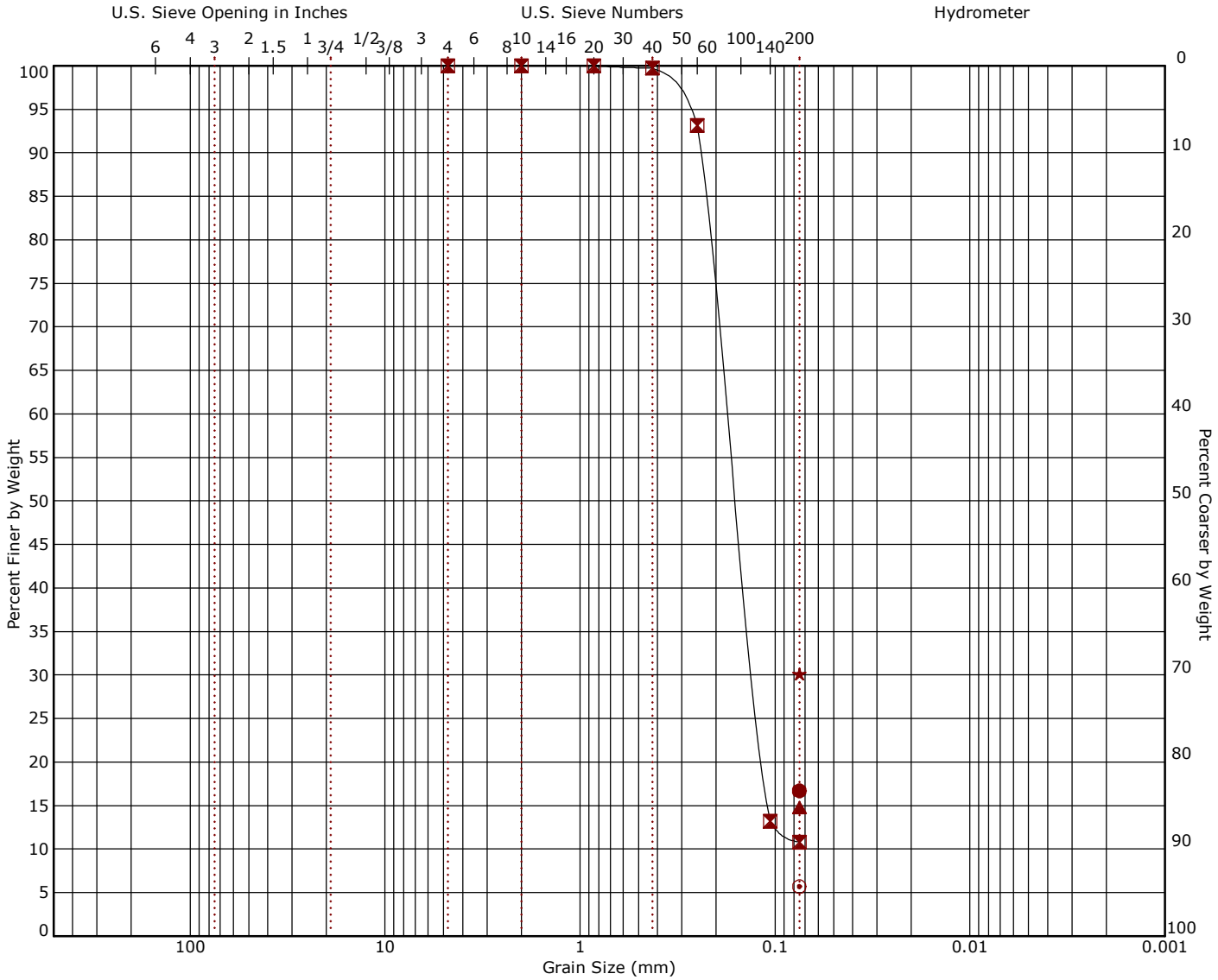
Grain Size Distribution

ASTM D422 / ASTM C136



Cobbles	Gravel		Sand			Silt or Clay
	coarse	fine	coarse	medium	fine	

Boring ID	Depth (Ft)	Description	USCS	LL	PL	PI	Cc	Cu
CL-P1634-SPT-05	0.6 - 2							
CL-P1634-SPT-06	4 - 6	POORLY GRADED SAND with SILT	SP-SM	NP	NP	NP	1.38	2.63
CL-P1634-SPT-07	2 - 4							
CL-P1634-SPT-08	2 - 4							
CL-P1634-SPT-09	2 - 4							

Boring ID	Depth (Ft)	D_{100}	D_{60}	D_{30}	D_{10}	%Cobbles	%Gravel	%Sand	%Fines	%Silt	%Clay
CL-P1634-SPT-05	0.6 - 2	0.075							16.7		
CL-P1634-SPT-06	4 - 6	4.75	0.175	0.127		0.0	0.0	89.2	10.8		
CL-P1634-SPT-07	2 - 4	0.075							14.8		
CL-P1634-SPT-08	2 - 4	0.075							30.1		
CL-P1634-SPT-09	2 - 4	0.075							5.7		

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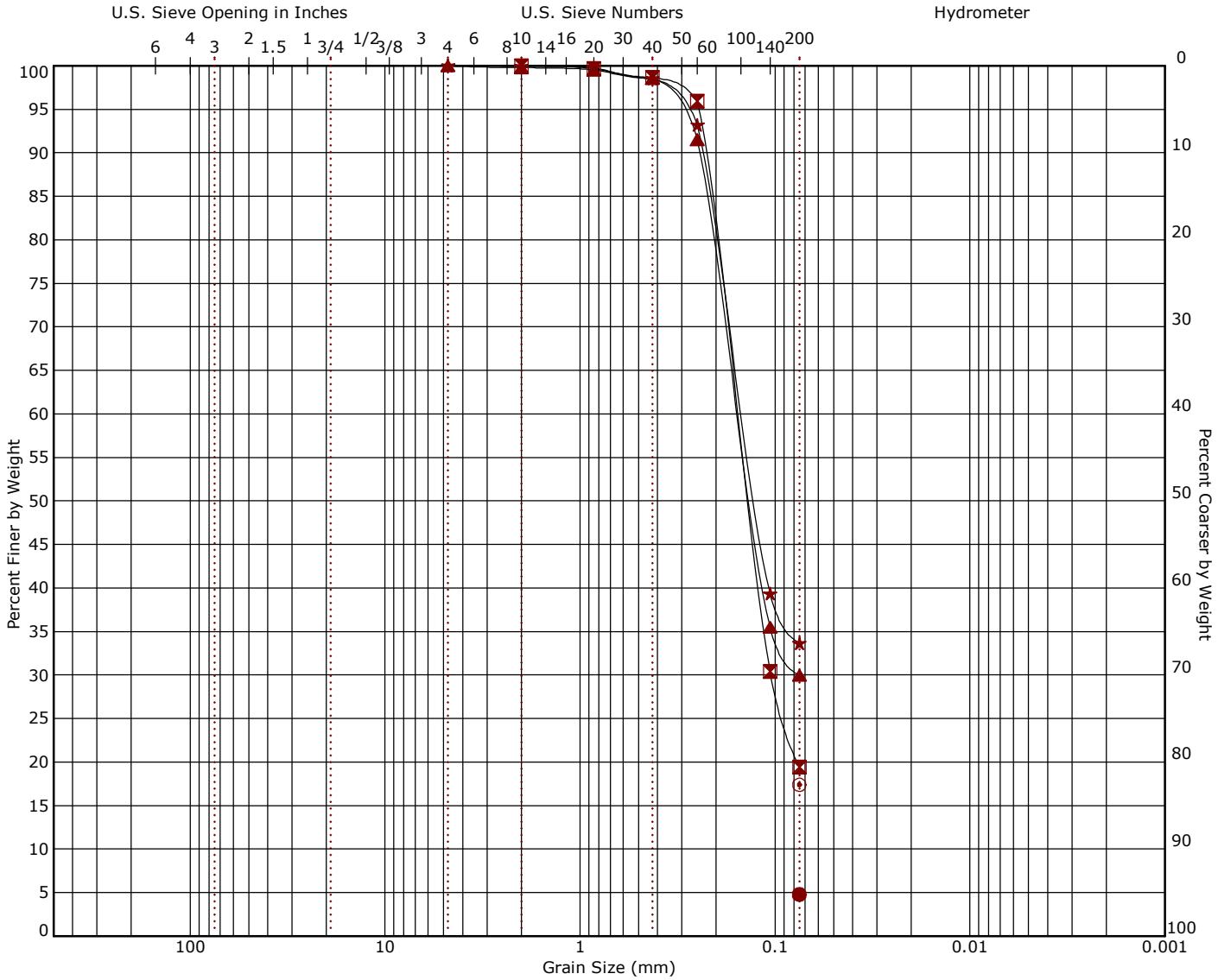
Grain Size Distribution

ASTM D422 / ASTM C136



Cobbles	Gravel		Sand			Silt or Clay
	coarse	fine	coarse	medium	fine	

Boring ID	Depth (Ft)	Description	USCS	LL	PL	PI	Cc	Cu
● CL-P1634-SPT-10	10 - 12							
⊠ CL-P1634-SPT-11	4 - 6	SILTY SAND	SM	NP	NP	NP		
▲ CL-P1634-CPT-01s	1 - 2	CLAYEY SAND	SC	25	13	12		
★ CL-P1634-CPT-03s	1.5 - 2.5	SILTY, CLAYEY SAND	SC-SM	24	18	6		
⊙ CL-P1634-CPT-04s	2 - 3							

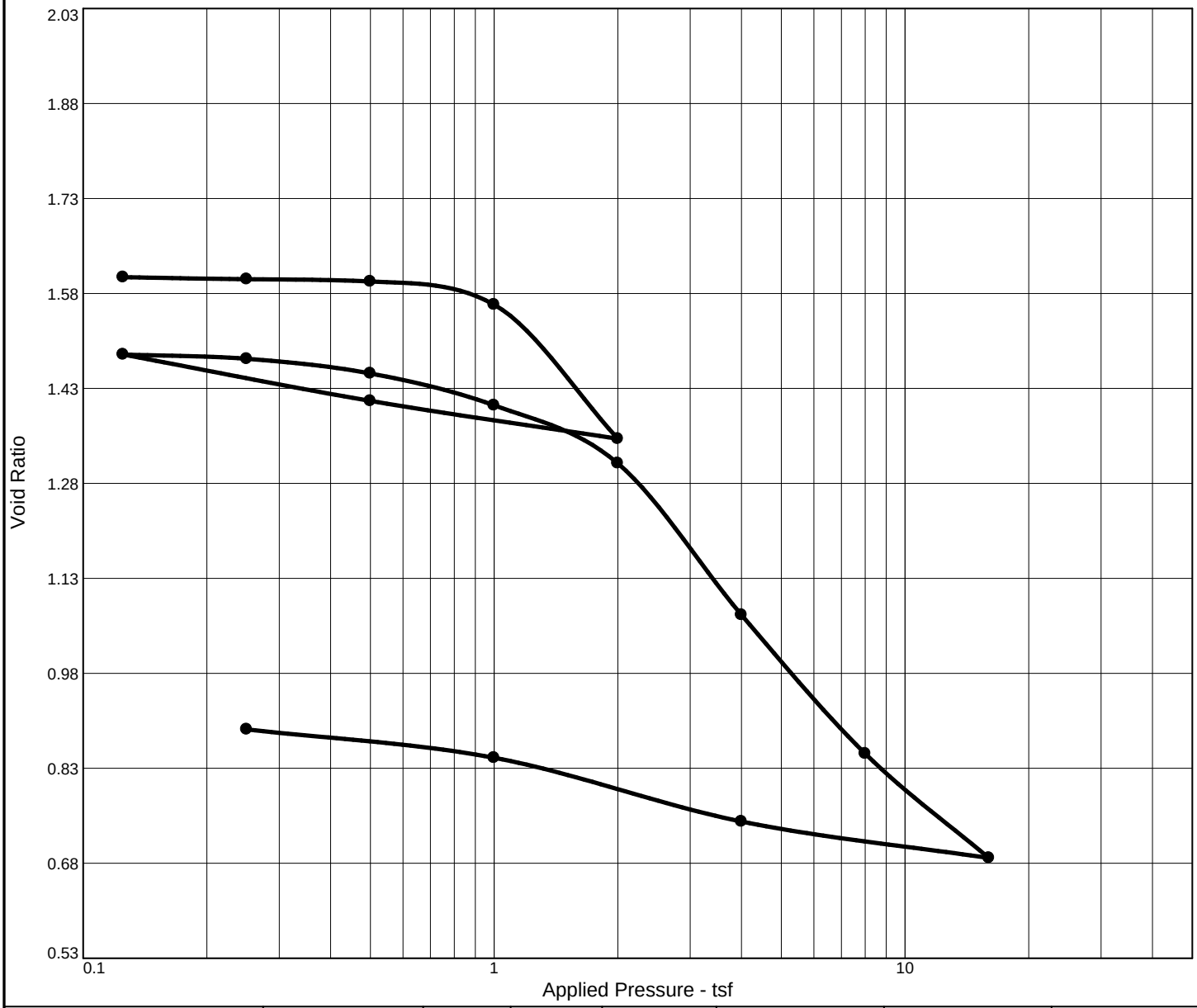
Boring ID	Depth (Ft)	D_{100}	D_{60}	D_{30}	D_{10}	%Cobbles	%Gravel	%Sand	%Fines	%Silt	%Clay
● CL-P1634-SPT-10	10 - 12	0.075							4.8		
⊠ CL-P1634-SPT-11	4 - 6	2	0.156	0.105		0.0	0.0	80.6	19.4		
▲ CL-P1634-CPT-01s	1 - 2	4.75	0.154	0.075		0.0	0.0	70.0	30.0		
★ CL-P1634-CPT-03s	1.5 - 2.5	4.75	0.147			0.0	0.0	66.3	33.7		
⊙ CL-P1634-CPT-04s	2 - 3	0.075							17.4		

Laboratory tests are not valid if separated from original report.

Consolidation Testing

All collected Shelby Tube samples were extracted and reviewed by the Geotechnical Engineer. The Shelby Tube sample collected from CL-P1634-SPT-02 was observed to have poor recovery, less than 6 inches, and was determined to be unsuitable for testing. Therefore, the Shelby Tube from CL-P1634-SPT-01 was selected and subjected to One-Dimensional Consolidation testing in accordance with ASTM D2435. The consolidation result is presented in the following test report.

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	USCS	AASHTO	Initial Void Ratio
Saturation	Moisture							
97.2 %	57.9 %	62.6	46	23	2.7	CL	A-7-6(20)	1.609

MATERIAL DESCRIPTION

Gray, Lean CLAY (CL) with Sand

Project No. K325P194 **Client:** Clark Nexsen/Michael Baker JV

Project: FY 26 USMC Barracks 2030

Location: CL-P1634-SPT-01 **Depth:** 18-20 ft.

Remarks:

Passing #200 Sieve = 83.2%

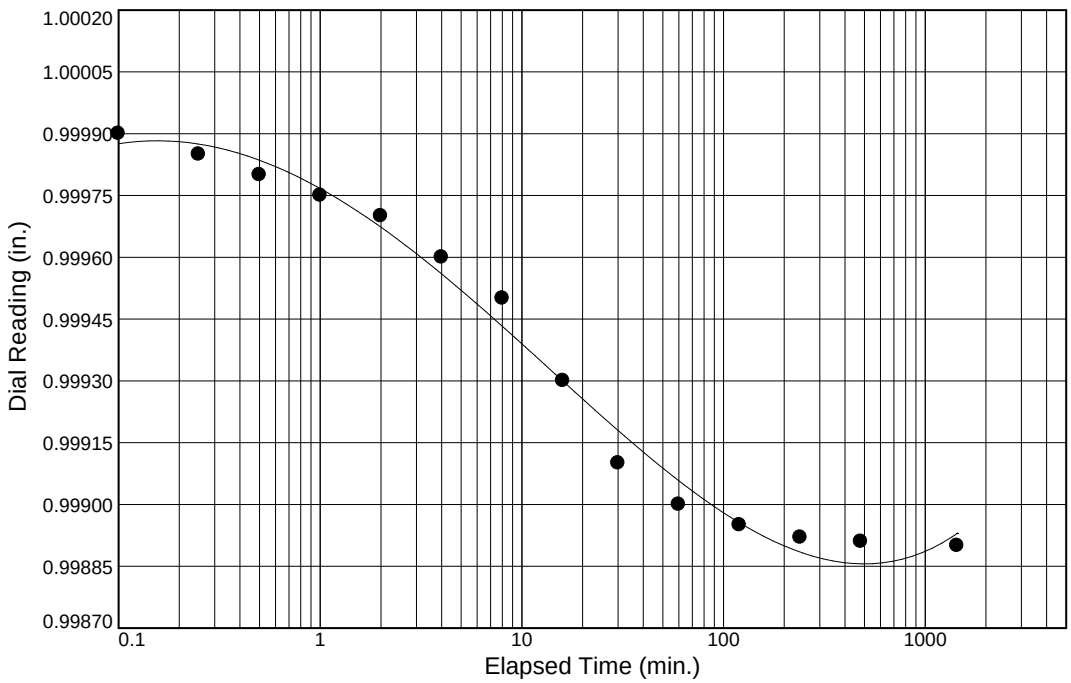
Terracon

Figure 1

Dial Reading vs. Time

Project No.: K325P194
Project: FY 26 USMC Barracks 2030

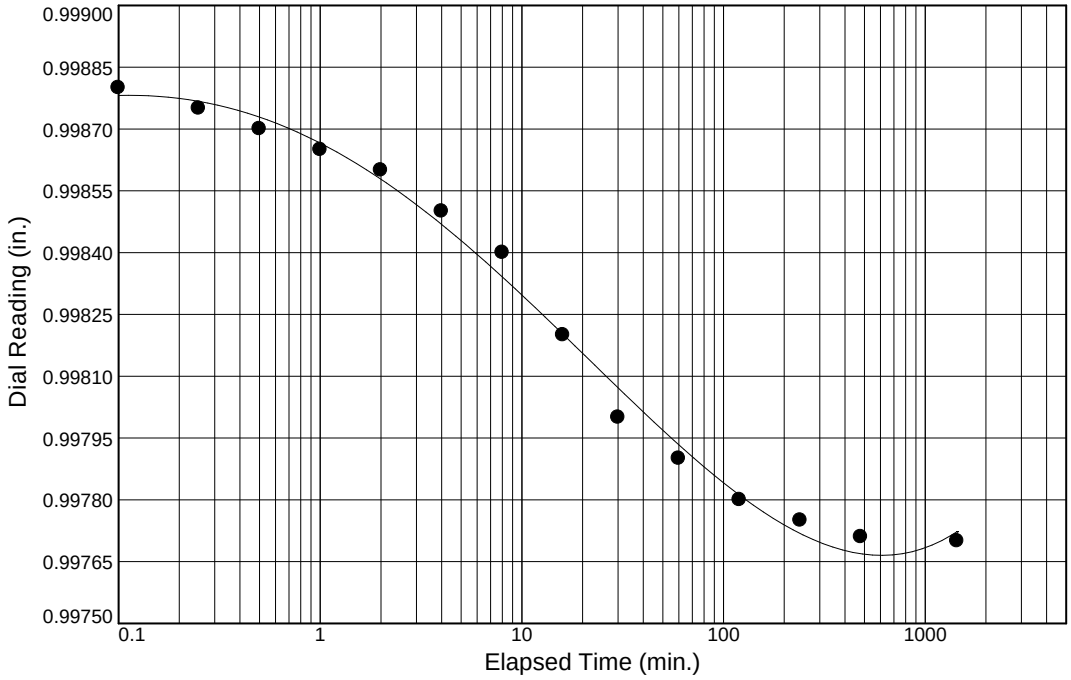
Location: CL-P1634-SPT-01 Depth: 18-20 ft.



Load No.= 1
Load= 0.13 tsf
D_0 = 0.9999
D_{50} = 0.9994
D_{100} = 0.9989
T_{50} = 7.83 min.

C_v @ T_{50}
0.063 ft.^{2}/day

C_α = 0.000



Load No.= 2
Load= 0.25 tsf
D_0 = 0.9988
D_{50} = 0.9983
D_{100} = 0.9977
T_{50} = 11.21 min.

C_v @ T_{50}
0.044 ft.^{2}/day

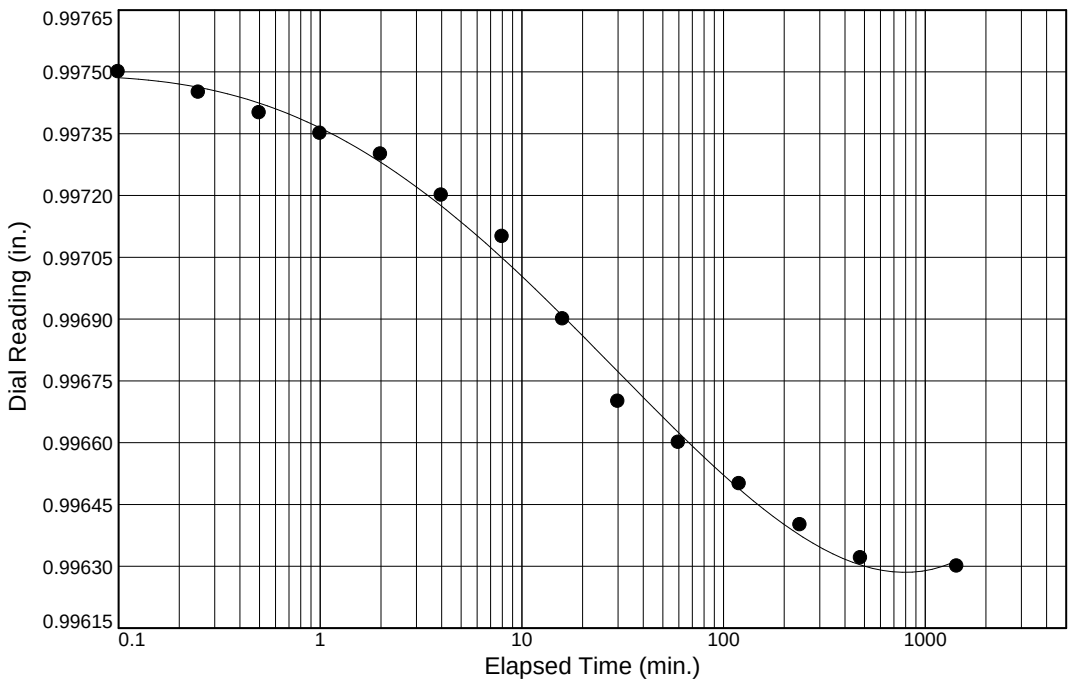
C_α = 0.000

Figure 2

Dial Reading vs. Time

Project No.: K325P194
Project: FY 26 USMC Barracks 2030

Location: CL-P1634-SPT-01 Depth: 18-20 ft.



Load No.= 3

Load= 0.50 tsf

D_0 = 0.9975

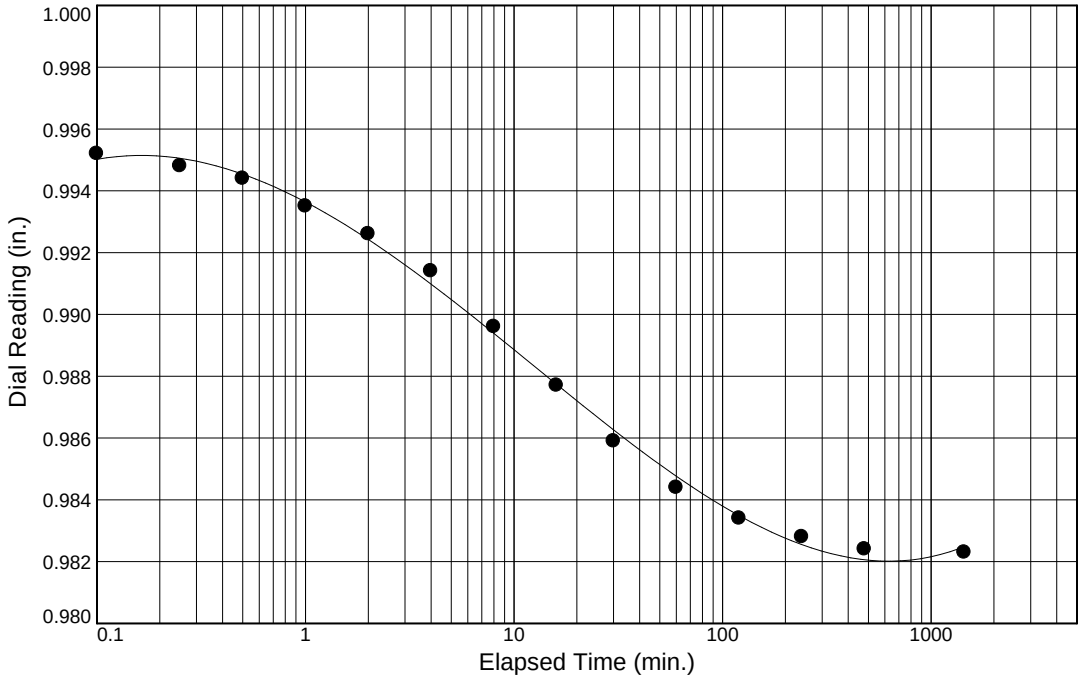
D_{50} = 0.9969

D_{100} = 0.9963

T_{50} = 13.61 min.

C_v @ T_{50}
0.036 ft.^{2}/day

C_α = 0.000



Load No.= 4

Load= 1.00 tsf

D_0 = 0.9957

D_{50} = 0.9891

D_{100} = 0.9825

T_{50} = 8.92 min.

C_v @ T_{50}
0.054 ft.^{2}/day

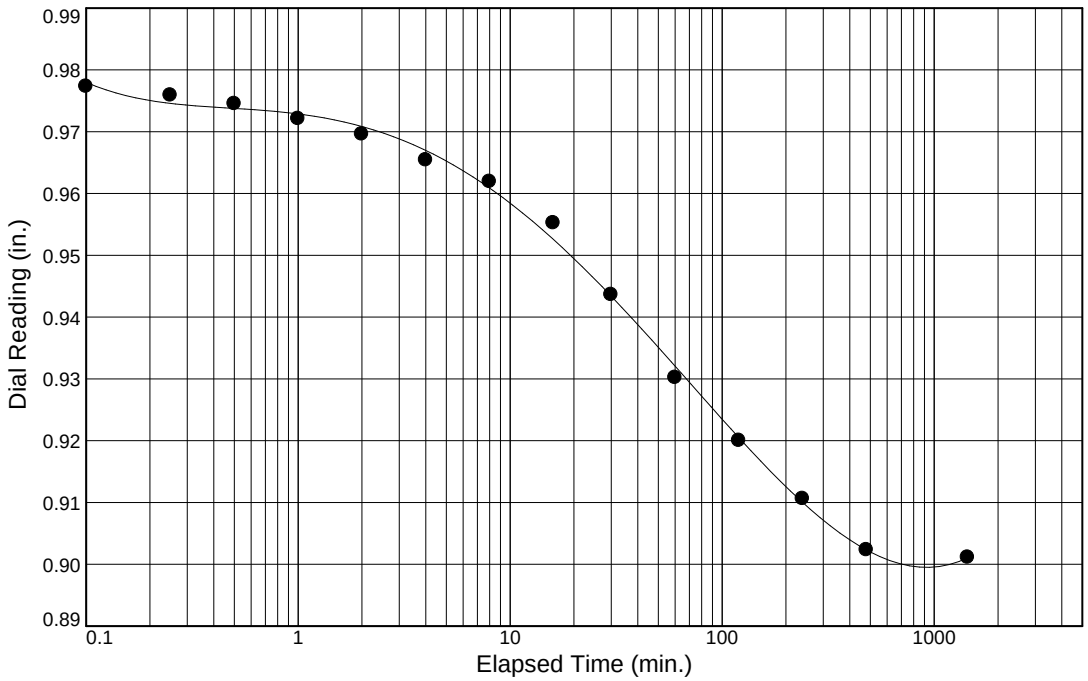
C_α = 0.001

Figure 3

Dial Reading vs. Time

Project No.: K325P194
Project: FY 26 USMC Barracks 2030

Location: CL-P1634-SPT-01 Depth: 18-20 ft.



Load No.= 5

Load= 2.00 tsf

D_0 = 0.9799

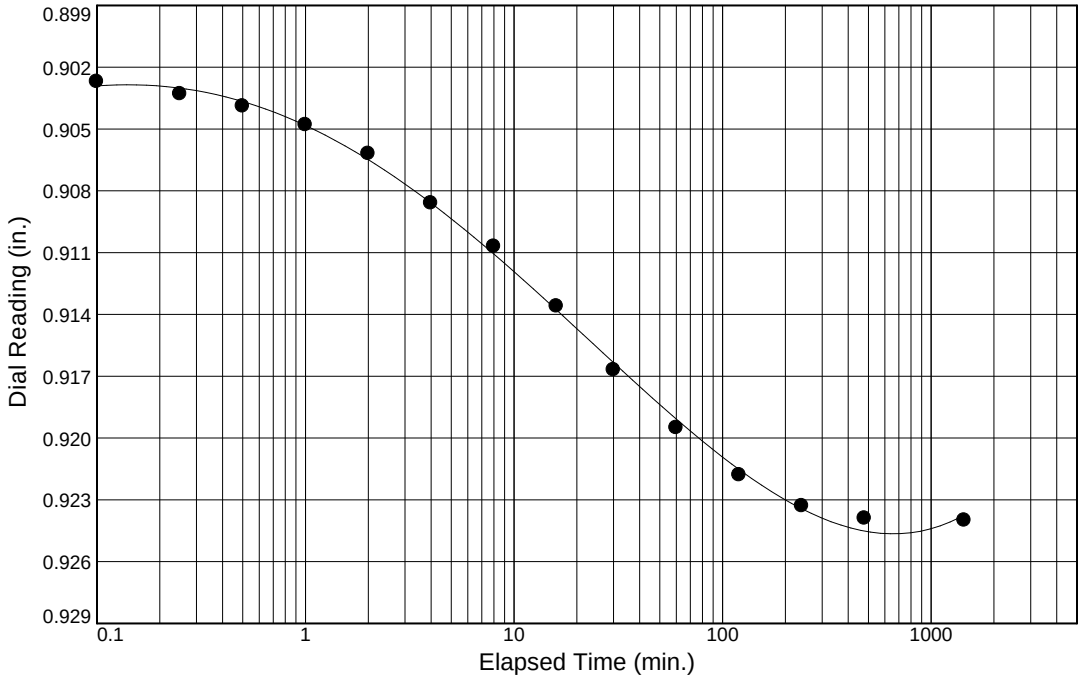
D_{50} = 0.9413

D_{100} = 0.9027

T_{50} = 34.23 min.

C_v @ T_{50}
0.013 ft.^{2}/day

C_α = 0.007



Load No.= 6

Load= 0.50 tsf

D_0 = 0.9021

D_{50} = 0.9130

D_{100} = 0.9238

T_{50} = 13.04 min.

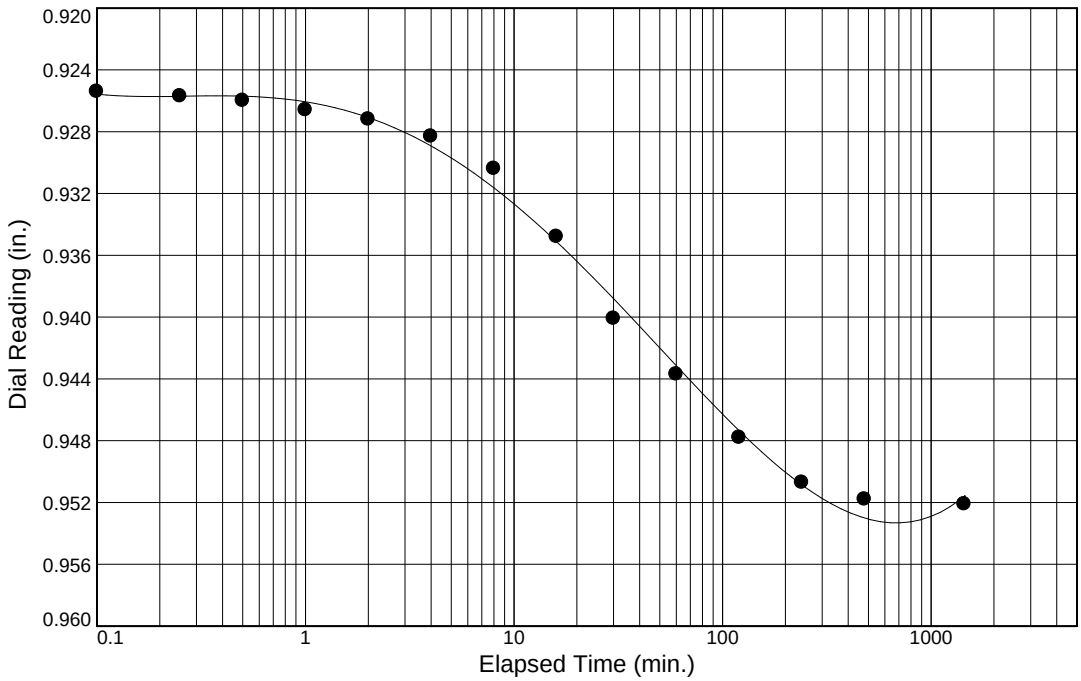
C_v @ T_{50}
0.031 ft.^{2}/day

Figure 4

Dial Reading vs. Time

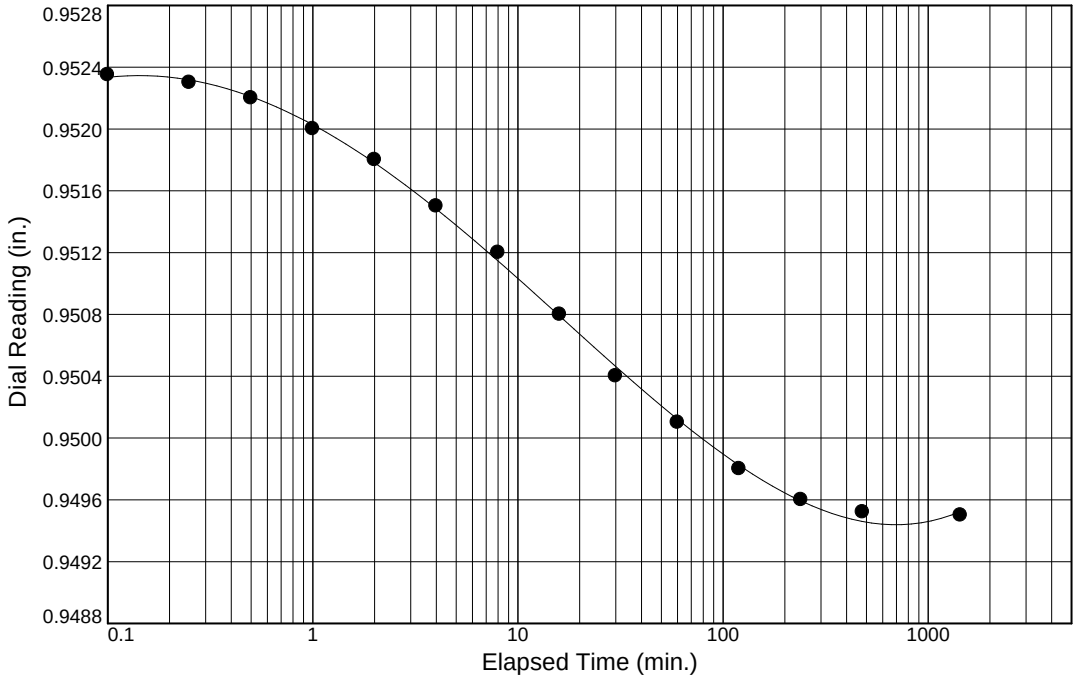
Project No.: K325P194
Project: FY 26 USMC Barracks 2030

Location: CL-P1634-SPT-01 Depth: 18-20 ft.



Load No.= 7
Load= 0.13 tsf
D_0 = 0.9227
D_{50} = 0.9372
D_{100} = 0.9516
T_{50} = 22.83 min.

C_v @ T_{50}
0.019 ft.^{2}/day



Load No.= 8
Load= 0.25 tsf
D_0 = 0.9525
D_{50} = 0.9510
D_{100} = 0.9495
T_{50} = 9.86 min.

C_v @ T_{50}
0.045 ft.^{2}/day

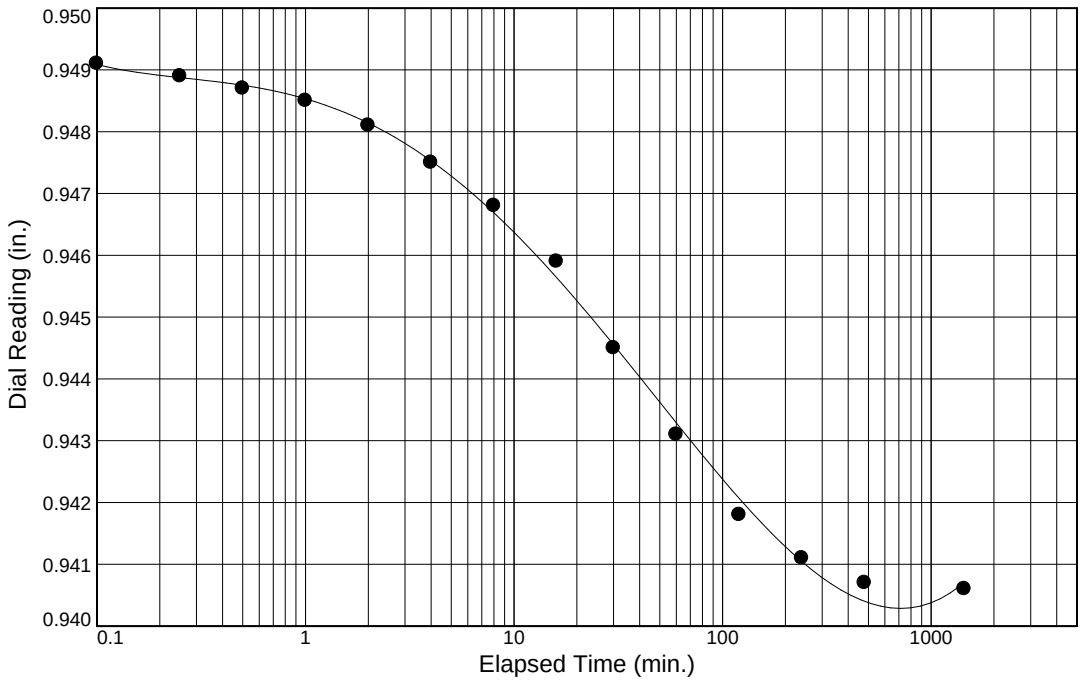
C_α = 0.000

Figure 5

Dial Reading vs. Time

Project No.: K325P194
Project: FY 26 USMC Barracks 2030

Location: CL-P1634-SPT-01 Depth: 18-20 ft.



Load No.= 9

Load= 0.50 tsf

D_0 = 0.9493

D_{50} = 0.9450

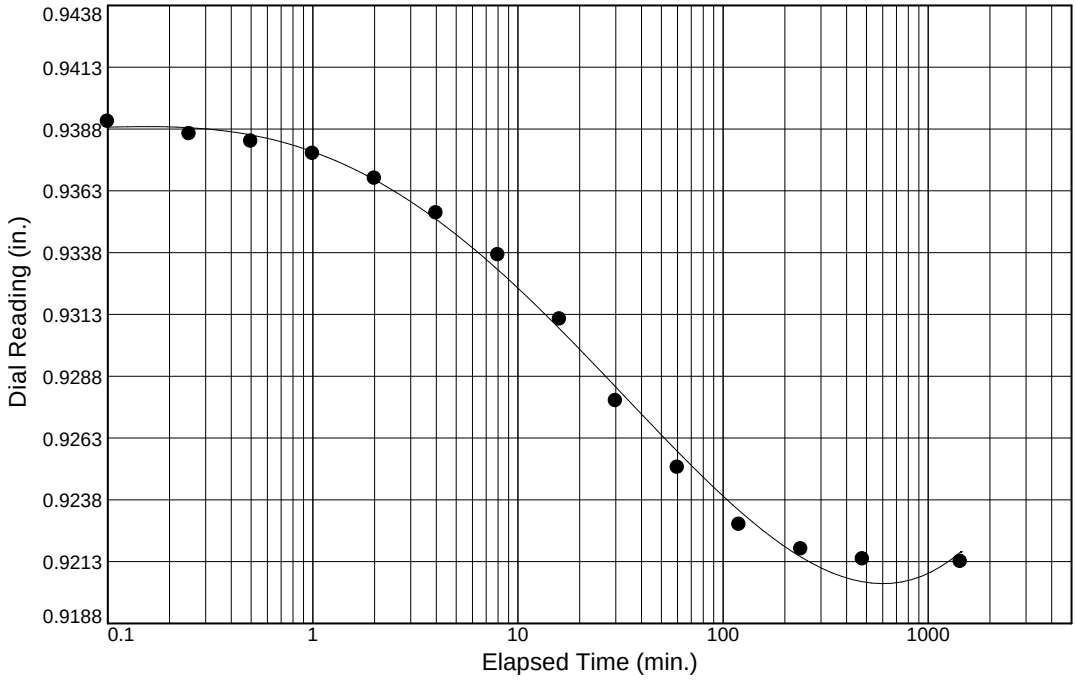
D_{100} = 0.9408

T_{50} = 22.92 min.

C_v @ T_{50}

0.019 ft.^{2}/day

C_α = 0.001



Load No.= 10

Load= 1.00 tsf

D_0 = 0.9399

D_{50} = 0.9307

D_{100} = 0.9215

T_{50} = 15.97 min.

C_v @ T_{50}

0.027 ft.^{2}/day

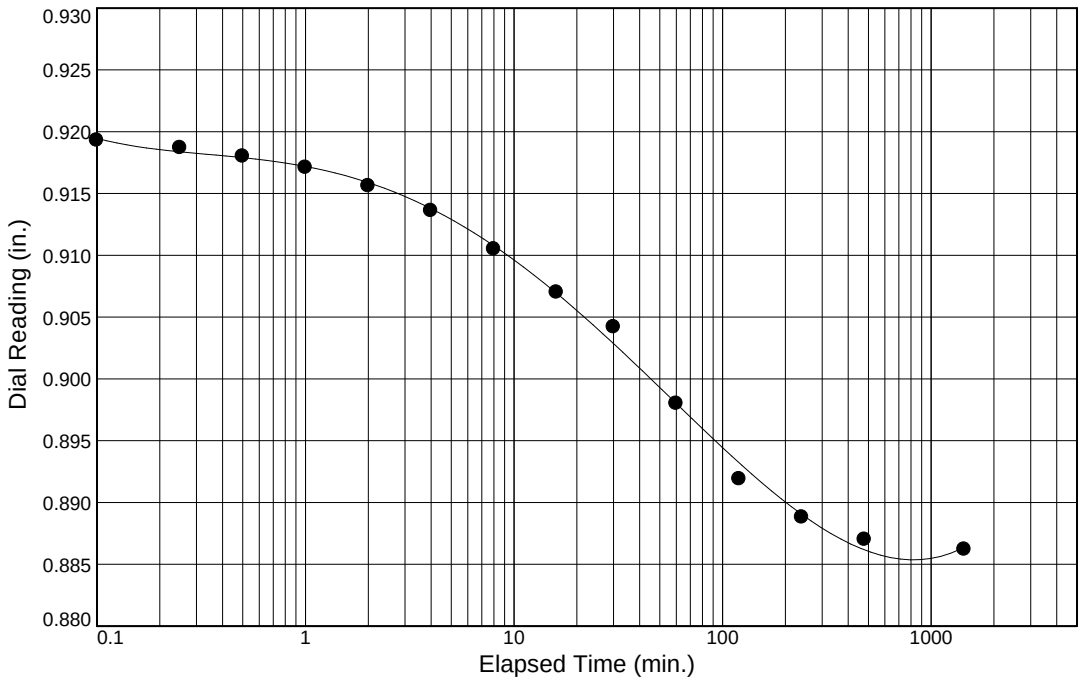
C_α = 0.001

Figure 6

Dial Reading vs. Time

Project No.: K325P194
Project: FY 26 USMC Barracks 2030

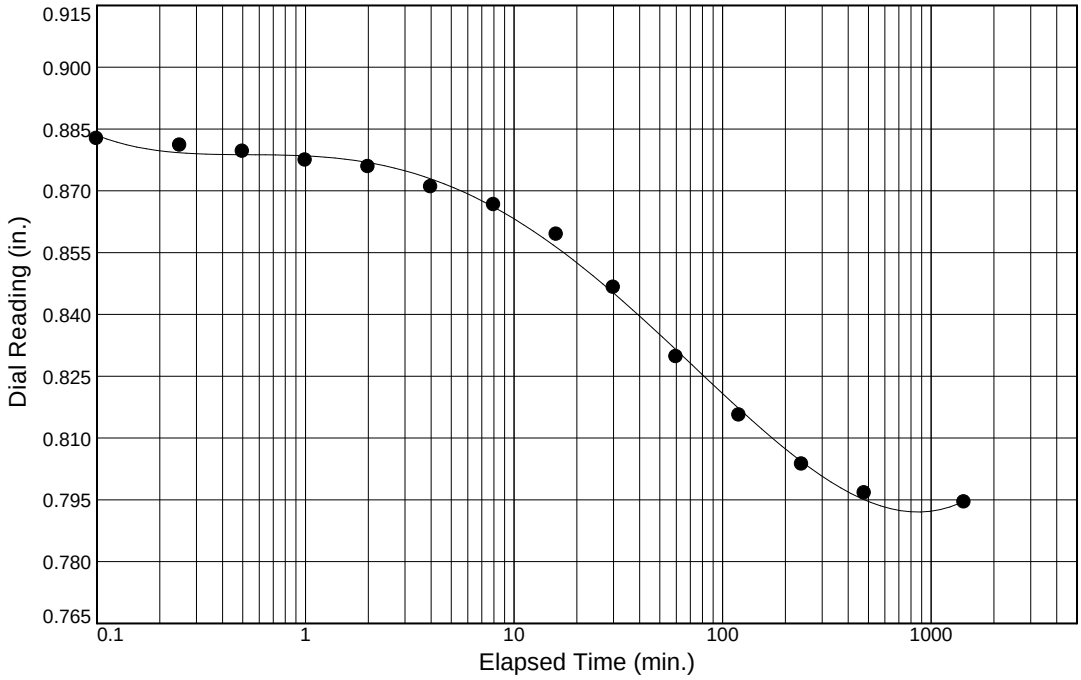
Location: CL-P1634-SPT-01 Depth: 18-20 ft.



Load No.= 11
Load= 2.00 tsf
D_0 = 0.9201
D_{50} = 0.9038
D_{100} = 0.8874
T_{50} = 26.20 min.

C_v @ T_{50}
0.015 ft.^{2}/day

C_α = 0.004



Load No.= 12
Load= 4.00 tsf
D_0 = 0.8891
D_{50} = 0.8433
D_{100} = 0.7975
T_{50} = 33.07 min.

C_v @ T_{50}
0.011 ft.^{2}/day

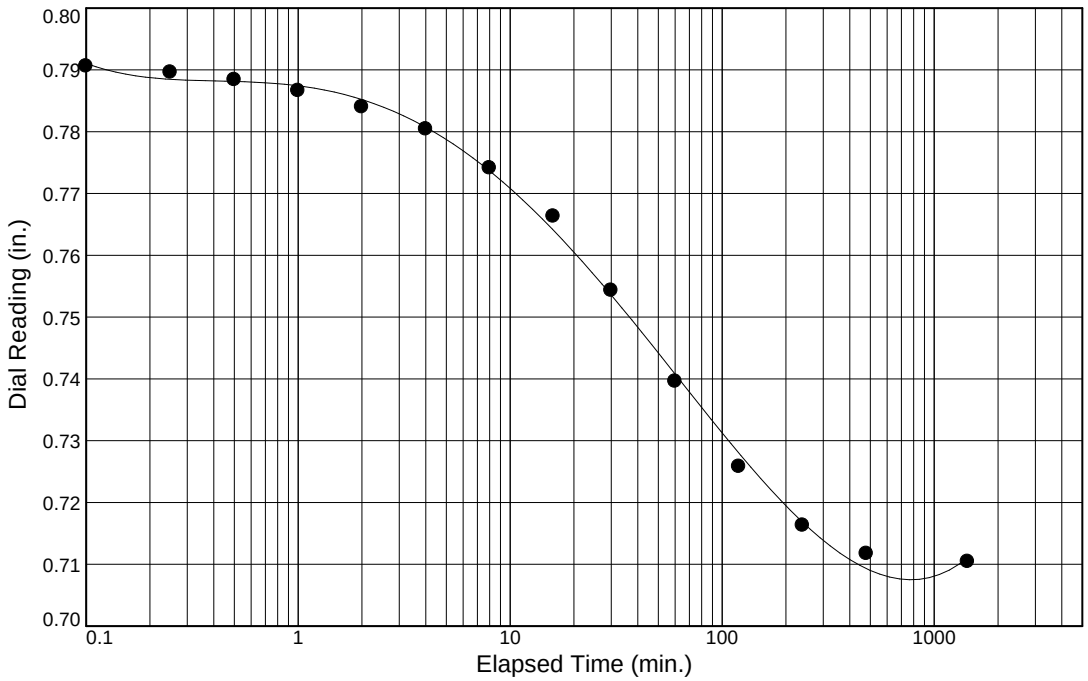
C_α = 0.012

Figure 7

Dial Reading vs. Time

Project No.: K325P194
Project: FY 26 USMC Barracks 2030

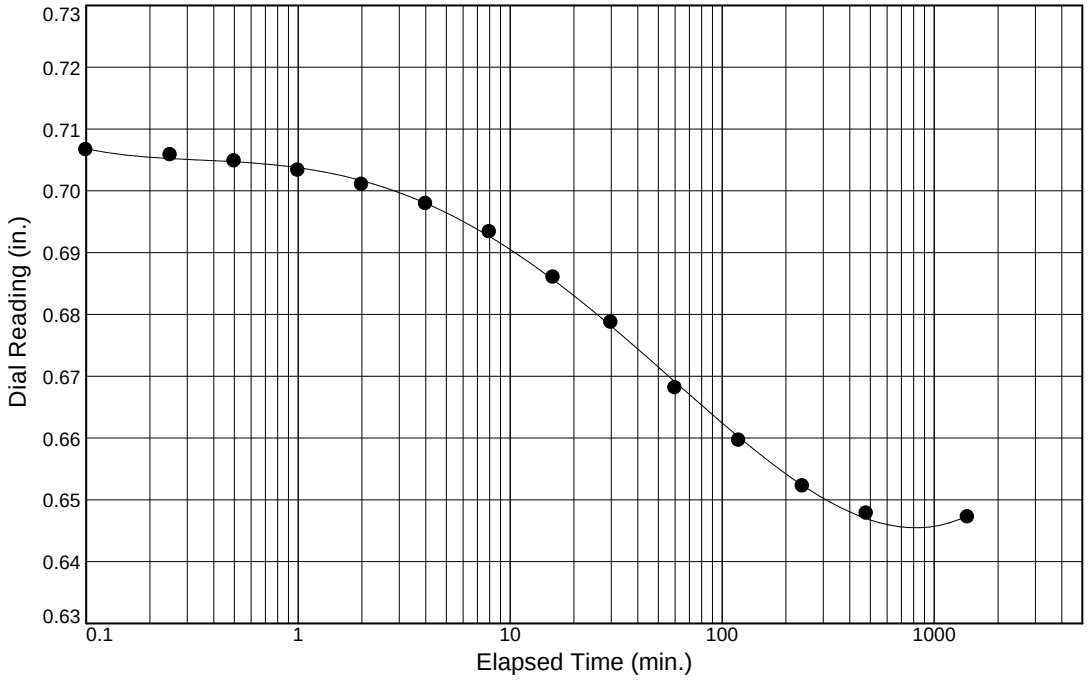
Location: CL-P1634-SPT-01 Depth: 18-20 ft.



Load No.= 13
Load= 8.00 tsf
D_0 = 0.7975
D_{50} = 0.7549
D_{100} = 0.7124
T_{50} = 27.76 min.

C_v @ T_{50}
0.010 ft.^{2}/day

C_α = 0.007



Load No.= 14
Load= 16.00 tsf
D_0 = 0.7090
D_{50} = 0.6785
D_{100} = 0.6481
T_{50} = 28.90 min.

C_v @ T_{50}
0.008 ft.^{2}/day

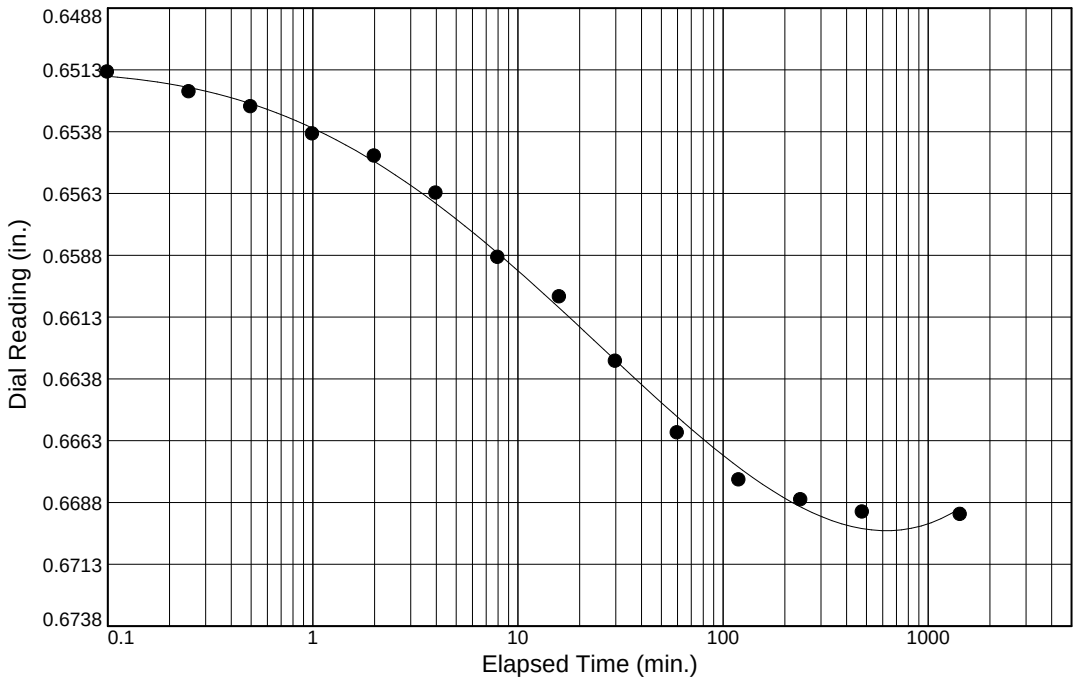
C_α = 0.003

Figure 8

Dial Reading vs. Time

Project No.: K325P194
Project: FY 26 USMC Barracks 2030

Location: CL-P1634-SPT-01 Depth: 18-20 ft.



Load No.= 15

Load= 4.00 tsf

D_0 = 0.6506

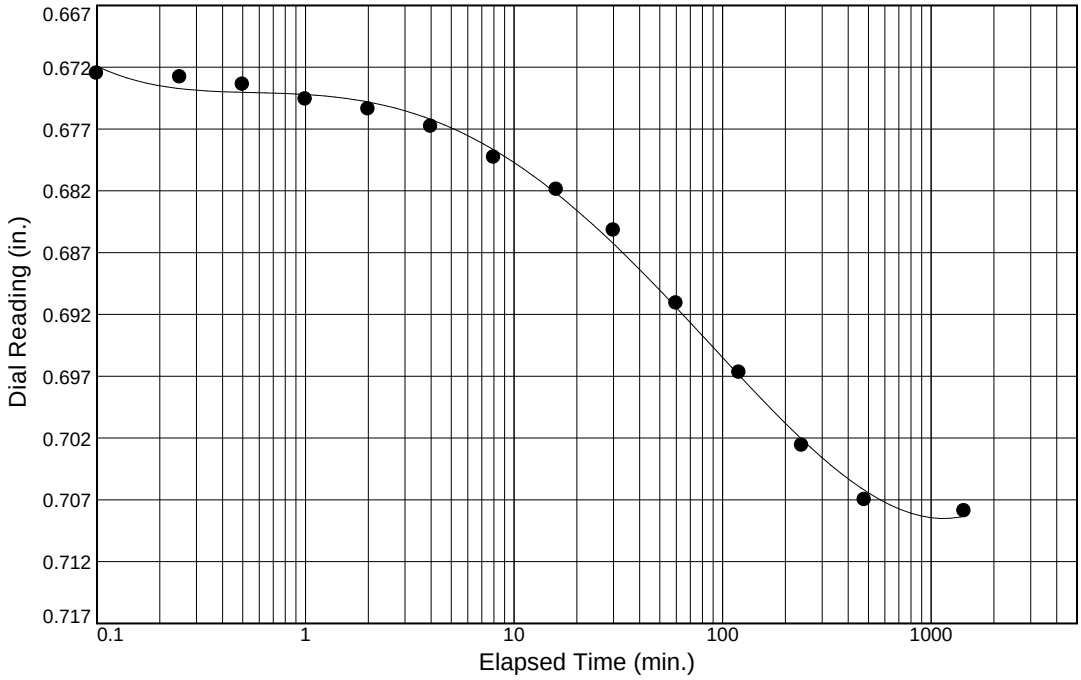
D_{50} = 0.6599

D_{100} = 0.6691

T_{50} = 11.51 min.

C_v @ T_{50}

0.019 ft.^{2}/day



Load No.= 16

Load= 1.00 tsf

D_0 = 0.6707

D_{50} = 0.6888

D_{100} = 0.7069

T_{50} = 42.47 min.

C_v @ T_{50}

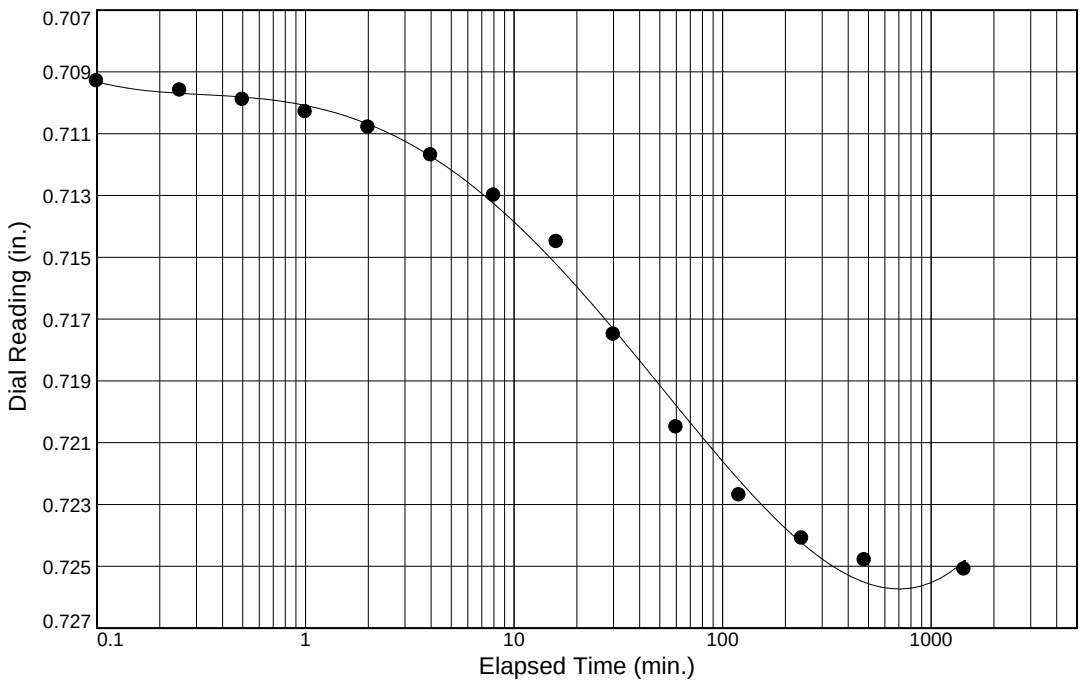
0.005 ft.^{2}/day

Figure 9

Dial Reading vs. Time

Project No.: K325P194
Project: FY 26 USMC Barracks 2030

Location: CL-P1634-SPT-01 Depth: 18-20 ft.



Load No.= 17

Load= 0.25 tsf

D_0 = 0.7084

D_{50} = 0.7165

D_{100} = 0.7246

T_{50} = 23.58 min.

C_v @ T_{50}
0.011 ft.^{2}/day

Figure 10

Bulk Soil Sample CBR Testing

The bulk soil samples were subjected to Standard Proctor and CBR testing in general accordance with ASTM D698 and ASTM D1883, respectively. Specimens were compacted to approximately 95% compaction at approximately 2% wet of optimum moisture, and subjected to a 15lb surcharge load. The stress-strain curves were plotted. If necessary, the stress-strain curve was corrected by adjusting the location of the origin for concave shaped curves. CBR results were compared for 0.1-inch and 0.2-inch penetration, and subsequently, the CBR value was selected at 0.1-inch penetration using the corrected load values. These test results are provided in the Table below.

Summary of CBR Test Results

Sample No	Boring ID	Depth Below Grade (ft)	USCS	w_N (%)	Pass #200 Sieve (%)	A.L. (LL/PL/PI)	Max. Dry Density (pcf)	Optimum Moisture (%)	CBR Value	Swell (%)
1	CL-P1634-SPT-04	1 – 3	SM	10.2	21.3	NP/NP/NP	116.5	11.7	11.0	0.0
2	CL-P1634-SPT-10	1 – 3	SM	15.1	14.9	NP/NP/NP	109.8	13.3	13.0	0.0

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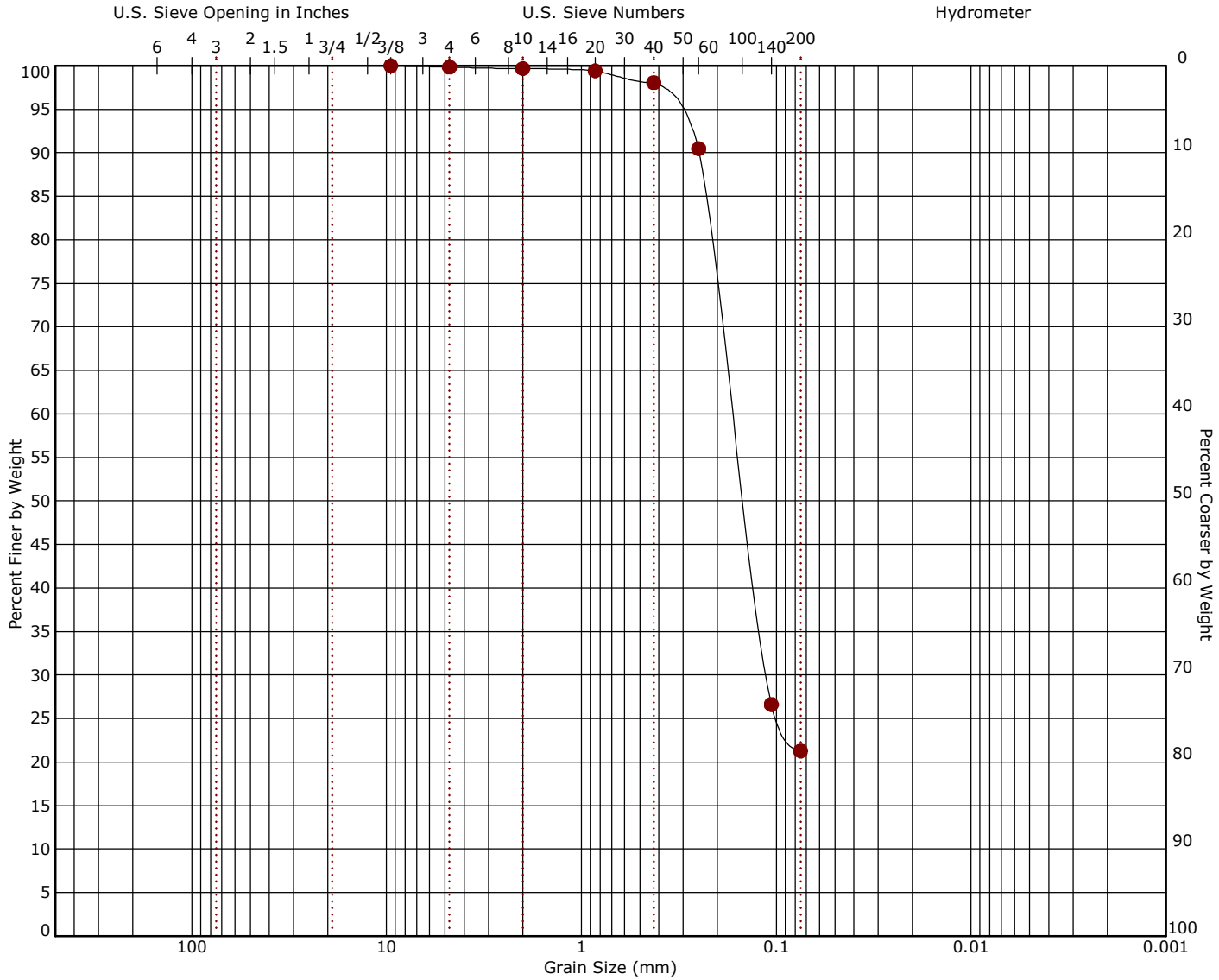
Grain Size Distribution

ASTM D422 / ASTM C136



Cobbles	Gravel		Sand			Silt or Clay
	coarse	fine	coarse	medium	fine	

Boring ID	Depth (Ft)	Description	USCS	LL	PL	PI	Cc	Cu
CL-P1634-SPT-04	1 - 3	SILTY SAND	SM	NP	NP	NP		

Boring ID	Depth (Ft)	D_{100}	D_{60}	D_{30}	D_{10}	%Cobbles	%Gravel	%Sand	%Fines	%Silt	%Clay
CL-P1634-SPT-04	1 - 3	9.5	0.166	0.111		0.0	0.2	78.6	21.3		

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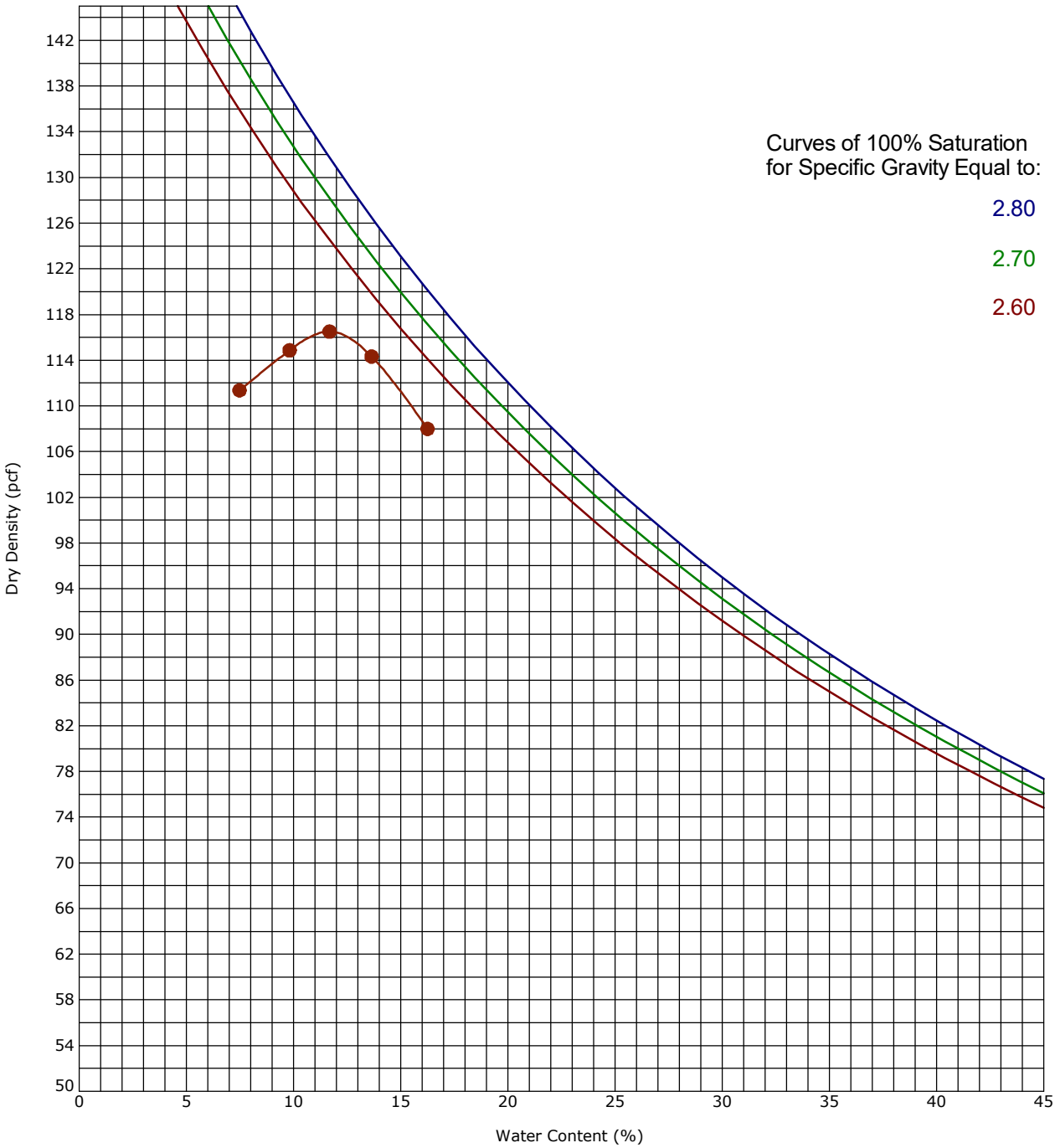
Moisture-Density Relationship

ASTM D698 Method A



Boring ID	Depth (Ft)	Description of Materials
CL-P1634-SPT-04	1 - 3	SILTY SAND(SM)

Fines (%)	Fraction >4.75 mm size	LL	PL	PI	Test Method	Maximum Dry Density (pcf)	Optimum Water Content (%)
21.3	0.0	NP	NP	NP	ASTM D698 Method A	116.5	11.7

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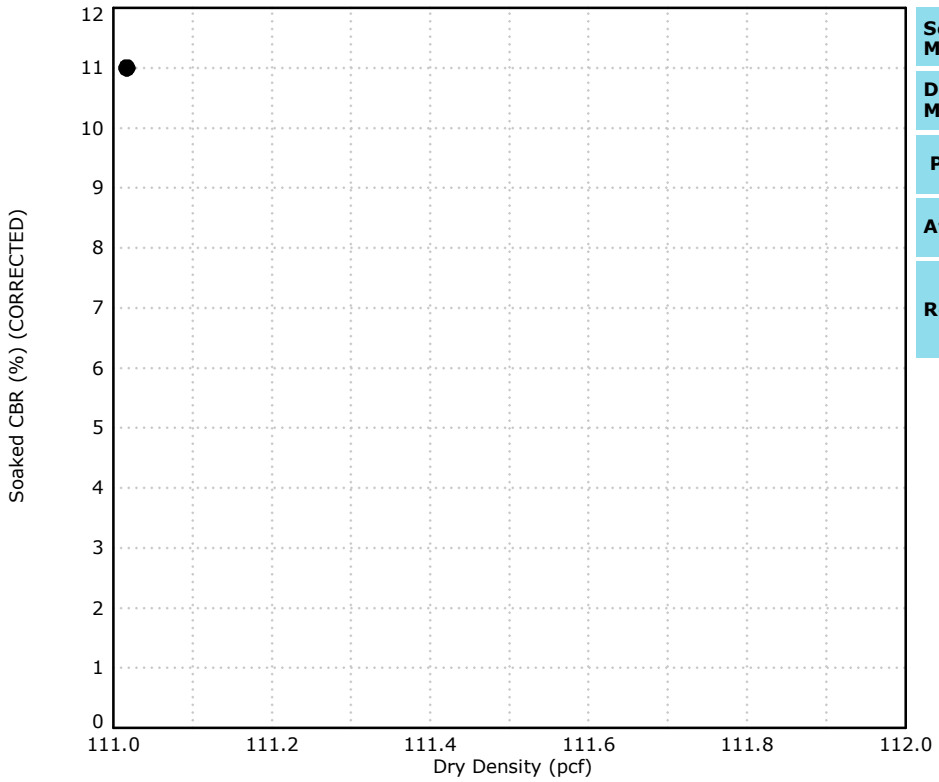
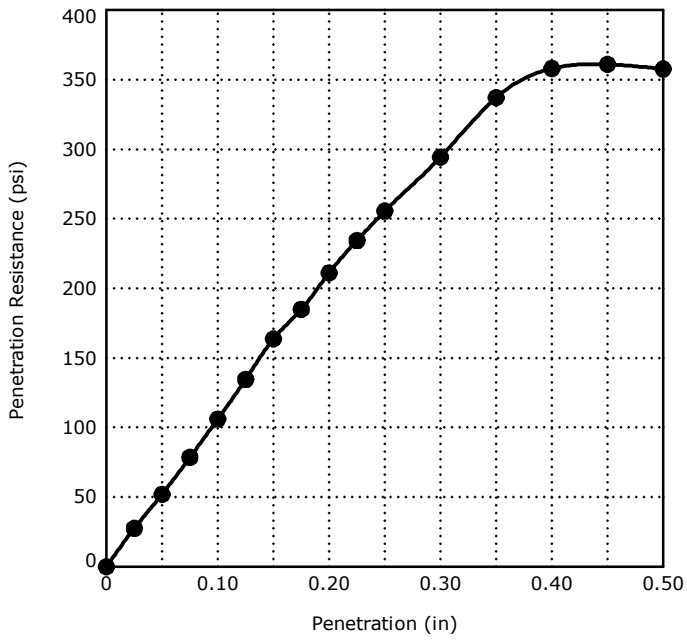
California Bearing Ratio

ASTM D1883-07[2]



Source of Material	CL-P1634-SPT-04		
Description of Material	SILTY SAND(SM)		
Percent Fines	21.3		
Atterberg Limits	LL / NP	PL / NP	PI / NP
Remarks:			



Sample No.	1
Sample Condition	Soaked
Compaction Method	ASTM 698A
Maximum Dry Density, (pcf)	116.5
Optimum Moisture Content, (%)	11.7
Dry Density before Soaking, (pcf)	111.02
Moisture Content, (%)	
After Compaction	13.2
Top 1" After Soaking	15.1
Surcharge, (lbs)	15.00
Swell, (%)	0.00
Bearing Ratio, (%)	11.0

FY26 USMC Barracks 2030 - P-1634 & P-1636
MCB Camp Lejeune | Jacksonville, NC
Terracon Project No. K625P194

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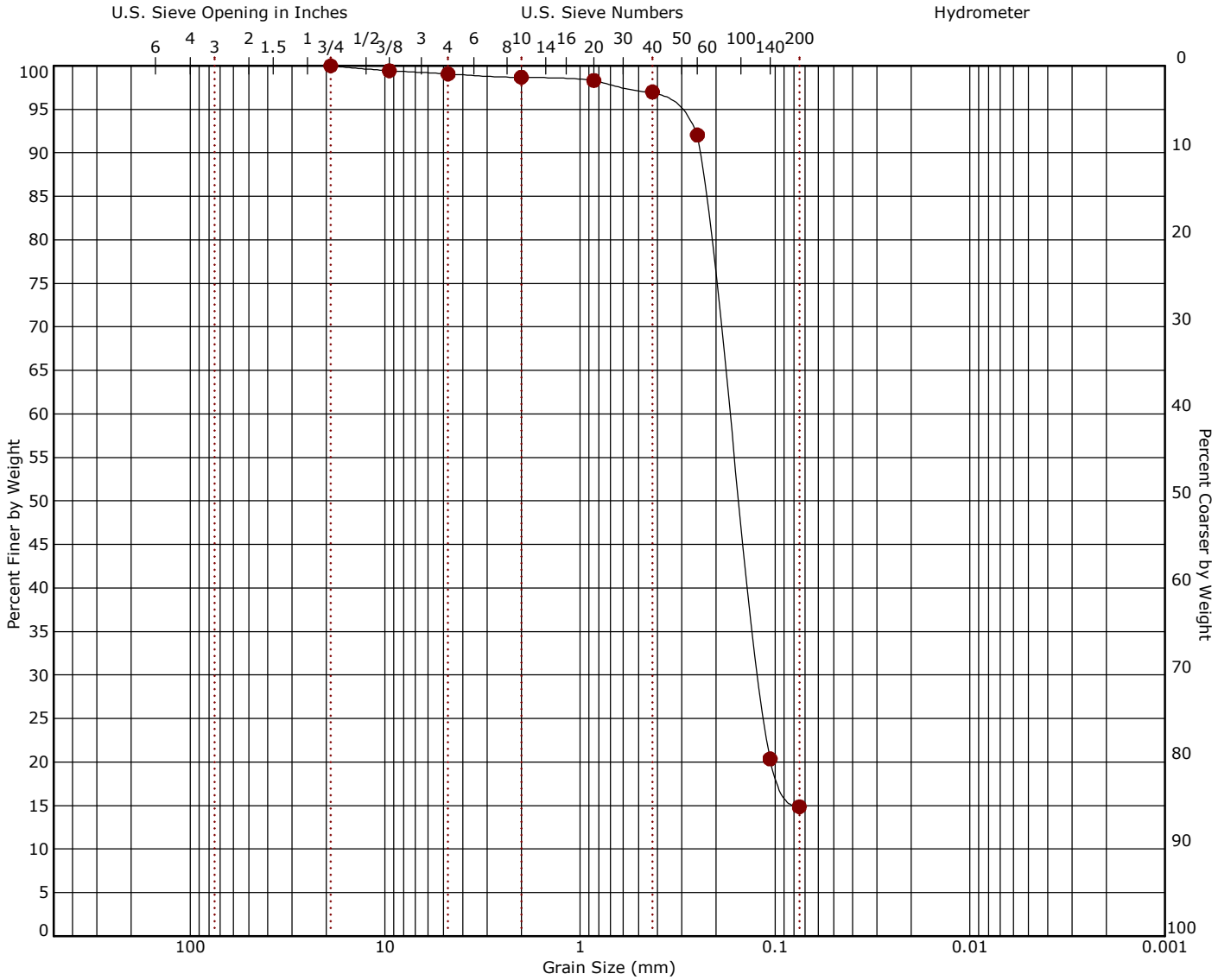
Grain Size Distribution

ASTM D422 / ASTM C136



Cobbles	Gravel		Sand			Silt or Clay
	coarse	fine	coarse	medium	fine	

Boring ID	Depth (Ft)	Description	USCS	LL	PL	PI	Cc	Cu
CL-P1634-SPT-10	1 - 3	SILTY SAND	SM	NP	NP	NP		

Boring ID	Depth (Ft)	D_{100}	D_{60}	D_{30}	D_{10}	%Cobbles	%Gravel	%Sand	%Fines	%Silt	%Clay
CL-P1634-SPT-10	1 - 3	19	0.17	0.119		0.0	0.9	84.2	14.9		

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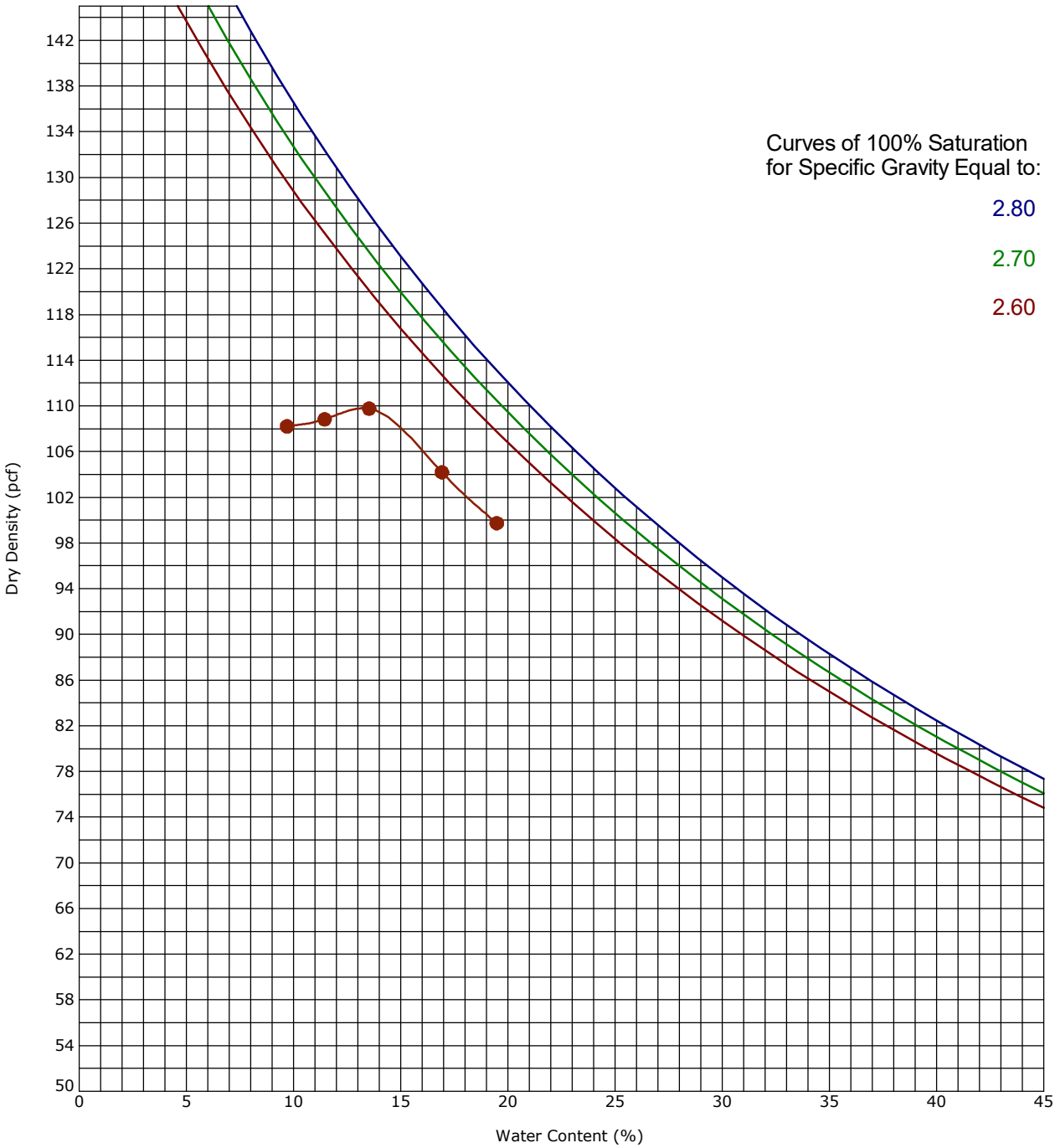
Moisture-Density Relationship

ASTM D698 Method A



Boring ID	Depth (Ft)	Description of Materials
CL-P1634-SPT-10	1 - 3	SILTY SAND(SM)

Fines (%)	Fraction >4.75 mm size	LL	PL	PI	Test Method	Maximum Dry Density (pcf)	Optimum Water Content (%)
14.9	0.0	NP	NP	NP	ASTM D698 Method A	109.8	13.3

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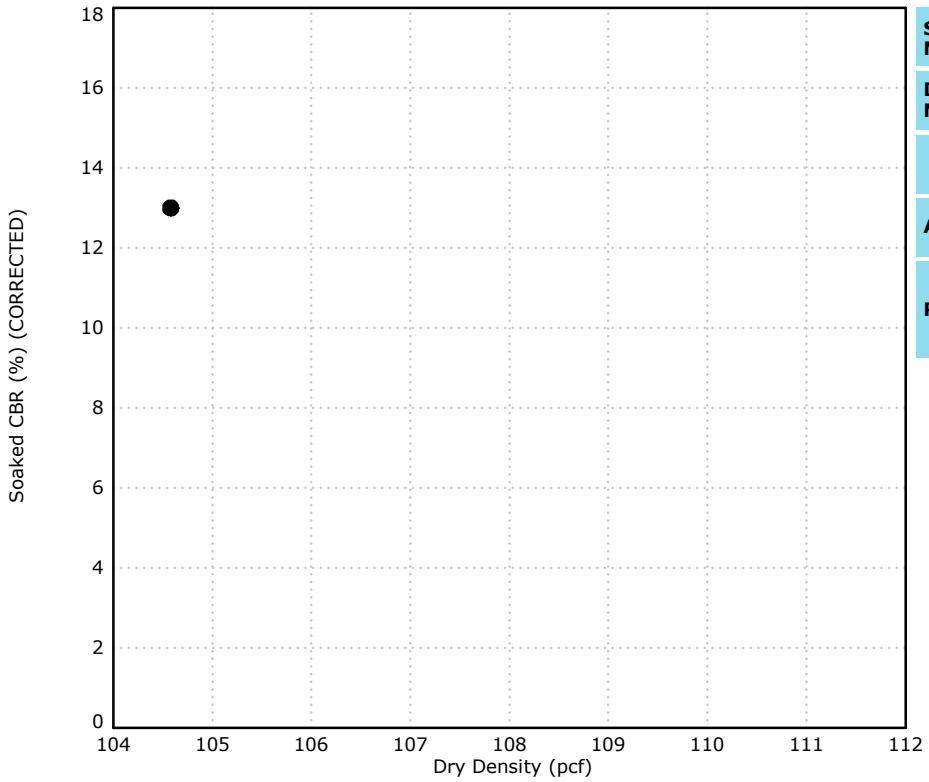
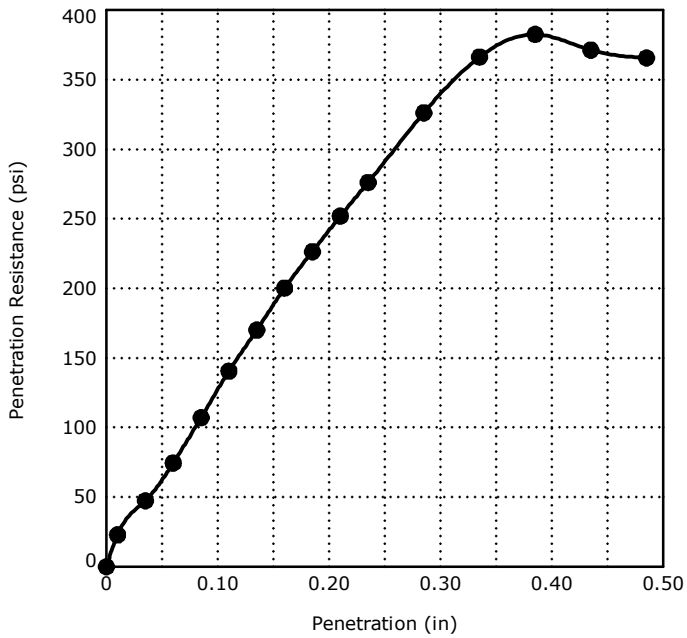
California Bearing Ratio

ASTM D1883-07[2]



Source of Material	CL-P1634-SPT-10
Description of Material	SILTY SAND(SM)
Percent Fines	14.9
Atterberg Limits	LL / NP PL / NP PI / NP
Remarks:	Stress-Penetration Curve corrected for concave upward shape; Corrected CBR value reported



Sample No.	1
Sample Condition	Soaked
Compaction Method	ASTM 698A
Maximum Dry Density, (pcf)	109.8
Optimum Moisture Content, (%)	13.3
Dry Density before Soaking, (pcf)	104.58
Moisture Content, (%)	
After Compaction	15.1
Top 1" After Soaking	17.5
Surcharge, (lbs)	15.00
Swell, (%)	0.00
Bearing Ratio, (%)	13.0

Infiltration Testing

Constant-Head Borehole Permeameter Infiltration testing was performed at the most restrictive layer within 2 feet of the ESHWT. Based on the field testing and corroborated with laboratory testing results, the hydraulic conductivity of the soils is presented in the Table below. The subconsultant's infiltration summary report is provided after this section.

Infiltration Test Results

Boring ID	Test Elevation (ft) NAVD 88	Ksat Value (in/hr)	Ksat Value (cm/sec)	Ksat Class	USCS Classification
CL-P1634-SPT-10	9.3 to 9.8	19.33	1.36×10^{-2}	Moderate	SP

The infiltration test results provided in this report are the result of permeability testing at the locations and depths indicated and do not include a safety factor. Varying site conditions, including soil composition, soil density, stratum depth, and stratum thickness should be expected throughout the site. As such, the permeability test results should not be assumed for all locations and depths across the project site.

TERRAIN ENVIRONMENTAL CONSULTING

January 22, 2026

Terracon Consultants, Inc.
2108 Capital Drive, Suite 103
Wilmington, NC 28405

Attention: Mr. Mike Delaney, P.E.

Subject: Stormwater Soil Evaluations
Project No. 25-054-SS
Camp Lejeune – Project P-1634
Jacksonville, NC

Dear Mr. Delaney:

Terrain Environmental Consulting, PLLC (TEC) appreciates the opportunity to provide you with this report for stormwater soil evaluation services associated with design of stormwater control measures (SCMs) at the above referenced project site. The results of the testing are presented below.

PROJECT BACKGROUND

TEC was contracted by Terracon to perform soil evaluation services, specifically seasonal high water table (SHWT) evaluations and hydraulic conductivity (Ksat) testing, to assist with the design of SCMs at the project site. A .kmz file showing one test location (CL-P1634-SPT-10) was provided and the location was also marked on the site prior to our mobilization.

Review of the Web Soil Survey showed the area at the test location as mapped with the Marvyn soil series. The Marvyn series is generally described as well drained soil formed in loamy marine sediments on level to strongly sloping land with an expected SHWT greater than 60 inches below the surface.

The project site is located on an active US military base. The area at/around the test location consisted of undeveloped land with nearby utility easements and buildings.

RESULTS

<u>Seasonal High Water Table Evaluation</u>

The SHWT evaluation were performed on January 5, 2026 by advancing a hand auger boring at the test location (CL-P1634-SPT-10), as shown on the attached Stormwater Soil Evaluations sketch (**Figure 1**). The hand auger boring was advanced to a depth ranging of approximately 120 inches below the existing ground surface. Soils were evaluated by a Licensed Soil Scientist for evidence of SHWT influence. This

evaluation involved looking at the actual moisture content in the soil and observing the matrix and mottle colors. Depending on the soil texture, the soil color will indicate processes that are driven by SHWT fluctuations such as iron reduction and oxidation and organic matter staining.

Soils at the test location consisted of loamy surface soils underlain by a multi-layer profile sequence of coarser to finer to coarser to finer textured soils. The SHWT was estimated at approximately 104 inches below the surface. The Observed Water Table (OWT) was not encountered to the depth evaluated. It should be noted that Onslow County is under Abnormally Dry to Moderate Drought conditions as of January 6, 2026 per the NC Drought Management Advisory Council.

A Soil Profile Description sheet, which provides a description of the observed soil horizons and the estimated SHWT depths, has also been included with this report.

Ksat Testing

TEC personnel performed in-situ saturated hydraulic conductivity (Ksat) testing at the test locations after the SHWT evaluation was complete. Specifically, the constant-head well permeameter technique (also known as shallow well pump-in technique and bore hole permeameter method) was used. This procedure is described in Methods of Soil Analysis, Part 1., Chapter 29 – Hydraulic Conductivity of Saturated Soils: Field Methods, 29 – 3.2 Shallow Well Pump In Method, pp. 758-763 and in the Soil Science Society of America Journal, Vol. 53, no. 5, Sept. – Oct. 1989, “A Constant-head Permeameter for Measuring Saturated Hydraulic Conductivity of the Vadose Zone” and “Comparison of the Glover Solution with the Simultaneous – Equations Approach for Measuring Hydraulic Conductivity.” This method involves allowing a measured volume of water to percolate through the soil until a steady rate of flow is achieved. The steady state rate is used to calculate the Ksat of the soil horizon using the Glover equation.

The Ksat testing was performed within the most-hydraulically limiting horizon within two feet above the SHWT to satisfy NC Division of Environmental Quality (NCDEQ) soil testing requirements for infiltration systems.

See Table 1 below for a summary of the soil evaluation results.

TABLE 1				
TEST LOCATION	**SHWT (inches below ground surface)**	**OWT (inches below ground surface)**	**Ksat Testing Interval (inches below ground surface)**	**Ksat RATE (inches per hour)**
CL-P1634-SPT-10	104 inches	Not Observed	74 to 80 inches	19.33 in/hr

DISCUSSION

At the test location a thick horizon of low-chroma sandy soil was encountered above the SHWT (labeled as 2E/Bt in the soil profiles). High chroma soil features which appeared to be clay films and not redoximorphic features (indicative of SHWT conditions) were observed in this horizon as well. Water in a nearby surface water feature was estimated to be 8 to 10 feet below the ground surface elevation of the test location, thus we feel the SHWT is not within the 2E/Bt horizon but rather below it. However, the currently dry climatic conditions make this determination difficult. Additional soil evaluations and/or groundwater monitoring in this area would help to determine if the high chroma soil features as redoximorphic features or clay films coating the sand grains.

CLOSING

We appreciate the opportunity to provide stormwater soil evaluation services. If you have any questions, please do not hesitate to contact me.

Sincerely,

Paul Masten, LSS, PWS
President/Owner

Attachments
Figure 1 – Stormwater Soil Evaluations
Soil Profile Descriptions

Figure 1 - Stormwater Soil Evaluations
Camp Lejeune - Project P-1634
Jacksonville, NC

0 2,000 Feet

N

SOIL PROFILE DESCRIPTIONS
Camp Lejeune
Project P-1634
Jacksonville, NC

Location	Horizon	Depth (inches)	Matrix	Mottles	Texture, Structure, Consistence
CL-P1634-SPT-10	A	0-3	10YR 3/2		Very dark grayish brown loam, strong, fine, sub-angular blocky, friable
	AE	3-7	2.5Y 3/1		Very dark gray sandy loam, granular, friable
	E	7-11	10YR 6/2		Light brownish gray very fine sand, single grain, loose
	E/Bs1	11-15	10YR 5/4	10YR 5/6 10YR 5/8	Yellowish brown loamy sand, granular, very friable; cemented yellowish brown sands
	E/Bs2	15-23	2.5Y 6/4	10YR 5/6 10YR 5/8	Light yellowish brown loamy sand, granular, very friable; yellowish brown cemented sands
	Bt1	23-35	10YR 5/8		Yellowish brown sandy clay loam, moderate, medium sub-angular blocky, slightly sticky, non-plastic, firm
	Bt2	35-43	10YR 5/6		Yellowish brown sandy loam, moderate, fine sub-angular blocky, slightly sticky, non-plastic, friable
	2E	43-52	2.5Y 6/6		Olive yellow loamy sand, moderate, fine sub-angular blocky, very friable
	2E/Bt	52-104	10YR 7/1	10YR 5/4 10YR 5/8	Light gray fine sand, single grain, loose; yellowish brown clay films
	2Bt	104-120	2.5Y 6/3	10YR 5/8 2.5Y 6/2 2.5Y 5/2	Light yellowish brown sandy loam, moderate, medium sub-angular blocky, friable; common yellowish brown redox concentrations and light brownish gray to grayish brown redox depletions
Seasonal High Water Table = 104 inches below the existing ground surface. Water table not observed.					

Soil Corrosivity Testing

One (1) composite soil sample was collected over a depth interval of 1 to 6 feet below existing grades for analysis regarding soil corrosiveness and aggressiveness potential. The sampling equipment was cleaned and decontaminated using non-phosphate industrial grade detergent and a distilled water rinse prior to collecting and compositing each sample. The resultant composite soil sample was placed in appropriately preserved certified clean glass containers, labeled, packed on ice and delivered to the contract laboratory under chain-of-custody protocol for analysis for the presence and concentrations of the analytes summarized in the Table below.

Corrosivity Test Results Summary

Location	Units	CL-P1634-SPT-02	Test Method
Depth[1]	Feet (bgs)	1.0’ – 6.0’	--
Moisture Content	%	12.7	ASTM D2216
pH	Standard Units	5.0	ASTM G51
Oxidation/ Reduction Potential	RmV	227	AWWA 2589-B
Resistivity	Ω-cm	41300	ASTM G57
Sulfide	mg/kg	Negative	ASTM A647 X1.6
Chloride	mg/kg	316.4	AASHTO T291A
Sulfate	mg/kg	149.5	AASHTO T290B
Total Salts	mg/kg	112	AWWA 2520 B

1. Referenced from the existing ground surface at the time of exploration

Soil And Groundwater Analytical Testing

Three (3) collected composite soil samples and one (1) groundwater sample were submitted to the contract laboratory under chain of custody protocol for the following analyses:

- TAL Metals
- TCL Volatiles
- TCL Semi-volatiles
- PCBs
- Pesticides
- Herbicides
- TPH-DRO & GRO
- PFAS

The test results are provided in the following summary table and reports.

Composite Soil and Groundwater Summary - PFAS

Composite Soil Summary of Detections and Exceedances
Marine Corps Base Camp Lejeune - Jacksonville, North Carolina
Terracon Project # K625P194
CL-P1634

Boring ID:	CL-P1634-SPT-02	CL-P1634-SPT-05	CL-P1634-SPT-10	NC DEQ PSRG Industrial/Commercial Health Based PSRG (mg/kg)	NC DEQ PSRG Protection of Groundwater PSRG (mg/kg)
Sample Collection Depth (feet below ground surface):	1 to 6	1 to 6	1 to 6		
Sample Delivery Group No.:	L1933601	L1933601	L1933585		
Sample Collection Date:	1/6/2026	1/6/2026	1/6/2026		
PFAS via EPA Method 1633 (mg/kg)					
Perfluorobutanoic acid (PFBA)	0.0003	ND	ND	49.00	0.013
Perfluorodecanoic acid (PFDA)	ND	ND	ND	230.00	0.049
Perfluoroheptanoic acid (PFHpA)	0.000084	ND	ND	NP	NP
Perfluorohexanesulfonic acid (PFHxS)	0.00012	0.000066	ND	3.30	0.000085
Perfluorooctanesulfonic acid (PFOS)	0.00039	0.00024	0.00039	0.016	0.000013
Perfluorooctanoic acid (PFOA)	0.00021	ND	ND	0.000078	0.0000000086
Perfluoropropanoic acid (PFPrA)	0.0012	ND	ND	120.00	NP

Notes:

Detected Concentrations are reported in milligrams per kilograms (mg/kg)

NP = Not Published

ND = Not detected

RED = Exceeds respective PSRG Industrial/Commercial Health Based

RED = Exceeds respective PSRG Protection of Groundwater

Groundwater Summary of Detections and Exceedances
Marine Corps Base Camp Lejeune - Jacksonville, North Carolina
Terracon Project # K625P194
CL-P1634

Boring ID:	CL-P1634-SPT-10	CL-Field Blank-01	15A NCAC 02L .0202 Groundwater Quality Standards (ng/L)
Sample Collection Depth (feet below ground surface):	-	-	
Sample Delivery Group No.:	L1933601	L1936528	
Sample Collection Date:	1/6/2026	1/13/2026	
PFAS via EPA Method 1633 (ng/L)			
Perfluorobutanesulfonic acid (PFBS)	2.90	ND	NP
Perfluorobutanoic acid (PFBA)	19.0	ND	NP
Perfluoroheptanoic acid (PFHpA)	16.0	ND	NP
Perfluorohexanesulfonic acid (PFHxS)	2.0	ND	NP
Perfluorohexanoic acid (PFHxA)	23.0	ND	NP
Perfluorononanoic acid (PFNA)	0.650	ND	NP
Perfluoroactanesulfonamide (PFOSA)	ND	0.280	NP
Perfluorooctanesulfonic acid (PFOS)	7.10	ND	0.700
Perfluorooctanoic acid (PFOA)	10.0	ND	0.001
Perfluoropentanesulfonic acid (PRPeS)	ND	ND	NP
Perfluoropentanoic acid (PFPeA)	42.0	ND	NP
Perfluoropropanoic acid (PFPrA)	31.0	250.0	NP

Notes:

Detected Concentrations are reported in nanograms per liter (ng/L)

NP = Not Published

ND = Not detected

RED = Exceeds respective 15A NCAC 02L .0202 Groundwater Quality Standards

ANALYTICAL REPORT

February 10, 2026

Terracon - Wilmington, NC

Sample Delivery Group:	L1936528
Samples Received:	01/15/2026
Project Number:	K625P194
Description:	Marine Corps Base Camp Lejeune
Report To:	Danielle Foster 2108 Capital Drive Suite 103 Wilmington, NC 28405

Entire Report Reviewed By:

Heather J Wagner
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Gl: Glossary of Terms	5
Al: Accreditations & Locations	6
Sc: Sample Chain of Custody	7

1 Cp
2 Tc
3 Ss
4 Cn
5 Gl
6 Al
7 Sc

CL-FIELD BLANK-01 L1936528-05

Collected by	Collected date/time	Received date/time
Baylee Kutz	01/13/26 08:00	01/15/26 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Subcontracted Analyses	WG2677448	1	02/10/26 00:00	02/10/26 00:00	-	West Columbia, SC 29172

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Heather J Wagner
Project Manager

Project Comments

L1936528 -01, -02, -03, -04, -05 contains subout data that is included after the chain of custody.

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

SDG	Sample Delivery Group.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Terracon - Wilmington, NC
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Billing Information:
Accounts Payable
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Pres Chk: 22

Report to: **Danielle Foster**

Email To: **danielle.foster@terracon.com;nick.lin**

Project Description: Marin Corps Base Camp Lejeune

City/State Collected: ~~Hampton, VA~~ Jacksonville NC

Please Circle: PT MT CT (ET)

Phone: **910-229-8597**

Client Project # K625P194

Lab Project # **TERRACWNC-LEJEUNE**

Collected by (print): Baylee Kurtz

Site/Facility ID # ~~[illegible]~~ MCB CL

P.O. # ____

Collected by (signature): Baylee K

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote # ____

Date Results Needed

Immediately Packed on Ice N ___ Y X

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace — PEOPLE ADVANCING SCIENCE
12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubis/pas standard-terms.pdf

SDG # L1336528

C232

Acctnum: **TERRACWNC**
Template: **T286013**
Prelogin: **P1200317**
PM: **Heather Wagner**
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	DOD 6010 TAL Metals	DOD RCI	DOD8270TCL	DODDRO	DODPaint Filter	DODGRO	DODV8260BTEX	DODV8260TCL	DOD PFAS 1633	DOD Full TCLP+TCLP PCB	Remarks	Sample # (lab only)
CL-P1636-HP55/57-SPT-05	G	GW	—	1-13-26	1115	13	X		X	X		X		X	X		—	01
CL-P1636-HP55/57-SPT-11	G	GW	—	1-13-26	1340	13	X		X	X		X		X	X		—	02
CL-P1636-HP55/57-SPT-05	C	S	1-6	1-13-26	1100	4				X		X			X	X	—	03
CL-P1636-HP55/57-SPT-11	C	S	1-6	1-13-26	1330	4				X		X			X	X	—	04
CL-Field Blank-01	—	W	—	1-13-26	0800	2									X		—	05

AB 01/15/2026

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

pH _____ Temp _____
Flow Other
PH – 10BDH07251
TRC – 5325A337

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: X Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	1-14-26	1550	J. Dixon / Pace	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 36
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Aly Barker	Date: 01/15/2026 Time: 0830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Multiple Parcel Form

L# L1936528

Parcel Tracking Number	Infrared Thermometer ID	Temperature Reading (°C)	Correction Factor (°C)	Corrected Temperature (°C)	Custody Seal Intact
7920 9198 6222	TLA9	2.2	+0	2.2	Yes / No / Not Present
7920 9198 6428	TLA9	1.1	+0	1.1	Yes / No / Not Present
7920 9198 6141	TLA9	1.7	+0	1.7	Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present

Ashley Barber
Name

01/15/2026
Date

Report of Analysis

Pace Analytical LLC
12065 Lebanon Rd.
Mt. Juliet, TN 37122
Attention: Jimmy Huckaba

Project Name: L1936528

Project Number: WG2677448

Lot Number:**BA20003**

Date Completed:02/10/2026

02/10/2026 10:09 AM
Approved and released by:
Project Manager II: **Edward Barnett**

The electronic signature above is the equivalent of a handwritten signature.
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Pace Analytical Services, LLC (*formerly Shealy Environmental Services, Inc.*)
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Tel: 803-791-9700 Fax: 803-791-9111 www.pacelabs.com

Case Narrative
Pace Analytical LLC
Lot Number: BA20003

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report. Where sampling is conducted by the client, results relate to the accuracy of the information provided, and as the samples are received.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Additionally, the DoD QSM version 6.0 has been followed for these samples. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs, the DoD QSM, or policies are qualified on the results page or discussed below.

Pace - West Columbia is a DOD/DOE accredited laboratory; however, the following subcontract laboratories do not hold DOD/DOE certification: Schnabel Engineering, Bunnell Lammons Engineering (BLE), and Pace - Sheridan Terra (WY). The use of these subcontract laboratories is approved by the customer prior to sample shipment.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope accreditation: 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS), 2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA), 3-Perfluoroheptyl propanoic acid (7:3FTCA), 3-Perfluoropropyl propanoic acid (3:3FTCA), 4,8-Dioxa-3H-perfluorononanoic acid (ADONA), 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS), Hexafluoropropylene oxide dimer acid (HFPO-DA), N-ethyl perfluorooctanesulfonamide (NEtFOSA), N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE), N-methyl perfluorooctanesulfonamide (NMeFOSA), N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE), Nonafluoro-3,6-dioxaheptanoic acid (NFDHA), Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA), Perfluoro-3-methoxypropanoic acid (PFMPA), Perfluoro-4-methoxybutanoic acid (PFMBA), Perfluorododecanesulfonic acid (PFDoS), Perfluoropropanoic acid (PFPrA), 2H-perfluoro-2-octenoic acid (FHUEA), 2H-perfluoro-2-decenoic acid (FOUEA), Lithium Bis(trifluoromethane)sulfonimide (HQ-115) by EPA Method 8327. Perfluoropropanoic acid (PFPrA) and Bis (trifluoromethylsulfonyl)amine (TFSI) by EPA Method 1633.

Manual integration summaries are provided at the end of this report when applicable.

Where applicable, all soil sample results (including LOQ and DL if requested) are corrected for dry weight unless flagged with a "W" qualifier.

PFAS

The following samples were diluted due to the nature of the sample matrix: BA20003-001 (MS/MSD), BA20003-002. The LOQ has been elevated to reflect the dilution.

BA20003-001 (CL-P1636-HP55/57-SPT-05) (Run 1) (Analysis Batch 29427) (Prep Batch 29356) PFAS 1633LV Method List (DOD QSM 6.0) (Refrigerated)
BA20003-002 (CL-P1636-HP55/57-SPT-11) (Run 1) (Analysis Batch 29427) (Prep Batch 29356) PFAS 1633LV Method List (DOD QSM 6.0) (Refrigerated)

The following samples were diluted due to the nature of the sample matrix: BA20003-001, BA20003-002. The LOQ has been elevated to reflect the dilution.

BA20003-001 (CL-P1636-HP55/57-SPT-05) (Run 2) (Analysis Batch 29600) (Prep Batch 29556) PFAS 1633LV Method List (DOD QSM 6.0) (Refrigerated)
BA20003-002 (CL-P1636-HP55/57-SPT-11) (Run 2) (Analysis Batch 29600) (Prep Batch 29556) PFAS 1633LV Method List (DOD QSM 6.0) (Refrigerated)

Sample Summary
Pace Analytical LLC
Lot Number: BA20003

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
005	CL-FIELD BLANK-01	Aqueous	01/13/2026 0800	01/20/2026

(5 samples)

Detection Summary
Pace Analytical LLC
Lot Number: BA20003

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
005	CL-FIELD BLANK-01	Aqueous	PFOSA	1633	0.28	JM-03	ng/L	14
005	CL-FIELD BLANK-01	Aqueous	PFPrA	1633	250	M-03	ng/L	14

(17 detections)

PFAS by LC/MS/MS

Client: **Pace Analytical LLC** Laboratory ID: **BA20003-005**

Description: **CL-FIELD BLANK-01** Matrix: **Aqueous**

Date Sampled: **01/13/2026 0800**

Date Received: **01/20/2026**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	02/09/2026 1227	JWG	01/20/2026 1906	29356
2	1633	1633	1	02/04/2026 1702	JWG	02/03/2026 0729	29556

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Bis(trifluoromethylsulfonyl)amine (TFSI)	82113-65-3	1633	1.4	U	2.8	1.4	0.45	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3...)	763051-92-9	1633	2.7	U	5.7	2.7	0.84	ng/L	2
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	1633	2.7	U	5.7	2.7	0.94	ng/L	2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	1633	2.7	U	5.7	2.7	0.90	ng/L	2
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	1633	2.8	U	5.7	2.8	2.2	ng/L	2
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	1633	2.7	U	5.7	2.7	1.5	ng/L	2
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1633	2.7	U	5.7	2.7	1.8	ng/L	2
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1633	18	U	35	18	5.9	ng/L	2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6	1633	2.9	U	5.7	2.9	1.0	ng/L	2
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	4151-50-2	1633	0.70	U	1.4	0.70	0.39	ng/L	2
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	1633	1.1	U	1.4	1.1	0.82	ng/L	2
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1633	7.0	U	14	7.0	2.7	ng/L	2
N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1633	0.70	U	1.4	0.70	0.26	ng/L	2
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	1633	0.70	U	1.4	0.70	0.26	ng/L	2
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1633	7.0	U	14	7.0	2.9	ng/L	2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	1633	1.4	U	2.8	1.4	0.70	ng/L	2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	1633	1.2	U	2.8	1.2	0.27	ng/L	2
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1633	1.4	U	2.8	1.4	0.64	ng/L	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	1633	1.4	U	2.8	1.4	0.47	ng/L	2
Perfluorobutanesulfonic acid (PFBS)	375-73-5	1633	1.2	UM-03	1.4	1.2	1.1	ng/L	2
Perfluorobutanoic acid (PFBA)	375-22-4	1633	2.9	U	5.7	2.9	0.84	ng/L	1
Perfluorodecanesulfonic acid (PFDS)	335-77-3	1633	0.67	U	1.4	0.67	0.37	ng/L	2
Perfluorodecanoic acid (PFDA)	335-76-2	1633	0.70	U	1.4	0.70	0.44	ng/L	2
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5	1633	0.67	U	1.4	0.67	0.31	ng/L	2
Perfluorododecanoic acid (PFDoA)	307-55-1	1633	0.70	U	1.4	0.70	0.17	ng/L	2
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	1633	0.67	U	1.4	0.67	0.52	ng/L	2
Perfluoroheptanoic acid (PFHpA)	375-85-9	1633	0.70	U	1.4	0.70	0.28	ng/L	2
3-Perfluoroheptyl propanoic acid (7:3FTCA)	812-70-4	1633	18	U	35	18	7.2	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1633	0.64	U	1.4	0.64	0.63	ng/L	2
Perfluorohexanoic acid (PFHxA)	307-24-4	1633	0.70	U	1.4	0.70	0.21	ng/L	2
Perfluorononanesulfonic acid (PFNS)	68259-12-1	1633	0.67	U	1.4	0.67	0.41	ng/L	2
Perfluorononanoic acid (PFNA)	375-95-1	1633	0.70	U	1.4	0.70	0.54	ng/L	2
Perfluorooctanesulfonamide (PFOSA)	**754-91-6**	**1633**	**0.28**	**JM-03**	**1.4**	**0.70**	**0.25**	**ng/L**	**2**
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1633	0.65	U	1.4	0.65	0.49	ng/L	2
Perfluorooctanoic acid (PFOA)	335-67-1	1633	0.70	U	1.4	0.70	0.65	ng/L	2
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	1633	0.66	UM-03	1.4	0.66	0.39	ng/L	2
Perfluoropentanoic acid (PFPeA)	2706-90-3	1633	1.4	U	2.8	1.4	0.39	ng/L	2
Perfluoropropanoic acid (PFPrA)	**422-64-0**	**1633**	**250**	**M-03**	**5.7**	**2.9**	**2.2**	**ng/L**	**1**
3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	1633	3.6	U	7.1	3.6	1.3	ng/L	2
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1633	0.70	U	1.4	0.70	0.38	ng/L	2
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	1633	0.70	U	1.4	0.70	0.54	ng/L	2
Perfluoroundecanoic acid (PFUnA)	2058-94-8	1633	1.1	U	1.4	1.1	0.72	ng/L	2

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
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PFAS by LC/MS/MS

Client: **Pace Analytical LLC**
Laboratory ID: **BA20003-005**
Description: **CL-FIELD BLANK-01**
Matrix: **Aqueous**
Date Sampled: **01/13/2026 0800**
Date Received: **01/20/2026**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	02/09/2026 1227	JWG	01/20/2026 1906	29356
2	1633	1633	1	02/04/2026 1702	JWG	02/03/2026 0729	29556

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
13C2-4:2FTS	M-03	99	40-200		106	40-200
13C2-6:2FTS		97	40-200		103	40-200
13C2-8:2FTS	M-03	104	40-300		108	40-300
13C8-PFOSA		83	40-130		101	40-130
D5-NEtFOSA	M-03	59	10-130		60	10-130
D3-NMeFOSA		64	10-130		64	10-130
D5-NEtFOSAA	M-03	76	25-135		89	25-135
D3-NMeFOSAA	M-03	84	40-170		95	40-170
13C4-PFBA		88	5-130		94	5-130
13C5-PFPeA		96	40-130	M-03	105	40-130
13C5-PFHxA		99	40-130		104	40-130
13C4-PFHpA		103	40-130		104	40-130
13C8-PFOA		100	40-130		113	40-130
13C9-PFNA		95	40-130		99	40-130
13C6-PFDA		97	40-130	M-03	86	40-130
13C3-PFBS		95	40-135		108	40-135
13C3-PFHxS	M-03	103	40-130	M-03	113	40-130
13C8-PFOS	M-03	87	40-130	M-03	95	40-130
13C7-PFUnA		81	30-130		88	30-130
13C2-PFDoA		71	10-130	M-03	81	10-130
13C2-PFTeDA	M-03	62	10-130		68	10-130
13C3-HFPO-DA		103	40-130		108	40-130
D7-NMeFOSE	M-03	66	10-130	M-03	82	10-130
D9-NEtFOSE	M-03	60	10-130		78	10-130
13C3-PFPrA	M-03	65	5-130		65	5-130

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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QC Summary

PFAS by LC/MS/MS - MB

Sample ID: BQ29356-001
Batch: 29356
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/20/2026 1906

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
PFMPA	1.6	U	1	3.2	1.6	0.72	ng/L	01/22/2026 0416
PFBA	3.2	U	1	6.4	3.2	0.95	ng/L	01/22/2026 0416
PFPrA	3.2	U	1	6.4	3.2	2.5	ng/L	01/22/2026 0416

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS	M-03	104	40-200
13C2-6:2FTS		111	40-200
13C2-8:2FTS		104	40-300
13C8-PFOSA		101	40-130
D5-NEtFOSA	M-03	87	10-130
D3-NMeFOSA		87	10-130
D5-NEtFOSAA		88	25-135
D3-NMeFOSAA		99	40-170
13C4-PFBA		97	5-130
13C5-PFPeA		107	40-130
13C5-PFHxA		115	40-130
13C4-PFHpA		114	40-130
13C8-PFOA		116	40-130
13C9-PFNA	M-03	115	40-130
13C6-PFDA	M-03	116	40-130
13C3-PFBS		109	40-135
13C3-PFHxS		111	40-130
13C8-PFOS		106	40-130
13C7-PFUnA	M-03	110	30-130
13C2-PFDoA		100	10-130
13C2-PFTeDA		89	10-130
13C3-HFPO-DA		119	40-130
D7-NMeFOSE		94	10-130
D9-NEtFOSE		90	10-130
13C3-PFPrA		83	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29356-002
Batch: 29356
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/20/2026 1906

Parameter	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
PFMPA	80	88	M-03	1	111	55-140	01/22/2026 0425
PFBA	160	180	M-03	1	110	70-140	01/22/2026 0425
PFPrA	160	170		1	107	70-140	01/22/2026 0425

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		102	40-200
13C2-6:2FTS		105	40-200
13C2-8:2FTS		97	40-300
13C8-PFOSA		92	40-130
D5-NEtFOSA		81	10-130
D3-NMeFOSA		81	10-130
D5-NEtFOSAA		82	25-135
D3-NMeFOSAA		91	40-170
13C4-PFBA		91	5-130
13C5-PFPeA		103	40-130
13C5-PFHxA		107	40-130
13C4-PFHpA		102	40-130
13C8-PFOA		104	40-130
13C9-PFNA		110	40-130
13C6-PFDA		101	40-130
13C3-PFBS		105	40-135
13C3-PFHxS		107	40-130
13C8-PFOS	M-03	91	40-130
13C7-PFUnA		95	30-130
13C2-PFDoA		89	10-130
13C2-PFTeDA		75	10-130
13C3-HFPO-DA		108	40-130
D7-NMeFOSE		84	10-130
D9-NEtFOSE		82	10-130
13C3-PFPrA		83	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29356-102
Batch: 29356
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/20/2026 1906

Parameter	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
PFMPA	6.4	7.3	M-03	1	114	55-140	01/22/2026 0435
PFBA	13	15		1	114	70-140	01/22/2026 0435
PFPrA	13	15	M-03	1	116	70-140	01/22/2026 0435

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		97	40-200
13C2-6:2FTS		99	40-200
13C2-8:2FTS		97	40-300
13C8-PFOSA		90	40-130
D5-NEtFOSA		77	10-130
D3-NMeFOSA		76	10-130
D5-NEtFOSAA		87	25-135
D3-NMeFOSAA		95	40-170
13C4-PFBA		84	5-130
13C5-PFPeA		95	40-130
13C5-PFHxA		99	40-130
13C4-PFHpA		96	40-130
13C8-PFOA		103	40-130
13C9-PFNA		94	40-130
13C6-PFDA	M-03	103	40-130
13C3-PFBS		103	40-135
13C3-PFHxS		95	40-130
13C8-PFOS		94	40-130
13C7-PFUnA		92	30-130
13C2-PFDoA		86	10-130
13C2-PFTeDA		78	10-130
13C3-HFPO-DA		102	40-130
D7-NMeFOSE		87	10-130
D9-NEtFOSE		82	10-130
13C3-PFPrA		85	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MS

Sample ID: BA20003-001MS
Batch: 29356
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/20/2026 1906

Parameter	Sample Amount (ng/L)	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
PFMPA	ND	1600	1900	M-03	1	119	55-140	01/22/2026 0455
PFBA	27	3200	3900		1	121	70-140	01/22/2026 0455
PFPrA	86	3200	4500		1	138	70-140	01/22/2026 0455

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		92	40-200
13C2-6:2FTS	M-03	91	40-200
13C2-8:2FTS	M-03	87	40-300
13C8-PFOSA		80	40-130
D5-NEtFOSA		66	10-130
D3-NMeFOSA		66	10-130
D5-NEtFOSAA		72	25-135
D3-NMeFOSAA		80	40-170
13C4-PFBA		80	5-130
13C5-PFPeA		89	40-130
13C5-PFHxA		94	40-130
13C4-PFHpA		90	40-130
13C8-PFOA		93	40-130
13C9-PFNA		89	40-130
13C6-PFDA		78	40-130
13C3-PFBS		89	40-135
13C3-PFHxS		91	40-130
13C8-PFOS		82	40-130
13C7-PFUnA		74	30-130
13C2-PFDoA		68	10-130
13C2-PFTeDA		66	10-130
13C3-HFPO-DA		95	40-130
D7-NMeFOSE		72	10-130
D9-NEtFOSE	M-03	71	10-130
13C3-PFPrA		67	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MSD

Sample ID: BA20003-001MD
Batch: 29356
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/20/2026 1906

Parameter	Sample Amount (ng/L)	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
PFMPA	ND	1600	1700	M-03	1	108	9.2	55-140	30	01/22/2026 0504
PFBA	27	3200	3500	M-03	1	107	12	70-140	30	01/22/2026 0504
PFPrA	86	3200	4100	M-03	1	125	9.3	70-140	30	01/22/2026 0504

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS	M-03	96	40-200
13C2-6:2FTS	M-03	102	40-200
13C2-8:2FTS		96	40-300
13C8-PFOSA		93	40-130
D5-NEtFOSA		77	10-130
D3-NMeFOSA		79	10-130
D5-NEtFOSAA		87	25-135
D3-NMeFOSAA		91	40-170
13C4-PFBA		89	5-130
13C5-PFPeA		97	40-130
13C5-PFHxA		100	40-130
13C4-PFHpA		98	40-130
13C8-PFOA		102	40-130
13C9-PFNA		107	40-130
13C6-PFDA		95	40-130
13C3-PFBS		98	40-135
13C3-PFHxS		97	40-130
13C8-PFOS		91	40-130
13C7-PFUnA		93	30-130
13C2-PFDoA		79	10-130
13C2-PFTeDA		75	10-130
13C3-HFPO-DA		102	40-130
D7-NMeFOSE		84	10-130
D9-NEtFOSE		80	10-130
13C3-PFPrA		74	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29382-001
Batch: 29382
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/22/2026 1105

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
TFSI	0.20	U	1	0.40	0.20	0.076	ng/g	01/23/2026 1131
11Cl-PF3OUdS	0.38	U	1	0.80	0.38	0.21	ng/g	01/23/2026 1131
9Cl-PF3ONS	0.37	U	1	0.80	0.37	0.21	ng/g	01/23/2026 1131
ADONA	0.38	U	1	0.80	0.38	0.18	ng/g	01/23/2026 1131
8:2FTS	0.38	U	1	0.80	0.38	0.25	ng/g	01/23/2026 1131
4:2FTS	0.37	U	1	0.80	0.37	0.30	ng/g	01/23/2026 1131
6:2FTS	0.57	U	1	0.80	0.57	0.52	ng/g	01/23/2026 1131
5:3FTCA	2.5	U	1	5.0	2.5	1.7	ng/g	01/23/2026 1131
HFPO-DA	0.40	U	1	0.80	0.40	0.21	ng/g	01/23/2026 1131
NEtFOSA	0.10	U	1	0.20	0.10	0.079	ng/g	01/23/2026 1131
NEtFOSAA	0.10	U	1	0.20	0.10	0.089	ng/g	01/23/2026 1131
NEtFOSE	1.0	UM-03	1	2.0	1.0	0.67	ng/g	01/23/2026 1131
NMeFOSA	0.10	U	1	0.20	0.10	0.060	ng/g	01/23/2026 1131
NMeFOSAA	0.15	U	1	0.20	0.15	0.15	ng/g	01/23/2026 1131
NMeFOSE	1.0	U	1	2.0	1.0	0.64	ng/g	01/23/2026 1131
NFDHA	0.20	U	1	0.40	0.20	0.16	ng/g	01/23/2026 1131
PFEESA	0.18	U	1	0.40	0.18	0.078	ng/g	01/23/2026 1131
PFMPA	0.20	U	1	0.40	0.20	0.13	ng/g	01/23/2026 1131
PFMBA	0.20	U	1	0.40	0.20	0.14	ng/g	01/23/2026 1131
PFBS	0.089	U	1	0.20	0.089	0.079	ng/g	01/23/2026 1131
PFBA	0.40	U	1	0.80	0.40	0.25	ng/g	01/23/2026 1131
PFDS	0.10	U	1	0.20	0.10	0.040	ng/g	01/23/2026 1131
PFDA	0.15	U	1	0.20	0.15	0.11	ng/g	01/23/2026 1131
PFDoS	0.10	U	1	0.20	0.10	0.068	ng/g	01/23/2026 1131
PFDoA	0.10	U	1	0.20	0.10	0.097	ng/g	01/23/2026 1131
PFHpS	0.10	U	1	0.20	0.10	0.082	ng/g	01/23/2026 1131
PFHpA	0.10	U	1	0.20	0.10	0.065	ng/g	01/23/2026 1131
7:3FTCA	2.5	U	1	5.0	2.5	1.8	ng/g	01/23/2026 1131
PFHxS	0.091	U	1	0.20	0.091	0.065	ng/g	01/23/2026 1131
PFHxA	0.10	U	1	0.20	0.10	0.038	ng/g	01/23/2026 1131
PFNS	0.10	U	1	0.20	0.10	0.084	ng/g	01/23/2026 1131
PFNA	0.10	U	1	0.20	0.10	0.096	ng/g	01/23/2026 1131
PFOSA	0.10	U	1	0.20	0.10	0.078	ng/g	01/23/2026 1131
PFOS	0.14	U	1	0.20	0.14	0.12	ng/g	01/23/2026 1131
PFOA	0.15	U	1	0.20	0.15	0.11	ng/g	01/23/2026 1131
PFPeS	0.094	U	1	0.20	0.094	0.051	ng/g	01/23/2026 1131
PFPeA	0.20	U	1	0.40	0.20	0.15	ng/g	01/23/2026 1131
PFPrA	0.72	UM-03	1	0.80	0.72	0.67	ng/g	01/23/2026 1131
3:3FTCA	0.75	U	1	1.0	0.75	0.54	ng/g	01/23/2026 1131
PFTeDA	0.10	U	1	0.20	0.10	0.099	ng/g	01/23/2026 1131
PFTrDA	0.10	U	1	0.20	0.10	0.058	ng/g	01/23/2026 1131
PFUnA	0.10	U	1	0.20	0.10	0.10	ng/g	01/23/2026 1131

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29382-001
Batch: 29382
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/22/2026 1105

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS	M-03	124	40-165
13C2-6:2FTS		129	40-215
13C2-8:2FTS		120	40-275
13C8-PFOSA		105	40-130
D5-NEtFOSA		72	10-130
D3-NMeFOSA		78	10-130
D5-NEtFOSAA		102	40-150
D3-NMeFOSAA		103	40-135
13C4-PFBA	M-03	120	8-130
13C5-PFPeA		128	35-130
13C5-PFHxA		128	40-130
13C4-PFHpA		128	40-130
13C8-PFOA		129	40-130
13C9-PFNA		125	40-130
13C6-PFDA	M-03	114	40-130
13C3-PFBS	M-03	133	40-135
13C3-PFHxS		129	40-130
13C8-PFOS		112	40-130
13C7-PFUnA	M-03	100	40-130
13C2-PFDoA		80	40-130
13C2-PFTeDA		60	20-130
13C3-HFPO-DA		130	40-130
D7-NMeFOSE		93	20-130
D9-NEtFOSE	M-03	84	15-130
13C3-PFPrA	M-03	100	8-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29382-002
Batch: 29382
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/22/2026 1105

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	9.8	10		1	102	70-140	01/23/2026 1141
11Cl-PF3OUdS	19	13		1	67	45-160	01/23/2026 1141
9Cl-PF3ONS	19	18		1	94	70-150	01/23/2026 1141
ADONA	19	19		1	103	70-160	01/23/2026 1141
8:2FTS	19	21		1	107	70-150	01/23/2026 1141
4:2FTS	19	19		1	101	60-150	01/23/2026 1141
6:2FTS	19	21		1	112	55-200	01/23/2026 1141
5:3FTCA	130	130		1	100	60-130	01/23/2026 1141
HFPO-DA	20	21		1	103	70-145	01/23/2026 1141
NEtFOSA	5.0	6.2	M-03	1	123	70-140	01/23/2026 1141
NEtFOSAA	5.0	4.5	M-03	1	91	65-165	01/23/2026 1141
NEtFOSE	50	53		1	107	70-135	01/23/2026 1141
NMeFOSA	5.0	6.0	M-03	1	119	70-155	01/23/2026 1141
NMeFOSAA	5.0	4.8	M-03	1	95	65-155	01/23/2026 1141
NMeFOSE	50	54	M-03	1	107	70-140	01/23/2026 1141
NFDHA	10	9.9		1	99	60-155	01/23/2026 1141
PFEESA	8.9	9.0		1	101	70-140	01/23/2026 1141
PFMPA	10	9.7	M-03	1	97	30-140	01/23/2026 1141
PFMBA	10	9.9	M-03	1	99	60-150	01/23/2026 1141
PFBS	4.4	4.1		1	93	65-145	01/23/2026 1141
PFBA	20	20	M-03	1	99	70-140	01/23/2026 1141
PFDS	4.8	3.4		1	70	40-155	01/23/2026 1141
PFDA	5.0	5.2		1	104	70-155	01/23/2026 1141
PFDoS	4.8	1.8	M-03	1	37	25-160	01/23/2026 1141
PFDoA	5.0	5.0		1	101	70-150	01/23/2026 1141
PFHpS	4.8	4.8		1	101	65-155	01/23/2026 1141
PFHpA	5.0	5.0		1	100	65-145	01/23/2026 1141
7:3FTCA	130	130		1	101	60-150	01/23/2026 1141
PFHxS	4.6	3.9		1	86	60-150	01/23/2026 1141
PFHxA	5.0	5.0		1	100	65-140	01/23/2026 1141
PFNS	4.8	4.0	M-03	1	82	55-140	01/23/2026 1141
PFNA	5.0	5.1	M-03	1	102	70-155	01/23/2026 1141
PFOSA	5.0	5.1	M-03	1	103	70-140	01/23/2026 1141
PFOS	4.6	4.3	M-03	1	93	65-160	01/23/2026 1141
PFOA	5.0	4.7		1	94	70-150	01/23/2026 1141
PFPeS	4.7	4.4		1	94	55-160	01/23/2026 1141
PFPeA	10	9.9		1	99	60-150	01/23/2026 1141
PFPrA	20	19	M-03	1	94	70-140	01/23/2026 1141
3:3FTCA	25	25	M-03	1	100	45-130	01/23/2026 1141
PFTeDA	5.0	4.6		1	92	65-150	01/23/2026 1141
PFTrDA	5.0	3.3		1	66	65-150	01/23/2026 1141
PFUnA	5.0	4.7	M-03	1	94	70-155	01/23/2026 1141

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29382-002
Batch: 29382
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/22/2026 1105

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		116	40-165
13C2-6:2FTS		110	40-215
13C2-8:2FTS		107	40-275
13C8-PFOSA		88	40-130
D5-NEtFOSA		45	10-130
D3-NMeFOSA	M-03	53	10-130
D5-NEtFOSAA		90	40-150
D3-NMeFOSAA		96	40-135
13C4-PFBA	M-03	107	8-130
13C5-PFPeA		116	35-130
13C5-PFHxA		114	40-130
13C4-PFHpA		114	40-130
13C8-PFOA		114	40-130
13C9-PFNA		108	40-130
13C6-PFDA		99	40-130
13C3-PFBS	M-03	122	40-135
13C3-PFHxS		122	40-130
13C8-PFOS		109	40-130
13C7-PFUnA		94	40-130
13C2-PFDoA		67	40-130
13C2-PFTeDA		39	20-130
13C3-HFPO-DA		119	40-130
D7-NMeFOSE		75	20-130
D9-NEtFOSE		67	15-130
13C3-PFPrA	M-03	92	8-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29382-102
Batch: 29382
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/22/2026 1105

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	0.98	0.81	M-03	1	82	70-140	01/23/2026 1151
11Cl-PF3OUdS	1.9	1.1	M-03	1	59	45-160	01/23/2026 1151
9Cl-PF3ONS	1.9	1.6		1	85	70-150	01/23/2026 1151
ADONA	1.9	1.6		1	83	70-160	01/23/2026 1151
8:2FTS	1.9	1.8	M-03	1	94	70-150	01/23/2026 1151
4:2FTS	1.9	1.6		1	84	60-150	01/23/2026 1151
6:2FTS	1.9	1.7	M-03	1	87	55-200	01/23/2026 1151
5:3FTCA	13	10		1	81	60-130	01/23/2026 1151
HFPO-DA	2.0	1.7		1	84	70-145	01/23/2026 1151
NEtFOSA	0.50	0.49	M-03	1	97	70-140	01/23/2026 1151
NEtFOSAA	0.50	0.43	M-03	1	86	65-165	01/23/2026 1151
NEtFOSE	5.0	4.4	M-03	1	88	70-135	01/23/2026 1151
NMeFOSA	0.50	0.43	M-03	1	87	70-155	01/23/2026 1151
NMeFOSAA	0.50	0.39	M-03	1	78	65-155	01/23/2026 1151
NMeFOSE	5.0	4.3	M-03	1	87	70-140	01/23/2026 1151
NFDHA	1.0	0.86	M-03	1	86	60-155	01/23/2026 1151
PFEESA	0.89	0.76	M-03	1	85	70-140	01/23/2026 1151
PFMPA	1.0	0.83	M-03	1	83	30-140	01/23/2026 1151
PFMBA	1.0	0.84	M-03	1	84	60-150	01/23/2026 1151
PFBS	0.44	0.39	M-03	1	88	65-145	01/23/2026 1151
PFBA	2.0	1.7	M-03	1	85	70-140	01/23/2026 1151
PFDS	0.48	0.29		1	61	40-155	01/23/2026 1151
PFDA	0.50	0.38	M-03	1	75	70-155	01/23/2026 1151
PFDoS	0.48	0.15		1	32	25-160	01/23/2026 1151
PFDoA	0.50	0.47	M-03	1	93	70-150	01/23/2026 1151
PFHpS	0.47	0.44		1	93	65-155	01/23/2026 1151
PFHpA	0.50	0.44	M-03	1	87	65-145	01/23/2026 1151
7:3FTCA	13	11	M-03	1	84	60-150	01/23/2026 1151
PFHxS	0.45	0.35	M-03	1	79	60-150	01/23/2026 1151
PFHxA	0.50	0.41	M-03	1	81	65-140	01/23/2026 1151
PFNS	0.48	0.32	M-03	1	66	55-140	01/23/2026 1151
PFNA	0.50	0.43	M-03	1	86	70-155	01/23/2026 1151
PFOSA	0.50	0.42	M-03	1	83	70-140	01/23/2026 1151
PFOS	0.46	0.39	M-03	1	84	65-160	01/23/2026 1151
PFOA	0.50	0.46	M-03	1	92	70-150	01/23/2026 1151
PFPeS	0.47	0.40	M-03	1	86	55-160	01/23/2026 1151
PFPeA	1.0	0.90	M-03	1	90	60-150	01/23/2026 1151
PFPrA	2.0	1.7	M-03	1	87	70-140	01/23/2026 1151
3:3FTCA	2.5	2.3	M-03	1	91	45-130	01/23/2026 1151
PFTeDA	0.50	0.45	M-03	1	90	65-150	01/23/2026 1151
PFTrDA	0.50	0.33	M-03	1	65	65-150	01/23/2026 1151
PFUnA	0.50	0.46		1	91	70-155	01/23/2026 1151

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29382-102
Batch: 29382
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/22/2026 1105

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		114	40-165
13C2-6:2FTS		118	40-215
13C2-8:2FTS		107	40-275
13C8-PFOSA		89	40-130
D5-NEtFOSA	M-03	50	10-130
D3-NMeFOSA		58	10-130
D5-NEtFOSAA		79	40-150
D3-NMeFOSAA		92	40-135
13C4-PFBA	M-03	100	8-130
13C5-PFPeA		107	35-130
13C5-PFHxA		110	40-130
13C4-PFHpA		108	40-130
13C8-PFOA		107	40-130
13C9-PFNA		98	40-130
13C6-PFDA		97	40-130
13C3-PFBS		114	40-135
13C3-PFHxS		116	40-130
13C8-PFOS		101	40-130
13C7-PFUnA		82	40-130
13C2-PFDoA		62	40-130
13C2-PFTeDA		40	20-130
13C3-HFPO-DA		110	40-130
D7-NMeFOSE		77	20-130
D9-NEtFOSE		68	15-130
13C3-PFPrA	M-03	84	8-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29556-001
Batch: 29556
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
TFSI	1.6	U	1	3.2	1.6	0.51	ng/L	02/04/2026 1612
11Cl-PF3OUdS	3.0	U	1	6.4	3.0	0.95	ng/L	02/04/2026 1612
9Cl-PF3ONS	3.0	U	1	6.4	3.0	1.1	ng/L	02/04/2026 1612
ADONA	3.0	U	1	6.4	3.0	1.0	ng/L	02/04/2026 1612
8:2FTS	3.1	U	1	6.4	3.1	2.5	ng/L	02/04/2026 1612
4:2FTS	3.0	U	1	6.4	3.0	1.7	ng/L	02/04/2026 1612
6:2FTS	3.0	U	1	6.4	3.0	2.1	ng/L	02/04/2026 1612
5:3FTCA	20	U	1	40	20	6.6	ng/L	02/04/2026 1612
HFPO-DA	3.2	U	1	6.4	3.2	1.1	ng/L	02/04/2026 1612
NEtFOSA	0.80	U	1	1.6	0.80	0.44	ng/L	02/04/2026 1612
NEtFOSAA	1.2	U	1	1.6	1.2	0.93	ng/L	02/04/2026 1612
NEtFOSE	8.0	U	1	16	8.0	3.0	ng/L	02/04/2026 1612
NMeFOSA	0.80	U	1	1.6	0.80	0.30	ng/L	02/04/2026 1612
NMeFOSAA	0.80	U	1	1.6	0.80	0.30	ng/L	02/04/2026 1612
NMeFOSE	8.0	U	1	16	8.0	3.3	ng/L	02/04/2026 1612
NFDHA	1.6	U	1	3.2	1.6	0.79	ng/L	02/04/2026 1612
PFEESA	1.4	U	1	3.2	1.4	0.30	ng/L	02/04/2026 1612
PFMPA	1.6	U	1	3.2	1.6	0.72	ng/L	02/04/2026 1612
PFMBA	1.6	U	1	3.2	1.6	0.53	ng/L	02/04/2026 1612
PFBS	1.4	U	1	1.6	1.4	1.2	ng/L	02/04/2026 1612
PFBA	3.2	U	1	6.4	3.2	0.95	ng/L	02/04/2026 1612
PFDS	0.77	U	1	1.6	0.77	0.41	ng/L	02/04/2026 1612
PFDA	0.80	U	1	1.6	0.80	0.49	ng/L	02/04/2026 1612
PFDoS	0.77	U	1	1.6	0.77	0.36	ng/L	02/04/2026 1612
PFDoA	0.80	U	1	1.6	0.80	0.19	ng/L	02/04/2026 1612
PFHpS	0.76	U	1	1.6	0.76	0.58	ng/L	02/04/2026 1612
PFHpA	0.80	U	1	1.6	0.80	0.32	ng/L	02/04/2026 1612
7:3FTCA	20	U	1	40	20	8.1	ng/L	02/04/2026 1612
PFHxS	0.73	U	1	1.6	0.73	0.71	ng/L	02/04/2026 1612
PFHxA	0.80	U	1	1.6	0.80	0.24	ng/L	02/04/2026 1612
PFNS	0.77	U	1	1.6	0.77	0.47	ng/L	02/04/2026 1612
PFNA	0.80	U	1	1.6	0.80	0.61	ng/L	02/04/2026 1612
PFOSA	0.80	UM-03	1	1.6	0.80	0.29	ng/L	02/04/2026 1612
PFOS	0.74	U	1	1.6	0.74	0.55	ng/L	02/04/2026 1612
PFOA	0.80	U	1	1.6	0.80	0.73	ng/L	02/04/2026 1612
PFPeS	0.75	U	1	1.6	0.75	0.44	ng/L	02/04/2026 1612
PFPeA	1.6	U	1	3.2	1.6	0.44	ng/L	02/04/2026 1612
PFPrA	3.2	U	1	6.4	3.2	2.5	ng/L	02/04/2026 1612
3:3FTCA	4.0	U	1	8.0	4.0	1.5	ng/L	02/04/2026 1612
PFTeDA	0.80	U	1	1.6	0.80	0.43	ng/L	02/04/2026 1612
PFTrDA	0.80	U	1	1.6	0.80	0.61	ng/L	02/04/2026 1612
PFUnA	1.2	U	1	1.6	1.2	0.82	ng/L	02/04/2026 1612

LOQ = Limit of Quantitation
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P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29556-001
Batch: 29556
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		96	40-200
13C2-6:2FTS		100	40-200
13C2-8:2FTS	M-03	105	40-300
13C8-PFOSA		93	40-130
D5-NEtFOSA		73	10-130
D3-NMeFOSA	M-03	71	10-130
D5-NEtFOSAA	M-03	89	25-135
D3-NMeFOSAA	M-03	91	40-170
13C4-PFBA		92	5-130
13C5-PFPeA		99	40-130
13C5-PFHxA		104	40-130
13C4-PFHpA		101	40-130
13C8-PFOA		100	40-130
13C9-PFNA		92	40-130
13C6-PFDA	M-03	87	40-130
13C3-PFBS		98	40-135
13C3-PFHxS		96	40-130
13C8-PFOS	M-03	97	40-130
13C7-PFUnA		88	30-130
13C2-PFDoA		75	10-130
13C2-PFTeDA		69	10-130
13C3-HFPO-DA		99	40-130
D7-NMeFOSE		86	10-130
D9-NEtFOSE		86	10-130
13C3-PFPrA		98	5-130

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P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29556-002
Batch: 29556
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Parameter	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	78	79		1	101	70-140	02/04/2026 1622
11Cl-PF3OUdS	150	150		1	102	55-160	02/04/2026 1622
9Cl-PF3ONS	150	180	M-03	1	119	70-155	02/04/2026 1622
ADONA	150	180		1	122	65-145	02/04/2026 1622
8:2FTS	150	180	M-03	1	120	60-150	02/04/2026 1622
4:2FTS	150	170		1	115	70-145	02/04/2026 1622
6:2FTS	150	180		1	118	65-155	02/04/2026 1622
5:3FTCA	1000	1300		1	128	70-135	02/04/2026 1622
HFPO-DA	160	190		1	116	70-140	02/04/2026 1622
NEtFOSA	40	47	M-03	1	117	65-145	02/04/2026 1622
NEtFOSAA	40	44	M-03	1	110	70-145	02/04/2026 1622
NEtFOSE	400	460	M-03	1	116	70-135	02/04/2026 1622
NMeFOSA	40	47	M-03	1	119	60-150	02/04/2026 1622
NMeFOSAA	40	43	M-03	1	108	50-140	02/04/2026 1622
NMeFOSE	400	450	M-03	1	112	70-145	02/04/2026 1622
NFDHA	80	90		1	113	50-150	02/04/2026 1622
PFEESA	71	84		1	118	70-140	02/04/2026 1622
PFMPA	80	93	M-08	1	117	55-140	02/04/2026 1622
PFMBA	80	92	M-03	1	115	60-150	02/04/2026 1622
PFBS	36	40		1	114	60-145	02/04/2026 1622
PFBA	160	190	M-08	1	122	70-140	02/04/2026 1622
PFDS	39	38		1	98	60-145	02/04/2026 1622
PFDA	40	45	M-03	1	112	70-140	02/04/2026 1622
PFDoS	39	37		1	97	50-145	02/04/2026 1622
PFDoA	40	49	M-03	1	123	70-140	02/04/2026 1622
PFHpS	38	48	M-03	1	126	70-150	02/04/2026 1622
PFHpA	40	45		1	112	70-150	02/04/2026 1622
7:3FTCA	1000	1200	M-03	1	125	50-145	02/04/2026 1622
PFHxS	36	40	M-03	1	109	65-145	02/04/2026 1622
PFHxA	40	47		1	117	70-145	02/04/2026 1622
PFNS	38	42	M-03	1	109	65-145	02/04/2026 1622
PFNA	40	45		1	113	70-150	02/04/2026 1622
PFOSA	40	45	M-03	1	112	70-145	02/04/2026 1622
PFOS	37	42	M-03	1	113	55-150	02/04/2026 1622
PFOA	40	45	M-03	1	113	70-150	02/04/2026 1622
PFPeS	38	41		1	110	65-140	02/04/2026 1622
PFPeA	80	93	M-03	1	116	65-135	02/04/2026 1622
PFPrA	160	190		1	121	70-140	02/04/2026 1622
3:3FTCA	200	200	M-03	1	100	65-130	02/04/2026 1622
PFTeDA	40	43		1	107	60-140	02/04/2026 1622
PFTrDA	40	43	M-03	1	108	65-140	02/04/2026 1622
PFUnA	40	42	M-03	1	106	70-145	02/04/2026 1622

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

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J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29556-002
Batch: 29556
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		102	40-200
13C2-6:2FTS		96	40-200
13C2-8:2FTS		90	40-300
13C8-PFOSA		96	40-130
D5-NEtFOSA	M-03	68	10-130
D3-NMeFOSA	M-03	67	10-130
D5-NEtFOSAA	M-03	88	25-135
D3-NMeFOSAA	M-03	96	40-170
13C4-PFBA		87	5-130
13C5-PFPeA		95	40-130
13C5-PFHxA		93	40-130
13C4-PFHpA		93	40-130
13C8-PFOA		101	40-130
13C9-PFNA	M-03	98	40-130
13C6-PFDA	M-03	87	40-130
13C3-PFBS		93	40-135
13C3-PFHxS	M-03	99	40-130
13C8-PFOS		96	40-130
13C7-PFUnA		83	30-130
13C2-PFDoA	M-03	73	10-130
13C2-PFTeDA	M-03	72	10-130
13C3-HFPO-DA		97	40-130
D7-NMeFOSE	M-03	88	10-130
D9-NEtFOSE		83	10-130
13C3-PFPrA		92	5-130

LOQ = Limit of Quantitation
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LOD = Limit of Detection

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N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29556-102
Batch: 29556
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Parameter	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	6.3	6.6	M-03	1	106	70-140	02/04/2026 1632
11Cl-PF3OUdS	12	12		1	96	55-160	02/04/2026 1632
9Cl-PF3ONS	12	14	M-03	1	115	70-155	02/04/2026 1632
ADONA	12	15		1	128	65-145	02/04/2026 1632
8:2FTS	12	14		1	115	60-150	02/04/2026 1632
4:2FTS	12	14	M-03	1	119	70-145	02/04/2026 1632
6:2FTS	12	16		1	130	65-155	02/04/2026 1632
5:3FTCA	80	98	M-03	1	122	70-135	02/04/2026 1632
HFPO-DA	13	16		1	128	70-140	02/04/2026 1632
NEtFOSA	3.2	3.9	M-03	1	123	65-145	02/04/2026 1632
NEtFOSAA	3.2	4.2	M-03	1	132	70-145	02/04/2026 1632
NEtFOSE	32	36	M-03	1	113	70-135	02/04/2026 1632
NMeFOSA	3.2	3.6	M-03	1	112	60-150	02/04/2026 1632
NMeFOSAA	3.2	3.4		1	105	50-140	02/04/2026 1632
NMeFOSE	32	36	M-03	1	114	70-145	02/04/2026 1632
NFDHA	6.4	7.5	M-03	1	117	50-150	02/04/2026 1632
PFEESA	5.7	6.6	M-03	1	117	70-140	02/04/2026 1632
PFMPA	6.4	7.3	M-08	1	113	55-140	02/04/2026 1632
PFMBA	6.4	7.6	M-08	1	119	60-150	02/04/2026 1632
PFBS	2.8	3.2	M-03	1	114	60-145	02/04/2026 1632
PFBA	13	15	M-08	1	117	70-140	02/04/2026 1632
PFDS	3.1	2.8	M-03	1	90	60-145	02/04/2026 1632
PFDA	3.2	3.9	M-03	1	120	70-140	02/04/2026 1632
PFDoS	3.1	2.9	M-03	1	94	50-145	02/04/2026 1632
PFDoA	3.2	4.0		1	126	70-140	02/04/2026 1632
PFHpS	3.0	3.5		1	116	70-150	02/04/2026 1632
PFHpA	3.2	4.4	M-03	1	138	70-150	02/04/2026 1632
7:3FTCA	80	100	M-03	1	128	50-145	02/04/2026 1632
PFHxS	2.9	3.2	M-03	1	109	65-145	02/04/2026 1632
PFHxA	3.2	3.5	M-03	1	110	70-145	02/04/2026 1632
PFNS	3.1	3.4	M-03	1	112	65-145	02/04/2026 1632
PFNA	3.2	3.5	M-03	1	108	70-150	02/04/2026 1632
PFOSA	3.2	3.4	M-03	1	106	70-145	02/04/2026 1632
PFOS	3.0	3.0	M-03	1	100	55-150	02/04/2026 1632
PFOA	3.2	3.7	M-03	1	115	70-150	02/04/2026 1632
PFPeS	3.0	3.5	M-03	1	118	65-140	02/04/2026 1632
PFPeA	6.4	7.5	M-03	1	117	65-135	02/04/2026 1632
PFPrA	13	16		1	129	70-140	02/04/2026 1632
3:3FTCA	16	17	M-03	1	106	65-130	02/04/2026 1632
PFTeDA	3.2	4.4	M-03	1	139	60-140	02/04/2026 1632
PFTrDA	3.2	3.9	M-03	1	122	65-140	02/04/2026 1632
PFUnA	3.2	3.9	M-03	1	122	70-145	02/04/2026 1632

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Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

PFAS by LC/MS/MS - LCS

Sample ID: BQ29556-102
Batch: 29556
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		88	40-200
13C2-6:2FTS		87	40-200
13C2-8:2FTS		93	40-300
13C8-PFOSA		76	40-130
D5-NEtFOSA		54	10-130
D3-NMeFOSA		56	10-130
D5-NEtFOSAA	M-03	73	25-135
D3-NMeFOSAA		80	40-170
13C4-PFBA		87	5-130
13C5-PFPeA		91	40-130
13C5-PFHxA		91	40-130
13C4-PFHpA		86	40-130
13C8-PFOA		94	40-130
13C9-PFNA		87	40-130
13C6-PFDA		81	40-130
13C3-PFBS		94	40-135
13C3-PFHxS	M-03	98	40-130
13C8-PFOS	M-03	85	40-130
13C7-PFUnA		76	30-130
13C2-PFDoA		72	10-130
13C2-PFTeDA		65	10-130
13C3-HFPO-DA		95	40-130
D7-NMeFOSE	M-03	68	10-130
D9-NEtFOSE	M-03	69	10-130
13C3-PFPrA		89	5-130

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Manual Integration Summary
Pace Analytical LLC
Lot Number: BA20003

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BA20003-001	2	Nonafluoro-3,6-dioxaheptanoic acid	M-03
1633	BA20003-001	2	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	BA20003-001	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BA20003-001	2	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BA20003-001	2	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BA20003-001	2	Perfluorohexanoic acid (PFHxA)	M-03
1633	BA20003-001	2	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA20003-001	2	Perfluorooctanoic acid (PFOA)	M-03
1633	BA20003-001	2	Perfluoropentanoic acid (PFPeA)	M-08
1633	BA20003-001	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BA20003-001	1	13C2-4:2FTS	M-03
1633	BA20003-001	2	D5-NEtFOSA	M-03
1633	BA20003-001	2	D3-NMeFOSAA	M-03
1633	BA20003-001	2	13C5-PFPeA	M-03
1633	BA20003-001	1	13C9-PFNA	M-03
1633	BA20003-001	2	13C2-PFDoA	M-03
1633	BA20003-001	1	13C2-PFTeDA	M-03
1633	BA20003-001	1	D9-NEtFOSE	M-03
1633	BA20003-002	2	Nonafluoro-3,6-dioxaheptanoic acid	M-03
1633	BA20003-002	2	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BA20003-002	2	Perfluoropropanoic acid (PFPrA)	M-03
1633	BA20003-002	2	13C2-6:2FTS	M-03
1633	BA20003-002	2	13C2-8:2FTS	M-03
1633	BA20003-002	2	D5-NEtFOSA	M-03
1633	BA20003-002	2	D5-NEtFOSAA	M-03
1633	BA20003-002	1	D3-NMeFOSAA	M-03
1633	BA20003-002	1	13C5-PFPeA	M-03
1633	BA20003-002	1	13C9-PFNA	M-03
1633	BA20003-002	2	13C3-PFHxS	M-03
1633	BA20003-002	2	13C7-PFUnA	M-03
1633	BA20003-002	1	13C3-HFPO-DA	M-03
1633	BA20003-002	2	D7-NMeFOSE	M-03
1633	BA20003-002	2	D9-NEtFOSE	M-03
1633	BA20003-003	1	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BA20003-003	1	Perfluorohexanoic acid (PFHxA)	M-03
1633	BA20003-003	1	Perfluorononanoic acid (PFNA)	M-03
1633	BA20003-003	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA20003-003	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA20003-003	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BA20003-003	1	13C2-6:2FTS	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA20003

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BA20003-003	1	13C2-8:2FTS	M-03
1633	BA20003-003	1	13C8-PFOSA	M-03
1633	BA20003-003	1	D5-NEtFOSA	M-03
1633	BA20003-003	1	13C7-PFUnA	M-03
1633	BA20003-004	1	13C2-4:2FTS	M-03
1633	BA20003-004	1	D5-NEtFOSA	M-03
1633	BA20003-004	1	D3-NMeFOSA	M-03
1633	BA20003-004	1	D9-NEtFOSE	M-03
1633	BA20003-005	2	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	BA20003-005	2	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BA20003-005	2	Perfluoropentanesulfonic acid (PFPeS)	M-03
1633	BA20003-005	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BA20003-005	1	13C2-4:2FTS	M-03
1633	BA20003-005	1	13C2-8:2FTS	M-03
1633	BA20003-005	1	D5-NEtFOSA	M-03
1633	BA20003-005	1	D5-NEtFOSAA	M-03
1633	BA20003-005	1	D3-NMeFOSAA	M-03
1633	BA20003-005	2	13C5-PFPeA	M-03
1633	BA20003-005	2	13C6-PFDA	M-03
1633	BA20003-005	1	13C3-PFHxS	M-03
1633	BA20003-005	2	13C3-PFHxS	M-03
1633	BA20003-005	1	13C8-PFOS	M-03
1633	BA20003-005	2	13C8-PFOS	M-03
1633	BA20003-005	2	13C2-PFDoA	M-03
1633	BA20003-005	1	13C2-PFTeDA	M-03
1633	BA20003-005	1	D7-NMeFOSE	M-03
1633	BA20003-005	2	D7-NMeFOSE	M-03
1633	BA20003-005	1	D9-NEtFOSE	M-03
1633	BA20003-005	1	13C3-PFPrA	M-03
1633	BQ29556-102	1	Bis(trifluoromethylsulfonyl)amine (TFSI)	M-03
1633	BQ29556-002	1	9-Chlorohexadecafluoro-3-oxanonane-	M-03
1633	BQ29556-102	1	9-Chlorohexadecafluoro-3-oxanonane-	M-03
1633	BQ29556-002	1	1H,1H,2H,2H-Perfluorodecane sulfonic	M-03
1633	BQ29556-102	1	1H,1H,2H,2H-Perfluorohexane sulfonic	M-03
1633	BQ29556-102	1	2H,2H,3H,3H-Perfluorooctanoic acid	M-03
1633	BQ29556-002	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29556-102	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29556-002	1	N-ethyl	M-03
1633	BQ29556-102	1	N-ethyl	M-03
1633	BQ29556-002	1	N-ethyl	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA20003

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BQ29556-102	1	N-ethyl	M-03
1633	BQ29556-002	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29556-102	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29556-002	1	N-methyl	M-03
1633	BQ29556-002	1	N-methyl	M-03
1633	BQ29556-102	1	N-methyl	M-03
1633	BQ29556-102	1	Nonafluoro-3,6-dioxaheptanoic acid	M-03
1633	BQ29556-102	1	Perfluoro(2-ethoxyethane)sulfonic acid	M-03
1633	BQ29356-002	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29356-102	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BA20003-001MS	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BA20003-001MD	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29556-002	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29556-102	1	Perfluoro-4-methoxybutanoic acid	M-08
1633	BQ29556-102	1	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	BQ29356-002	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BA20003-001MD	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29556-102	1	Perfluorodecanesulfonic acid (PFDS)	M-03
1633	BQ29556-002	1	Perfluorodecanoic acid (PFDA)	M-03
1633	BQ29556-102	1	Perfluorodecanoic acid (PFDA)	M-03
1633	BQ29556-102	1	Perfluorododecanesulfonic acid (PFDoS)	M-03
1633	BQ29556-002	1	Perfluorododecanoic acid (PFDoA)	M-03
1633	BQ29556-002	1	Perfluoroheptanesulfonic acid (PFHpS)	M-03
1633	BQ29556-102	1	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BQ29556-002	1	3-Perfluoroheptyl propanoic acid	M-03
1633	BQ29556-102	1	3-Perfluoroheptyl propanoic acid	M-03
1633	BQ29556-002	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BQ29556-102	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BQ29556-102	1	Perfluorohexanoic acid (PFHxA)	M-03
1633	BQ29556-002	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BQ29556-102	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BQ29556-102	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29556-001	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29556-002	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29556-102	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29556-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29556-102	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29556-002	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BQ29556-102	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BQ29556-102	1	Perfluoropentanesulfonic acid (PFPeS)	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA20003

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BQ29556-002	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29556-102	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29356-102	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BA20003-001MD	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29556-002	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29556-102	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29556-102	1	Perfluorotetradecanoic acid (PFTeDA)	M-03
1633	BQ29556-002	1	Perfluorotridecanoic acid (PFTrDA)	M-03
1633	BQ29556-102	1	Perfluorotridecanoic acid (PFTrDA)	M-03
1633	BQ29556-002	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BQ29556-102	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BQ29356-001	1	13C2-4:2FTS	M-03
1633	BA20003-001MD	1	13C2-4:2FTS	M-03
1633	BA20003-001MS	1	13C2-6:2FTS	M-03
1633	BA20003-001MD	1	13C2-6:2FTS	M-03
1633	BA20003-001MS	1	13C2-8:2FTS	M-03
1633	BQ29556-001	1	13C2-8:2FTS	M-03
1633	BQ29356-001	1	D5-NEtFOSA	M-03
1633	BQ29556-002	1	D5-NEtFOSA	M-03
1633	BQ29556-001	1	D3-NMeFOSA	M-03
1633	BQ29556-002	1	D3-NMeFOSA	M-03
1633	BQ29556-001	1	D5-NEtFOSAA	M-03
1633	BQ29556-002	1	D5-NEtFOSAA	M-03
1633	BQ29556-102	1	D5-NEtFOSAA	M-03
1633	BQ29556-001	1	D3-NMeFOSAA	M-03
1633	BQ29556-002	1	D3-NMeFOSAA	M-03
1633	BQ29356-001	1	13C9-PFNA	M-03
1633	BQ29556-002	1	13C9-PFNA	M-03
1633	BQ29356-001	1	13C6-PFDA	M-03
1633	BQ29356-102	1	13C6-PFDA	M-03
1633	BQ29556-001	1	13C6-PFDA	M-03
1633	BQ29556-002	1	13C6-PFDA	M-03
1633	BQ29556-002	1	13C3-PFHxS	M-03
1633	BQ29556-102	1	13C3-PFHxS	M-03
1633	BQ29356-002	1	13C8-PFOS	M-03
1633	BQ29556-001	1	13C8-PFOS	M-03
1633	BQ29556-102	1	13C8-PFOS	M-03
1633	BQ29356-001	1	13C7-PFUnA	M-03
1633	BQ29556-002	1	13C2-PFDoA	M-03
1633	BQ29556-002	1	13C2-PFTeDA	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA20003

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BQ29556-002	1	D7-NMeFOSE	M-03
1633	BQ29556-102	1	D7-NMeFOSE	M-03
1633	BA20003-001MS	1	D9-NEtFOSE	M-03
1633	BQ29556-102	1	D9-NEtFOSE	M-03
1633	BQ29556-002	1	Perfluoro-3-methoxypropanoic acid	M-08
1633	BQ29556-102	1	Perfluoro-3-methoxypropanoic acid	M-08
1633	BQ29556-002	1	Perfluorobutanoic acid (PFBA)	M-08
1633	BQ29556-102	1	Perfluorobutanoic acid (PFBA)	M-08
1633	BQ29382-102	1	Bis(trifluoromethylsulfonyl)amine (TFSI)	M-03
1633	BQ29382-102	1	11-Chloroeicosafluoro-3-oxaundecane-	M-03
1633	BQ29382-102	1	1H,1H,2H,2H-Perfluorodecane sulfonic	M-03
1633	BQ29382-102	1	1H,1H,2H,2H-Perfluorooctane sulfonic	M-03
1633	BQ29382-002	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29382-102	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29382-002	1	N-ethyl	M-03
1633	BQ29382-102	1	N-ethyl	M-03
1633	BQ29382-001	1	N-ethyl	M-03
1633	BQ29382-102	1	N-ethyl	M-03
1633	BQ29382-002	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29382-102	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29382-002	1	N-methyl	M-03
1633	BQ29382-102	1	N-methyl	M-03
1633	BQ29382-002	1	N-methyl	M-03
1633	BQ29382-102	1	N-methyl	M-03
1633	BQ29382-102	1	Nonafluoro-3,6-dioxaheptanoic acid	M-03
1633	BQ29382-102	1	Perfluoro(2-ethoxyethane)sulfonic acid	M-03
1633	BQ29382-002	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29382-102	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29382-002	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29382-102	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29382-102	1	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	BQ29382-002	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29382-102	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29382-102	1	Perfluorodecanoic acid (PFDA)	M-03
1633	BQ29382-002	1	Perfluorododecanesulfonic acid (PFDoS)	M-03
1633	BQ29382-102	1	Perfluorododecanoic acid (PFDoA)	M-03
1633	BQ29382-102	1	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BQ29382-102	1	3-Perfluoroheptyl propanoic acid	M-03
1633	BQ29382-102	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BQ29382-102	1	Perfluorohexanoic acid (PFHxA)	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA20003

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BQ29382-002	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BQ29382-102	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BQ29382-002	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29382-102	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29382-002	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29382-102	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29382-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29382-102	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29382-102	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BQ29382-102	1	Perfluoropentanesulfonic acid (PFPeS)	M-03
1633	BQ29382-102	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29382-001	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29382-002	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29382-102	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29382-002	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29382-102	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29382-102	1	Perfluorotetradecanoic acid (PFTeDA)	M-03
1633	BQ29382-102	1	Perfluorotridecanoic acid (PFTrDA)	M-03
1633	BQ29382-002	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BQ29382-001	1	13C2-4:2FTS	M-03
1633	BQ29382-102	1	D5-NEtFOSA	M-03
1633	BQ29382-002	1	D3-NMeFOSA	M-03
1633	BQ29382-001	1	13C4-PFBA	M-03
1633	BQ29382-002	1	13C4-PFBA	M-03
1633	BQ29382-102	1	13C4-PFBA	M-03
1633	BQ29382-001	1	13C6-PFDA	M-03
1633	BQ29382-001	1	13C3-PFBS	M-03
1633	BQ29382-002	1	13C3-PFBS	M-03
1633	BQ29382-001	1	13C7-PFUnA	M-03
1633	BQ29382-001	1	D9-NEtFOSE	M-03
1633	BQ29382-001	1	13C3-PFPrA	M-03
1633	BQ29382-002	1	13C3-PFPrA	M-03
1633	BQ29382-102	1	13C3-PFPrA	M-03

If you have any questions regarding this report, please contact the Pace Project Manager listed on the cover page.

Chain of Custody
and
Miscellaneous Documents

Sub-Contract Chain of Custody

Batch Date/Time: 01/19/26 10:05
Sub-Contract Lab: PACEWCSC
Address: 106 Vantage Point Dr.
City/State: West Columbia, SC 29172
Contact: Edward.Burnett@pacelabs.com
Owner Lab: PACEMTJL
Address: 12065 Lebanon Rd.
City/State: Mt. Juliet, TN 37122
Phone: (615) 773-9756
Fax: (615) 758-5859

BA20003

Pace Analytical

12065 Lebanon Rd.
Mt. Juliet, TN 37122
Phone:(615) 773-9756
Fax:(615) 758-5859

WO: WG2677448
Email: MTJLSubcontTeam@pacelabs.com
Results Due Date: 02/05/26
ESC Purchase Order #: L1936528
Send Reports to: Skylar S DeBoer

Sample ID / Container ID	Matrix	State	Collect Date	Description	Sample Number Lab Use Only	Sample Comments Lab Use Only
CL-P1636-HP55/57-SPT-05						
PFAS-250HDPE-NoPres - 55089214	GW	NC	01/13/26 11:15	PFAS1633	1. L1936528-01	Excel EDD, level 2
PFAS-250HDPE-NoPres - 55089215						
CL-P1636-HP55/57-SPT-11						
PFAS-250HDPE-NoPres - 55089216	GW	NC	01/13/26 13:40	PFAS1633	2. L1936528-02	Excel EDD, level 2
PFAS-250HDPE-NoPres - 55089217						
CL-P1636-HP55/57-SPT-05	SS	NC	01/13/26 11:00	SUBPFAS1633	3. L1936528-03	Excel EDD, level 2
PFAS-90mlPP-NoPres - 55091558						
CL-P1636-HP55/57-SPT-11	SS	NC	01/13/26 13:30	SUBPFAS1633	4. L1936528-04	Excel EDD, level 2
PFAS-90mlPP-NoPres - 55091559						
CL-FIELD BLANK-01						
PFAS-90mlPP-NoPres - 55091560	SS	NC	01/13/26 08:00	SUBPFAS1633	5. L1936528-05	Excel EDD, level 2
PFAS-90mlPP-NoPres - 55091561						

*= Container used for multiple Samples and/or Analyses

Relinquished by: [signature] Date 1-19-26 T= 1.8°C

Received by: _____ Date _____

Relinquished by: FEDEX Date 1/20/26

Received by: [signature] PACE Date 1/20/26

DC#_Title: ENV-FRM-WCOL-0286 v02_Samples Receipt Checklist (SRC)
Effective Date: 8/2/2022

BA20003

Sample Receipt Checklist (SRC)

Client: PACE

Cooler Inspected by/date: CNF / 1/20/26 Lot #.

Means of receipt: ☐ Pace ☐ Client ☐ UPS ☑ FedEx ☐ Other:

☑ Yes	☐ No		1. Were custody seals present on the cooler?
☑ Yes	☐ No	☐ NA	2. If custody seals were present, were they intact and unbroken?

pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA

Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: 337205

1.8 / 1.8 °C NA / NA °C NA / NA °C NA / NA °C

Method: ☐ Temperature Blank ☑ Against Bottles IR Gun ID: 8 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☑ Yes	☐ No	☐ NA	3. Were all coolers received at or below 6.0°C? If no, was Project Manager notified? PM was Notified by: phone / email / face-to-face (circle one).
☑ Yes	☐ No	☐ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC and all sample containers?
☑ Yes	☐ No		7. Was collection date & time listed on the COC and all sample containers?
☑ Yes	☐ No		8. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		9. Were tests to be performed listed on the COC?
☑ Yes	☐ No		10. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☑ Yes	☐ No		11. Was adequate sample volume available?
☐ Yes	☑ No		12. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☑ Yes	☐ No		13. Were all samples containers accounted for? (No missing/excess)
☐ Yes	☐ No	☑ NA	14. Were VOA, 8015C and RSK-175 samples free of bubbles >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	15. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	16. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	17. Were all applicable NH_3/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
☐ Yes	☑ No	☐ NA	18. Was the quote number listed on the container label? If yes, Quote #

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # NA. ☐
Time of preservation NA. If more than one preservative is needed, please note in the comments below.

Sample(s) NA were received with bubbles >6 mm in diameter.

Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is *no*) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Unique ID: NA.

Comments:

Qualtrax ID: 56360 Pace® Analytical Services, LLC Page 1 of 1

ANALYTICAL REPORT

January 15, 2026

Terracon - Wilmington, NC

Sample Delivery Group:	L1933585
Samples Received:	01/08/2026
Project Number:	K625P194
Description:	Marine Corps Base Camp Lejeune
Site:	MCAS CL
Report To:	Danielle Foster 2108 Capital Drive Suite 103 Wilmington, NC 28405

Entire Report Reviewed By:

Heather J Wagner
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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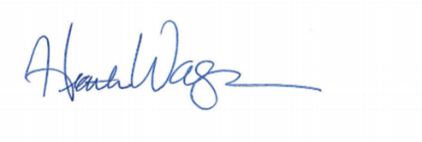
CL-P1634-SPT-10 L1933585-04

Collected by	Collected date/time	Received date/time
Danielle Foster	01/06/26 12:45	01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Subcontracted Analyses	WG2671383	1	01/13/26 00:00	01/13/26 00:00	-	West Columbia, SC 29172

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Heather J Wagner
Project Manager

Project Narrative

L1933585 -01, -02, -03, -04 contains subout data that is included after the chain of custody.

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

SDG	Sample Delivery Group.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Terracon - Wilmington, NC
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Billing Information:
Accounts Payable
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Pres Chk

Report to: Danielle Foster

Email To: danielle.foster@terracon.com;nick.lin

Project Description: Marin Corps Base Camp Lejeune

City/State Collected: Jacksonville, NC

Please Circle: PT MT CT ET

Phone: 910-229-8597

Client Project # K625P194

Lab Project # TERRACWNC-LEJEUNE

Collected by (print): Danielle Foster

Site/Facility ID # MCAS CL

P.O. # —

Collected by (signature): Danielle Foster

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day X 10 Day (Rad Only)
___ Three Day

Quote # —

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1933585

Tat H085

Acctnum: TERRACWNC

Template: T286013

Prelogin: P1200317

PM: Heather Wagner

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	DOD 6010 TAL Metals	DOD RCI	DOD8270TCL	DODDRO	DODPaint Filter	DODGRO	DODV8260BTEX	DODV8260TCL	DOD PFAS 1633	DOD Full TCLP+TCLP PCB	Remarks	Sample # (lab only)
NR-P2B03-SPT-07	Comp	S	1-6	1/6/25	0950	4				X		X			X	X		-01
NR-P2803-SPT-02	↓	↓	↓	↓	1030					↓		↓			↓	↓		-02
NR-P2803-SPT-04					1130													-03
CL-P1634-SPT-10	↓	↓	↓	↓	1245					↓		↓			↓	↓		-04
						NA 1/8												

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS X FedEx __ Courier __ _____

Tracking # ~~7920 9198 6656~~ 7920 9198 656

Sample Receipt Checklist
COC Seal Present/Intact: X NP __Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR
Danielle Foster	1/6/25	1700		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.6°C Bottles Received: 16 ~~TLA 2.3+0.0=2.3°C~~
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Stewart Frances	Date: 1/8/26 Time: 9:00am

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Report of Analysis

Pace Analytical LLC
12065 Lebanon Rd.
Mt. Juliet, TN 37122
Attention: Jimmy Huckaba

Project Name: L1933585

Project Number: WG2671383

Lot Number:**BA09005**

Date Completed:01/15/2026

01/15/2026 9:13 AM
Approved and released by:
Project Manager II: **Edward Barnett**

The electronic signature above is the equivalent of a handwritten signature.
This report shall not be reproduced, except in its entirety, without the written approval of Pace Analytical Services, LLC.

Pace Analytical Services, LLC (*formerly Shealy Environmental Services, Inc.*)
106 Vantage Point Drive West Columbia, SC 29172
Tel: 803-791-9700 Fax: 803-791-9111 www.pacelabs.com

Case Narrative
Pace Analytical LLC
Lot Number: BA09005

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report. Where sampling is conducted by the client, results relate to the accuracy of the information provided, and as the samples are received.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Additionally, the DoD QSM version 6.0 has been followed for these samples. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs, the DoD QSM, or policies are qualified on the results page or discussed below.

Pace - West Columbia is a DOD/DOE accredited laboratory; however, the following subcontract laboratories do not hold DOD/DOE certification: Schnabel Engineering, Bunnell Lammons Engineering (BLE), and Pace - Sheridan Terra (WY). The use of these subcontract laboratories is approved by the customer prior to sample shipment.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope accreditation: 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS), 2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA), 3-Perfluoroheptyl propanoic acid (7:3FTCA), 3-Perfluoropropyl propanoic acid (3:3FTCA), 4,8-Dioxa-3H-perfluorononanoic acid (ADONA), 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS), Hexafluoropropylene oxide dimer acid (HFPO-DA), N-ethyl perfluorooctanesulfonamide (NEtFOSA), N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE), N-methyl perfluorooctanesulfonamide (NMeFOSA), N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE), Nonafluoro-3,6-dioxaheptanoic acid (NFDHA), Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA), Perfluoro-3-methoxypropanoic acid (PFMPA), Perfluoro-4-methoxybutanoic acid (PFMBA), Perfluorododecanesulfonic acid (PFDoS), Perfluoropropanoic acid (PFPrA), 2H-perfluoro-2-octenoic acid (FHUEA), 2H-perfluoro-2-decenoic acid (FOUEA), Lithium Bis(trifluoromethane)sulfonimide (HQ-115) by EPA Method 8327. Perfluoropropanoic acid (PFPrA) and Bis (trifluoromethylsulfonyl)amine (TFSI) by EPA Method 1633.

Manual integration summaries are provided at the end of this report when applicable.

Where applicable, all soil sample results (including LOQ and DL if requested) are corrected for dry weight unless flagged with a "W" qualifier.

Sample Summary
Pace Analytical LLC
Lot Number: BA09005

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
004	CL-P1634-SPT-10	Solid	01/06/2026 1245	01/09/2026

(4 samples)

Detection Summary
Pace Analytical LLC
Lot Number: BA09005

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
004	CL-P1634-SPT-10	Solid	PFOS	1633	0.39	M-03	ng/g	11

(9 detections)

PFAS by LC/MS/MS

Client: **Pace Analytical LLC** Laboratory ID: **BA09005-004**
Description: **CL-P1634-SPT-10** Matrix: **Solid**
Date Sampled: **01/06/2026 1245** % Solids: **85.4** **01/09/2026 1838**
Date Received: **01/09/2026**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	01/13/2026 1915	BWS	01/12/2026 1419	29225

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Bis(trifluoromethylsulfonyl)amine (TFSI)	82113-65-3	1633	0.21	U	0.41	0.21	0.077	ng/g	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3...)	763051-92-9	1633	0.38	U	0.81	0.38	0.21	ng/g	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	1633	0.37	U	0.81	0.37	0.22	ng/g	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	1633	0.38	U	0.81	0.38	0.18	ng/g	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	1633	0.38	U	0.81	0.38	0.25	ng/g	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	1633	0.37	U	0.81	0.37	0.30	ng/g	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1633	0.58	U	0.81	0.58	0.53	ng/g	1
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1633	2.6	U	5.1	2.6	1.7	ng/g	1
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6	1633	0.41	U	0.81	0.41	0.21	ng/g	1
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	4151-50-2	1633	0.10	U	0.20	0.10	0.080	ng/g	1
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	1633	0.10	U	0.20	0.10	0.090	ng/g	1
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1633	1.0	U	2.0	1.0	0.68	ng/g	1
N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1633	0.10	U	0.20	0.10	0.061	ng/g	1
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	1633	0.15	U	0.20	0.15	0.15	ng/g	1
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1633	1.0	U	2.0	1.0	0.65	ng/g	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	1633	0.21	U	0.41	0.21	0.16	ng/g	1
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	1633	0.18	U	0.41	0.18	0.079	ng/g	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1633	0.21	U	0.41	0.21	0.14	ng/g	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	1633	0.21	U	0.41	0.21	0.14	ng/g	1
Perfluorobutanesulfonic acid (PFBS)	375-73-5	1633	0.089	U	0.20	0.089	0.080	ng/g	1
Perfluorobutanoic acid (PFBA)	375-22-4	1633	0.41	U	0.81	0.41	0.25	ng/g	1
Perfluorodecanesulfonic acid (PFDS)	335-77-3	1633	0.10	U	0.20	0.10	0.041	ng/g	1
Perfluorodecanoic acid (PFDA)	335-76-2	1633	0.15	U	0.20	0.15	0.11	ng/g	1
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5	1633	0.10	U	0.20	0.10	0.069	ng/g	1
Perfluorododecanoic acid (PFDoA)	307-55-1	1633	0.10	U	0.20	0.10	0.098	ng/g	1
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	1633	0.10	U	0.20	0.10	0.083	ng/g	1
Perfluoroheptanoic acid (PFHpA)	375-85-9	1633	0.10	U	0.20	0.10	0.066	ng/g	1
3-Perfluoroheptyl propanoic acid (7:3FTCA)	812-70-4	1633	2.6	U	5.1	2.6	1.8	ng/g	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1633	0.091	U	0.20	0.091	0.066	ng/g	1
Perfluorohexanoic acid (PFHxA)	307-24-4	1633	0.10	U	0.20	0.10	0.039	ng/g	1
Perfluorononanesulfonic acid (PFNS)	68259-12-1	1633	0.10	U	0.20	0.10	0.085	ng/g	1
Perfluorononanoic acid (PFNA)	375-95-1	1633	0.10	UM-03	0.20	0.10	0.097	ng/g	1
Perfluorooctanesulfonamide (PFOSA)	754-91-6	1633	0.10	U	0.20	0.10	0.079	ng/g	1
Perfluorooctanesulfonic acid (PFOS)	**1763-23-1**	**1633**	**0.39**	**M-03**	**0.20**	**0.14**	**0.12**	**ng/g**	**1**
Perfluorooctanoic acid (PFOA)	335-67-1	1633	0.15	UM-03	0.20	0.15	0.11	ng/g	1
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	1633	0.094	U	0.20	0.094	0.052	ng/g	1
Perfluoropentanoic acid (PFPeA)	2706-90-3	1633	0.21	UM-03	0.41	0.21	0.15	ng/g	1
Perfluoropropanoic acid (PFPrA)	422-64-0	1633	0.73	U	0.81	0.73	0.68	ng/g	1
3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	1633	0.75	U	1.0	0.75	0.55	ng/g	1
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1633	0.10	U	0.20	0.10	0.10	ng/g	1
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	1633	0.10	U	0.20	0.10	0.059	ng/g	1
Perfluoroundecanoic acid (PFUnA)	2058-94-8	1633	0.10	U	0.20	0.10	0.10	ng/g	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

PFAS by LC/MS/MS

Client:	**Pace Analytical LLC**	Laboratory ID:	**BA09005-004**
Description:	**CL-P1634-SPT-10**	Matrix:	**Solid**
Date Sampled:	**01/06/2026 1245**	% Solids:	**85.4 01/09/2026 1838**
Date Received:	**01/09/2026**		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	01/13/2026 1915	BWS	01/12/2026 1419	29225

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C2-4:2FTS		108	40-165
13C2-6:2FTS		126	40-215
13C2-8:2FTS		104	40-275
13C8-PFOSA		89	40-130
D5-NEtFOSA		59	10-130
D3-NMeFOSA		69	10-130
D5-NEtFOSAA		104	40-150
D3-NMeFOSAA		108	40-135
13C4-PFBA		110	8-130
13C5-PFPeA	M-03	106	35-130
13C5-PFHxA		102	40-130
13C4-PFHpA		102	40-130
13C8-PFOA		95	40-130
13C9-PFNA		113	40-130
13C6-PFDA		100	40-130
13C3-PFBS		99	40-135
13C3-PFHxS		118	40-130
13C8-PFOS		110	40-130
13C7-PFUnA		89	40-130
13C2-PFDoA		79	40-130
13C2-PFTeDA		73	20-130
13C3-HFPO-DA		106	40-130
D7-NMeFOSE		84	20-130
D9-NEtFOSE		75	15-130
13C3-PFPrA		94	8-130

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

QC Summary

PFAS by LC/MS/MS - MB

Sample ID: BQ29225-001
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
TFSI	0.20	U	1	0.40	0.20	0.076	ng/g	01/13/2026 1706
11Cl-PF3OUdS	0.38	U	1	0.80	0.38	0.21	ng/g	01/13/2026 1706
9Cl-PF3ONS	0.37	U	1	0.80	0.37	0.21	ng/g	01/13/2026 1706
ADONA	0.38	U	1	0.80	0.38	0.18	ng/g	01/13/2026 1706
8:2FTS	0.38	U	1	0.80	0.38	0.25	ng/g	01/13/2026 1706
4:2FTS	0.37	U	1	0.80	0.37	0.30	ng/g	01/13/2026 1706
6:2FTS	0.57	U	1	0.80	0.57	0.52	ng/g	01/13/2026 1706
5:3FTCA	2.5	U	1	5.0	2.5	1.7	ng/g	01/13/2026 1706
HFPO-DA	0.40	U	1	0.80	0.40	0.21	ng/g	01/13/2026 1706
NEtFOSA	0.10	U	1	0.20	0.10	0.079	ng/g	01/13/2026 1706
NEtFOSAA	0.10	U	1	0.20	0.10	0.089	ng/g	01/13/2026 1706
NEtFOSE	1.0	U	1	2.0	1.0	0.67	ng/g	01/13/2026 1706
NMeFOSA	0.10	U	1	0.20	0.10	0.060	ng/g	01/13/2026 1706
NMeFOSAA	0.15	U	1	0.20	0.15	0.15	ng/g	01/13/2026 1706
NMeFOSE	1.0	U	1	2.0	1.0	0.64	ng/g	01/13/2026 1706
NFDHA	0.20	U	1	0.40	0.20	0.16	ng/g	01/13/2026 1706
PFEESA	0.18	U	1	0.40	0.18	0.078	ng/g	01/13/2026 1706
PFMPA	0.20	U	1	0.40	0.20	0.13	ng/g	01/13/2026 1706
PFMBA	0.20	U	1	0.40	0.20	0.14	ng/g	01/13/2026 1706
PFBS	0.089	U	1	0.20	0.089	0.079	ng/g	01/13/2026 1706
PFBA	0.40	U	1	0.80	0.40	0.25	ng/g	01/13/2026 1706
PFDS	0.10	U	1	0.20	0.10	0.040	ng/g	01/13/2026 1706
PFDA	0.15	U	1	0.20	0.15	0.11	ng/g	01/13/2026 1706
PFDoS	0.10	U	1	0.20	0.10	0.068	ng/g	01/13/2026 1706
PFDoA	0.10	U	1	0.20	0.10	0.097	ng/g	01/13/2026 1706
PFHpS	0.10	U	1	0.20	0.10	0.082	ng/g	01/13/2026 1706
PFHpA	0.10	U	1	0.20	0.10	0.065	ng/g	01/13/2026 1706
7:3FTCA	2.5	U	1	5.0	2.5	1.8	ng/g	01/13/2026 1706
PFHxS	0.091	U	1	0.20	0.091	0.065	ng/g	01/13/2026 1706
PFHxA	0.10	U	1	0.20	0.10	0.038	ng/g	01/13/2026 1706
PFNS	0.10	U	1	0.20	0.10	0.084	ng/g	01/13/2026 1706
PFNA	0.10	U	1	0.20	0.10	0.096	ng/g	01/13/2026 1706
PFOSA	0.10	U	1	0.20	0.10	0.078	ng/g	01/13/2026 1706
PFOS	0.14	UM-03	1	0.20	0.14	0.12	ng/g	01/13/2026 1706
PFOA	0.15	U	1	0.20	0.15	0.11	ng/g	01/13/2026 1706
PFPeS	0.094	U	1	0.20	0.094	0.051	ng/g	01/13/2026 1706
PFPeA	0.20	U	1	0.40	0.20	0.15	ng/g	01/13/2026 1706
PFPrA	0.72	U	1	0.80	0.72	0.67	ng/g	01/13/2026 1706
3:3FTCA	0.75	U	1	1.0	0.75	0.54	ng/g	01/13/2026 1706
PFTeDA	0.10	U	1	0.20	0.10	0.099	ng/g	01/13/2026 1706
PFTrDA	0.10	U	1	0.20	0.10	0.058	ng/g	01/13/2026 1706
PFUnA	0.10	U	1	0.20	0.10	0.10	ng/g	01/13/2026 1706

LOQ = Limit of Quantitation
DL = Detection Limit
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U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

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P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29225-001
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		106	40-165
13C2-6:2FTS		109	40-215
13C2-8:2FTS		90	40-275
13C8-PFOSA		89	40-130
D5-NEtFOSA		44	10-130
D3-NMeFOSA		57	10-130
D5-NEtFOSAA		85	40-150
D3-NMeFOSAA		88	40-135
13C4-PFBA		108	8-130
13C5-PFPeA	M-03	102	35-130
13C5-PFHxA		99	40-130
13C4-PFHpA		101	40-130
13C8-PFOA		96	40-130
13C9-PFNA		96	40-130
13C6-PFDA		87	40-130
13C3-PFBS		88	40-135
13C3-PFHxS		100	40-130
13C8-PFOS		106	40-130
13C7-PFUnA		70	40-130
13C2-PFDoA		56	40-130
13C2-PFTeDA		41	20-130
13C3-HFPO-DA		106	40-130
D7-NMeFOSE		76	20-130
D9-NEtFOSE		67	15-130
13C3-PFPrA		87	8-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

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J = Estimated result < LOQ and ≥ DL
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N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29225-002
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	9.8	9.0		1	92	70-140	01/13/2026 1716
11Cl-PF3OUdS	19	13		1	67	45-160	01/13/2026 1716
9Cl-PF3ONS	19	18		1	94	70-150	01/13/2026 1716
ADONA	19	20		1	105	70-160	01/13/2026 1716
8:2FTS	19	23		1	119	70-150	01/13/2026 1716
4:2FTS	19	18		1	93	60-150	01/13/2026 1716
6:2FTS	19	19		1	99	55-200	01/13/2026 1716
5:3FTCA	130	140		1	110	60-130	01/13/2026 1716
HFPO-DA	20	21		1	106	70-145	01/13/2026 1716
NEtFOSA	5.0	5.6	M-03	1	112	70-140	01/13/2026 1716
NEtFOSAA	5.0	5.6	M-03	1	111	65-165	01/13/2026 1716
NEtFOSE	50	53	M-03	1	106	70-135	01/13/2026 1716
NMeFOSA	5.0	4.9	M-03	1	98	70-155	01/13/2026 1716
NMeFOSAA	5.0	5.2	M-03	1	104	65-155	01/13/2026 1716
NMeFOSE	50	51	M-03	1	103	70-140	01/13/2026 1716
NFDHA	10	11		1	111	60-155	01/13/2026 1716
PFEESA	8.9	11		1	118	70-140	01/13/2026 1716
PFMPA	10	10	M-03	1	101	30-140	01/13/2026 1716
PFMBA	10	11	M-03	1	107	60-150	01/13/2026 1716
PFBS	4.4	4.8		1	107	65-145	01/13/2026 1716
PFBA	20	22	M-03	1	108	70-140	01/13/2026 1716
PFDS	4.8	3.5		1	72	40-155	01/13/2026 1716
PFDA	5.0	4.8		1	95	70-155	01/13/2026 1716
PFDoS	4.8	2.1		1	44	25-160	01/13/2026 1716
PFDoA	5.0	4.8		1	97	70-150	01/13/2026 1716
PFHpS	4.8	4.6		1	97	65-155	01/13/2026 1716
PFHpA	5.0	4.8		1	97	65-145	01/13/2026 1716
7:3FTCA	130	120		1	93	60-150	01/13/2026 1716
PFHxS	4.6	4.1		1	90	60-150	01/13/2026 1716
PFHxA	5.0	5.4		1	108	65-140	01/13/2026 1716
PFNS	4.8	4.1	M-03	1	85	55-140	01/13/2026 1716
PFNA	5.0	4.5	M-03	1	90	70-155	01/13/2026 1716
PFOSA	5.0	4.8	M-03	1	97	70-140	01/13/2026 1716
PFOS	4.6	4.0	M-03	1	87	65-160	01/13/2026 1716
PFOA	5.0	5.5		1	111	70-150	01/13/2026 1716
PFPeS	4.7	4.6		1	97	55-160	01/13/2026 1716
PFPeA	10	11	M-03	1	106	60-150	01/13/2026 1716
PFPrA	20	20	M-03	1	98	70-140	01/13/2026 1716
3:3FTCA	25	25	M-03	1	99	45-130	01/13/2026 1716
PFTeDA	5.0	4.4		1	88	65-150	01/13/2026 1716
PFTrDA	5.0	3.7		1	74	65-150	01/13/2026 1716
PFUnA	5.0	4.6		1	91	70-155	01/13/2026 1716

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
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P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29225-002
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		102	40-165
13C2-6:2FTS		105	40-215
13C2-8:2FTS		89	40-275
13C8-PFOSA		98	40-130
D5-NEtFOSA		55	10-130
D3-NMeFOSA		69	10-130
D5-NEtFOSAA		93	40-150
D3-NMeFOSAA		101	40-135
13C4-PFBA		117	8-130
13C5-PFPeA	M-03	108	35-130
13C5-PFHxA		106	40-130
13C4-PFHpA		114	40-130
13C8-PFOA		107	40-130
13C9-PFNA		125	40-130
13C6-PFDA		108	40-130
13C3-PFBS		94	40-135
13C3-PFHxS		110	40-130
13C8-PFOS		119	40-130
13C7-PFUnA		92	40-130
13C2-PFDoA		76	40-130
13C2-PFTeDA		50	20-130
13C3-HFPO-DA		116	40-130
D7-NMeFOSE		89	20-130
D9-NEtFOSE		80	15-130
13C3-PFPrA		104	8-130

LOQ = Limit of Quantitation
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LOD = Limit of Detection

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Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29225-102
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	0.98	0.86	M-03	1	87	70-140	01/13/2026 1726
11Cl-PF3OUdS	1.9	1.1		1	61	45-160	01/13/2026 1726
9Cl-PF3ONS	1.9	1.7		1	94	70-150	01/13/2026 1726
ADONA	1.9	2.2		1	117	70-160	01/13/2026 1726
8:2FTS	1.9	2.0		1	102	70-150	01/13/2026 1726
4:2FTS	1.9	2.0		1	108	60-150	01/13/2026 1726
6:2FTS	1.9	2.1		1	110	55-200	01/13/2026 1726
5:3FTCA	13	15		1	122	60-130	01/13/2026 1726
HFPO-DA	2.0	2.3		1	114	70-145	01/13/2026 1726
NEtFOSA	0.50	0.64	M-03	1	127	70-140	01/13/2026 1726
NEtFOSAA	0.50	0.39		1	78	65-165	01/13/2026 1726
NEtFOSE	5.0	5.6	M-03	1	111	70-135	01/13/2026 1726
NMeFOSA	0.50	0.52	M-03	1	104	70-155	01/13/2026 1726
NMeFOSAA	0.50	0.54	M-03	1	108	65-155	01/13/2026 1726
NMeFOSE	5.0	5.3	M-03	1	105	70-140	01/13/2026 1726
NFDHA	1.0	1.2	M-03	1	116	60-155	01/13/2026 1726
PFEESA	0.89	1.0		1	117	70-140	01/13/2026 1726
PFMPA	1.0	1.1	M-03	1	108	30-140	01/13/2026 1726
PFMBA	1.0	1.1	M-03	1	114	60-150	01/13/2026 1726
PFBS	0.44	0.53		1	121	65-145	01/13/2026 1726
PFBA	2.0	2.2	M-03	1	111	70-140	01/13/2026 1726
PFDS	0.48	0.24	M-03	1	50	40-155	01/13/2026 1726
PFDA	0.50	0.46	M-03	1	91	70-155	01/13/2026 1726
PFDoS	0.48	0.18	M-03	1	38	25-160	01/13/2026 1726
PFDoA	0.50	0.56		1	111	70-150	01/13/2026 1726
PFHpS	0.47	0.48		1	103	65-155	01/13/2026 1726
PFHpA	0.50	0.49	M-03	1	98	65-145	01/13/2026 1726
7:3FTCA	13	13	M-03	1	107	60-150	01/13/2026 1726
PFHxS	0.45	0.47	M-03	1	104	60-150	01/13/2026 1726
PFHxA	0.50	0.55		1	110	65-140	01/13/2026 1726
PFNS	0.48	0.41		1	86	55-140	01/13/2026 1726
PFNA	0.50	0.49	M-03	1	97	70-155	01/13/2026 1726
PFOSA	0.50	0.52	M-03	1	103	70-140	01/13/2026 1726
PFOS	0.46	0.46	M-03	1	99	65-160	01/13/2026 1726
PFOA	0.50	0.56	M-03	1	112	70-150	01/13/2026 1726
PFPeS	0.47	0.47	M-03	1	99	55-160	01/13/2026 1726
PFPeA	1.0	1.1	M-03	1	111	60-150	01/13/2026 1726
PFPrA	2.0	2.0	M-03	1	100	70-140	01/13/2026 1726
3:3FTCA	2.5	2.3	M-03	1	90	45-130	01/13/2026 1726
PFTeDA	0.50	0.58	M-03	1	115	65-150	01/13/2026 1726
PFTrDA	0.50	0.38		1	76	65-150	01/13/2026 1726
PFUnA	0.50	0.53	M-03	1	106	70-155	01/13/2026 1726

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P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29225-102
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		100	40-165
13C2-6:2FTS		105	40-215
13C2-8:2FTS		100	40-275
13C8-PFOSA		84	40-130
D5-NEtFOSA		42	10-130
D3-NMeFOSA		54	10-130
D5-NEtFOSAA		89	40-150
D3-NMeFOSAA		83	40-135
13C4-PFBA		106	8-130
13C5-PFPeA	M-03	96	35-130
13C5-PFHxA		90	40-130
13C4-PFHpA		95	40-130
13C8-PFOA		102	40-130
13C9-PFNA		111	40-130
13C6-PFDA		100	40-130
13C3-PFBS		93	40-135
13C3-PFHxS		109	40-130
13C8-PFOS		103	40-130
13C7-PFUnA		81	40-130
13C2-PFDoA		56	40-130
13C2-PFTeDA		35	20-130
13C3-HFPO-DA		95	40-130
D7-NMeFOSE		74	20-130
D9-NEtFOSE		65	15-130
13C3-PFPrA		88	8-130

LOQ = Limit of Quantitation
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LOD = Limit of Detection

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Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA09005

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BA09005-001	1	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	BA09005-001	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA09005-001	1	D3-NMeFOSA	M-03
1633	BA09005-001	1	13C5-PFPeA	M-03
1633	BA09005-002	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BA09005-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA09005-002	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA09005-002	1	13C5-PFPeA	M-03
1633	BA09005-003	1	9-Chlorohexadecafluoro-3-oxanonane-	M-03
1633	BA09005-003	1	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	BA09005-003	1	Perfluorononanoic acid (PFNA)	M-03
1633	BA09005-003	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA09005-003	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA09005-003	1	13C5-PFPeA	M-03
1633	BA09005-004	1	Perfluorononanoic acid (PFNA)	M-03
1633	BA09005-004	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA09005-004	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA09005-004	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BA09005-004	1	13C5-PFPeA	M-03
1633	BQ29225-102	1	Bis(trifluoromethylsulfonyl)amine (TFSI)	M-03
1633	BQ29225-002	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29225-102	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29225-002	1	N-ethyl	M-03
1633	BQ29225-002	1	N-ethyl	M-03
1633	BQ29225-102	1	N-ethyl	M-03
1633	BQ29225-002	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29225-102	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29225-002	1	N-methyl	M-03
1633	BQ29225-102	1	N-methyl	M-03
1633	BQ29225-002	1	N-methyl	M-03
1633	BQ29225-102	1	N-methyl	M-03
1633	BQ29225-102	1	Nonafluoro-3,6-dioxaheptanoic acid	M-03
1633	BQ29225-002	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29225-102	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29225-002	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29225-102	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29225-002	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29225-102	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29225-102	1	Perfluorodecanesulfonic acid (PFDS)	M-03
1633	BQ29225-102	1	Perfluorodecanoic acid (PFDA)	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA09005

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BQ29225-102	1	Perfluorododecanesulfonic acid (PFDoS)	M-03
1633	BQ29225-102	1	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BQ29225-102	1	3-Perfluoroheptyl propanoic acid	M-03
1633	BQ29225-102	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BQ29225-002	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BQ29225-002	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29225-102	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29225-002	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29225-102	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29225-001	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29225-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29225-102	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29225-102	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BQ29225-102	1	Perfluoropentanesulfonic acid (PFPeS)	M-03
1633	BQ29225-002	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29225-102	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29225-002	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29225-102	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29225-002	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29225-102	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29225-102	1	Perfluorotetradecanoic acid (PFTeDA)	M-03
1633	BQ29225-102	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BQ29225-001	1	13C5-PFPeA	M-03
1633	BQ29225-002	1	13C5-PFPeA	M-03
1633	BQ29225-102	1	13C5-PFPeA	M-03

If you have any questions regarding this report, please contact the Pace Project Manager listed on the cover page.

Chain of Custody
and
Miscellaneous Documents

Sub-Contract Chain of Custody

Batch Date/Time: 01/08/26 13:54
Sub-Contract Lab: PACEWCSC
Address: 106 Vantage Point Dr.
City/State: West Columbia, SC 29172
Contact: Edward.Barnett@pacelabs.com
Owner Lab: PACEMTJL
Address: 12065 Lebanon Rd.
City/State: Mt. Juliet, TN 37122
Phone: (615) 773-9756
Fax: (615) 758-5859

WO: WG2671383
Email: MTJLSubcontTeam@pacelabs.com
Results Due Date: 01/29/26
ESC Purchase Order #: L1933585
Send Reports to: Skylar S DeBoer

Pace Analytical®
12065 Lebanon Rd.
Mt. Juliet, TN 37122
Phone:(615) 773-9756
Fax:(615) 758-5859

Sample ID / Container ID	Matrix	State	Collect Date	Description	Sample Number Lab Use Only	Sample Comments Lab Use Only
NR-P2803-SPT-07 / PFAS-90mlPP-NoPres - 54988622	SS	NC	01/06/26 09:50	SUBPFAS1633	1. L1933585-01	DOD
NR-P2803-SPT-02 / PFAS-90mlPP-NoPres - 54988623	SS	NC	01/06/26 10:30	SUBPFAS1633	2. L1933585-02	DOD
NR-P2803-SPT-04 / PFAS-90mlPP-NoPres - 54988624	SS	NC	01/06/26 11:30	SUBPFAS1633	3. L1933585-03	DOD
CL-P1634-SPT-10 / PFAS-90mlPP-NoPres - 54988625	SS	NC	01/06/26 12:45	SUBPFAS1633	4. L1933585-04	DOD

*= Container used for multiple Samples and/or Analyses

~~T=1.9°C~~ [illegible] 1/9/26

T=1.3°C

Relinquished by: [signature] Date 1-8-26

Received by: _____ Date _____

Relinquished by: FEDEX Date 1/9/26 0912

Received by: [signature] PACE Date 1/9/26 0912

BA09005

ETB2

DC#_Title: ENV-FRM-WCOL-0286 v02_Samples Receipt Checklist (SRC)
Effective Date: 8/2/2022

Sample Receipt Checklist (SRC)

Client: Pace National Cooler Inspected by/date: MAL / 1/9/26 Lot #: BA09005

Means of receipt: [ ] Pace [ ] Client [ ] UPS [✔] FedEx [ ] Other: ____

[✔] Yes	[ ] No		1. Were custody seals present on the cooler?
[✔] Yes	[ ] No	[ ] NA	2. If custody seals were present, were they intact and unbroken?

pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: 337205
1.3 / 1.3 °C NA / NA °C NA / NA °C NA / NA °C
Method: [✔] Temperature Blank [ ] Against Bottles IR Gun ID: 8 IR Gun Correction Factor: 0 °C
Method of coolant: [✔] Wet Ice [ ] Ice Packs [ ] Dry Ice [ ] None

[✔] Yes	[ ] No	[ ] NA	3. Were all coolers received at or below 6.0°C? If no, was Project Manager notified? PM was Notified by: phone / email / face-to-face (circle one).
[✔] Yes	[ ] No	[ ] NA	4. Is the commercial courier's packing slip attached to this form?
[✔] Yes	[ ] No		5. Were proper custody procedures (relinquished/received) followed?
[✔] Yes	[ ] No		6. Were sample IDs listed on the COC and all sample containers?
[✔] Yes	[ ] No		7. Was collection date & time listed on the COC and all sample containers?
[✔] Yes	[ ] No		8. Did all container label information (ID, date, time) agree with the COC?
[✔] Yes	[ ] No		9. Were tests to be performed listed on the COC?
[✔] Yes	[ ] No		10. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)? ____
[✔] Yes	[ ] No		11. Was adequate sample volume available?
[✔] Yes	[✓] No		12. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
[✔] Yes	[ ] No		13. Were all samples containers accounted for? (No missing/excess)
[ ] Yes	[ ] No	[✔] NA	14. Were VOA, 8015C and RSK-175 samples free of bubbles >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
[ ] Yes	[ ] No	[✔] NA	15. Were all DRO/metals/nutrient samples received at a pH of < 2?
[ ] Yes	[ ] No	[✔] NA	16. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
[ ] Yes	[ ] No	[✔] NA	17. Were all applicable NH_3/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
[ ] Yes	[ ] No	[✔] NA	18. Was the quote number listed on the container label? If yes, Quote # ____

tac 1/9/26

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) NA ____ were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # NA. ☐
Time of preservation NA. If more than one preservative is needed, please note in the comments below.

Sample(s) NA ____ were received with bubbles >6 mm in diameter.

Samples(s) NA ____ were received with TRC > 0.5 mg/L (If #19 is *no*) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Unique ID: NA.

Comments:

Qualtrax ID: 56360 Pace® Analytical Services, LLC Page 1 of 1

ANALYTICAL REPORT

January 19, 2026

Terracon - Wilmington, NC

Sample Delivery Group:	L1933601
Samples Received:	01/08/2026
Project Number:	K625P194
Description:	Marine Corps Base Camp Lejeune
Site:	MCAS CL
Report To:	Danielle Foster 2108 Capital Drive Suite 103 Wilmington, NC 28405

Entire Report Reviewed By:

Heather J Wagner
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

TABLE OF CONTENTS

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Cn: Case Narrative	4
Gl: Glossary of Terms	5
Al: Accreditations & Locations	6
Sc: Sample Chain of Custody	7

CL-P1634-SPT-02 L1933601-01

Collected by: Danielle Foster
Collected date/time: 01/06/26 14:30
Received date/time: 01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Subcontracted Analyses	WG2671473	1	01/13/26 00:00	01/13/26 00:00	-	West Columbia, SC 29172

CL-P1634-SPT-05 L1933601-02

Collected by: Danielle Foster
Collected date/time: 01/06/26 14:00
Received date/time: 01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Subcontracted Analyses	WG2671473	1	01/13/26 00:00	01/13/26 00:00	-	West Columbia, SC 29172

CL-P1634-SPT-10 L1933601-04

Collected by: Danielle Foster
Collected date/time: 01/06/26 13:30
Received date/time: 01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Subcontracted Analyses	WG2671473	1	01/13/26 00:00	01/13/26 00:00	-	West Columbia, SC 29172

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Heather J Wagner
Project Manager

Project Narrative

L1933601 -01, -02, -03, -04 contains subout data that is included after the chain of custody.

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

SDG	Sample Delivery Group.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Terracon - Wilmington, NC
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Billing Information:
Accounts Payable
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Report to: **Danielle Foster**

Email To: **danielle.foster@terracon.com;nick.lin**

Project Description: Marin Corps Base Camp Lejeune

City/State Collected: Jacksonville, NC

Please Circle: PT MT CT (ET)

Phone: **910-229-8597**

Client Project # K625P194

Lab Project # **TERRACWNC-LEJEUNE**

Collected by (print): Danielle Foster

Site/Facility ID # MCAS CL

P.O. # —

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day X 10 Day (Rad Only)
___ Three Day

Quote # —

Date Results Needed

Pres Chk: 87

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	DOD 6010 TAL Metals	DOD RCI	DOD8270TCL	DODDRO	DODPaint Filter	DODGRO	DODV8260BTEX	DODV8260TCL	DOD PFAS 1633	DOD Full TCLP+TCLP PCB	Remarks	Sample # (lab only)
CL-P1634-SPT-02	C	S	1-6	1/6/25	1430	4				X		X			X	X		-01
CL-P1634-SPT-05	C	S	1-6	↓	1400					X		X			X	X		-02
NR-P2803-SPT-07	G	GW	—		1050	13	X		X	X		X		X	X			-03
CL-P1634-SPT-10	G	GW	—	↓	1330	13	X		X	X		X		X	X			-04
						NP 1/8	SLF	1/8/26										

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS X FedEx __ Courier _____

Tracking # 7920 9198 6656

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/6/25	1700	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			[signature]

Trip Blank Received: (Yes) / No
HCL / MeoH
TBR

Temp: °C Bottles Received: 34
TLA9 2.3+0.0 = 2.3°C

Date: 1/8/26 Time: 9:00 am

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L933601

T **K124**

Acctnum: **TERRACWNC**
Template: **T286013**
Prelogin: **P1200317**
PM: **Heather Wagner**
PB:
Shipped Via:

Sample Receipt Checklist
COC Seal Present/Intact: X NP __Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: X Y __N
Preservation Correct/Checked: X Y __N
RAD Screen <0.5 mR/hr: X Y __N

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Report of Analysis

Pace Analytical LLC
12065 Lebanon Rd.
Mt. Juliet, TN 37122
Attention: Jimmy Huckaba

Project Name: L1933601

Project Number: WG2671473

Lot Number:**BA09008**

Date Completed:01/16/2026

01/16/2026 1:06 PM
Approved and released by:
Project Manager II: **Edward Barnett**

The electronic signature above is the equivalent of a handwritten signature.
This report shall not be reproduced, except in its entirety, without the written approval of Pace Analytical Services, LLC.

Pace Analytical Services, LLC (*formerly Shealy Environmental Services, Inc.*)
106 Vantage Point Drive West Columbia, SC 29172
Tel: 803-791-9700 Fax: 803-791-9111 www.pacelabs.com

Case Narrative
Pace Analytical LLC
Lot Number: BA09008

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report. Where sampling is conducted by the client, results relate to the accuracy of the information provided, and as the samples are received.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Additionally, the DoD QSM version 6.0 has been followed for these samples. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs, the DoD QSM, or policies are qualified on the results page or discussed below.

Pace - West Columbia is a DOD/DOE accredited laboratory; however, the following subcontract laboratories do not hold DOD/DOE certification: Schnabel Engineering, Bunnell Lammons Engineering (BLE), and Pace - Sheridan Terra (WY). The use of these subcontract laboratories is approved by the customer prior to sample shipment.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope accreditation: 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS), 2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA), 3-Perfluoroheptyl propanoic acid (7:3FTCA), 3-Perfluoropropyl propanoic acid (3:3FTCA), 4,8-Dioxa-3H-perfluorononanoic acid (ADONA), 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS), Hexafluoropropylene oxide dimer acid (HFPO-DA), N-ethyl perfluorooctanesulfonamide (NEtFOSA), N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE), N-methyl perfluorooctanesulfonamide (NMeFOSA), N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE), Nonafluoro-3,6-dioxaheptanoic acid (NFDHA), Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA), Perfluoro-3-methoxypropanoic acid (PFMPA), Perfluoro-4-methoxybutanoic acid (PFMBA), Perfluorododecanesulfonic acid (PFDoS), Perfluoropropanoic acid (PFPrA), 2H-perfluoro-2-octenoic acid (FHUEA), 2H-perfluoro-2-decenoic acid (FOUEA), Lithium Bis(trifluoromethane)sulfonimide (HQ-115) by EPA Method 8327. Perfluoropropanoic acid (PFPrA) and Bis (trifluoromethylsulfonyl)amine (TFSI) by EPA Method 1633.

Manual integration summaries are provided at the end of this report when applicable.

Where applicable, all soil sample results (including LOQ and DL if requested) are corrected for dry weight unless flagged with a "W" qualifier.

PFAS

The CCB associated with analytical batch 29251 contained EIS: PFTeDA greater than method criteria. The following sample was affected: BA09008-001. The data has been reported. The EIS failed high but the associated target analyte was ND.

BA09008-001 (CL-P1634-SPT-02) (Run 1) (Analysis Batch 29251) (Prep Batch 29225) PFAS 1633LV Method List (DOD QSM 6.0)

The continuing calibration verification (CCV) associated with sample BA09008-002 for NMeFOSAA recovered above the upper control limit. The sample associated with this CCV were non-detect for the affected analyte; therefore, the data has been reported.

BA09008-002 (CL-P1634-SPT-05) (Run 1) (Analysis Batch 29251) (Prep Batch 29225) PFAS 1633LV Method List (DOD QSM 6.0)

The CCB associated with analytical batch 29251 contained EIS: PFOS and PFTeDA greater than method criteria. The following sample was affected: BA09008-002. The data has been reported. The EIS failed high but the associated target analytes were ND.

BA09008-002 (CL-P1634-SPT-05) (Run 1) (Analysis Batch 29251) (Prep Batch 29225) PFAS 1633LV Method List (DOD QSM 6.0)

The low-level laboratory control sample (LLCS) for prep batch 29215 exceeded acceptance criteria for the following analytes: 3:3FTCA and 5:3FTCA. These analytes were biased high and were not detected in the samples affected: BA09008-003, BA09008-004.

BA09008-003 (NR-P2803-SPT-07) (Run 1) (Analysis Batch 29245) (Prep Batch 29215) PFAS 1633LV Method List (DOD QSM 6.0) (Refrigerated)
BA09008-004 (CL-P1634-SPT-10) (Run 1) (Analysis Batch 29245) (Prep Batch 29215) PFAS 1633LV Method List (DOD QSM 6.0) (Refrigerated)

The CCB associated with analytical batch 29245 contained EIS: PFPrA, PFOS, PFTeDA, MeFOSE, EtFOSE greater than method criteria. The following samples were affected: BA09008-003, BA09008-004. The data has been reported. The EIS failed high but the associated target analytes were ND.

BA09008-003 (NR-P2803-SPT-07) (Run 1) (Analysis Batch 29245) (Prep Batch 29215) PFAS 1633LV Method List (DOD QSM 6.0) (Refrigerated)
BA09008-004 (CL-P1634-SPT-10) (Run 1) (Analysis Batch 29245) (Prep Batch 29215) PFAS 1633LV Method List (DOD QSM 6.0) (Refrigerated)

Sample Summary
Pace Analytical LLC
Lot Number: BA09008

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	CL-P1634-SPT-02	Solid	01/06/2026 1430	01/09/2026
002	CL-P1634-SPT-05	Solid	01/06/2026 1400	01/09/2026
004	CL-P1634-SPT-10	Aqueous	01/06/2026 1330	01/09/2026

(4 samples)

Detection Summary
Pace Analytical LLC
Lot Number: BA09008

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	CL-P1634-SPT-02	Solid	PFBA	1633	0.30	JM-03	ng/g	6
001	CL-P1634-SPT-02	Solid	PFHpA	1633	0.084	JM-03	ng/g	6
001	CL-P1634-SPT-02	Solid	PFHxS	1633	0.12	J	ng/g	6
001	CL-P1634-SPT-02	Solid	PFOS	1633	0.39	M-03	ng/g	6
001	CL-P1634-SPT-02	Solid	PFOA	1633	0.21	M-03	ng/g	6
001	CL-P1634-SPT-02	Solid	PFPrA	1633	1.2	M-03	ng/g	6
002	CL-P1634-SPT-05	Solid	PFHxS	1633	0.066	JM-03	ng/g	8
002	CL-P1634-SPT-05	Solid	PFOS	1633	0.24	M-03	ng/g	8
004	CL-P1634-SPT-10	Aqueous	PFBS	1633	2.9		ng/L	12
004	CL-P1634-SPT-10	Aqueous	PFBA	1633	19	M-03	ng/L	12
004	CL-P1634-SPT-10	Aqueous	PFHpA	1633	16		ng/L	12
004	CL-P1634-SPT-10	Aqueous	PFHxS	1633	2.0	M-03	ng/L	12
004	CL-P1634-SPT-10	Aqueous	PFHxA	1633	23		ng/L	12
004	CL-P1634-SPT-10	Aqueous	PFNA	1633	0.65	JM-03	ng/L	12
004	CL-P1634-SPT-10	Aqueous	PFOS	1633	7.1	M-03	ng/L	12
004	CL-P1634-SPT-10	Aqueous	PFOA	1633	10	M-03	ng/L	12
004	CL-P1634-SPT-10	Aqueous	PFPeA	1633	42	M-03	ng/L	12
004	CL-P1634-SPT-10	Aqueous	PFPrA	1633	31	M-03	ng/L	12

(28 detections)

PFAS by LC/MS/MS

Client: **Pace Analytical LLC** | Laboratory ID: **BA09008-001**

Description: **CL-P1634-SPT-02** | Matrix: **Solid**

Date Sampled: **01/06/2026 1430** | % Solids: **86.4** **01/09/2026 1838**

Date Received: **01/09/2026**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	01/13/2026 1955	BWS	01/12/2026 1419	29225

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Bis(trifluoromethylsulfonyl)amine (TFSI)	82113-65-3	1633	0.20	U	0.40	0.20	0.075	ng/g	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3...)	763051-92-9	1633	0.38	U	0.79	0.38	0.21	ng/g	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	1633	0.37	U	0.79	0.37	0.21	ng/g	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	1633	0.38	U	0.79	0.38	0.18	ng/g	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	1633	0.38	U	0.79	0.38	0.25	ng/g	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	1633	0.37	U	0.79	0.37	0.29	ng/g	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1633	0.56	U	0.79	0.56	0.52	ng/g	1
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1633	2.5	U	5.0	2.5	1.7	ng/g	1
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6	1633	0.40	U	0.79	0.40	0.21	ng/g	1
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	4151-50-2	1633	0.10	U	0.20	0.10	0.078	ng/g	1
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	1633	0.10	U	0.20	0.10	0.088	ng/g	1
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1633	1.0	U	2.0	1.0	0.67	ng/g	1
N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1633	0.10	U	0.20	0.10	0.060	ng/g	1
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	1633	0.15	U	0.20	0.15	0.15	ng/g	1
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1633	1.0	U	2.0	1.0	0.64	ng/g	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	1633	0.20	U	0.40	0.20	0.15	ng/g	1
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	1633	0.18	U	0.40	0.18	0.077	ng/g	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1633	0.20	U	0.40	0.20	0.13	ng/g	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	1633	0.20	U	0.40	0.20	0.13	ng/g	1
Perfluorobutanesulfonic acid (PFBS)	375-73-5	1633	0.089	UM-03	0.20	0.089	0.078	ng/g	1
Perfluorobutanoic acid (PFBA)	**375-22-4**	**1633**	**0.30**	**JM-03**	**0.79**	**0.40**	**0.25**	**ng/g**	**1**
Perfluorodecanesulfonic acid (PFDS)	335-77-3	1633	0.10	U	0.20	0.10	0.040	ng/g	1
Perfluorodecanoic acid (PFDA)	335-76-2	1633	0.15	U	0.20	0.15	0.11	ng/g	1
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5	1633	0.10	U	0.20	0.10	0.068	ng/g	1
Perfluorododecanoic acid (PFDoA)	307-55-1	1633	0.10	U	0.20	0.10	0.096	ng/g	1
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	1633	0.10	U	0.20	0.10	0.081	ng/g	1
Perfluoroheptanoic acid (PFHpA)	**375-85-9**	**1633**	**0.084**	**JM-03**	**0.20**	**0.10**	**0.065**	**ng/g**	**1**
3-Perfluoroheptyl propanoic acid (7:3FTCA)	812-70-4	1633	2.5	U	5.0	2.5	1.8	ng/g	1
Perfluorohexanesulfonic acid (PFHxS)	**355-46-4**	**1633**	**0.12**	**J**	**0.20**	**0.091**	**0.065**	**ng/g**	**1**
Perfluorohexanoic acid (PFHxA)	307-24-4	1633	0.10	U	0.20	0.10	0.038	ng/g	1
Perfluorononanesulfonic acid (PFNS)	68259-12-1	1633	0.10	U	0.20	0.10	0.083	ng/g	1
Perfluorononanoic acid (PFNA)	375-95-1	1633	0.10	U	0.20	0.10	0.095	ng/g	1
Perfluorooctanesulfonamide (PFOSA)	754-91-6	1633	0.10	U	0.20	0.10	0.077	ng/g	1
Perfluorooctanesulfonic acid (PFOS)	**1763-23-1**	**1633**	**0.39**	**M-03**	**0.20**	**0.14**	**0.12**	**ng/g**	**1**
Perfluorooctanoic acid (PFOA)	**335-67-1**	**1633**	**0.21**	**M-03**	**0.20**	**0.15**	**0.11**	**ng/g**	**1**
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	1633	0.094	U	0.20	0.094	0.051	ng/g	1
Perfluoropentanoic acid (PFPeA)	2706-90-3	1633	0.20	UM-03	0.40	0.20	0.15	ng/g	1
Perfluoropropanoic acid (PFPrA)	**422-64-0**	**1633**	**1.2**	**M-03**	**0.79**	**0.71**	**0.67**	**ng/g**	**1**
3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	1633	0.74	U	0.99	0.74	0.54	ng/g	1
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1633	0.10	U	0.20	0.10	0.098	ng/g	1
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	1633	0.10	U	0.20	0.10	0.058	ng/g	1
Perfluoroundecanoic acid (PFUnA)	2058-94-8	1633	0.099	U	0.20	0.099	0.099	ng/g	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
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PFAS by LC/MS/MS

Client:	**Pace Analytical LLC**	Laboratory ID:	**BA09008-001**
Description:	**CL-P1634-SPT-02**	Matrix:	**Solid**
Date Sampled:	**01/06/2026 1430**	% Solids:	**86.4 01/09/2026 1838**
Date Received:	**01/09/2026**		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	01/13/2026 1955	BWS	01/12/2026 1419	29225

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C2-4:2FTS		112	40-165
13C2-6:2FTS		106	40-215
13C2-8:2FTS		100	40-275
13C8-PFOSA		67	40-130
D5-NEtFOSA		48	10-130
D3-NMeFOSA	M-03	52	10-130
D5-NEtFOSAA		71	40-150
D3-NMeFOSAA		74	40-135
13C4-PFBA		115	8-130
13C5-PFPeA		106	35-130
13C5-PFHxA		102	40-130
13C4-PFHpA		111	40-130
13C8-PFOA		101	40-130
13C9-PFNA		109	40-130
13C6-PFDA		98	40-130
13C3-PFBS		104	40-135
13C3-PFHxS		127	40-130
13C8-PFOS		115	40-130
13C7-PFUnA		82	40-130
13C2-PFDoA		65	40-130
13C2-PFTeDA		86	20-130
13C3-HFPO-DA		110	40-130
D7-NMeFOSE		60	20-130
D9-NEtFOSE		57	15-130
13C3-PFPrA		111	8-130

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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PFAS by LC/MS/MS

Client:	**Pace Analytical LLC**	Laboratory ID:	**BA09008-002**
Description:	**CL-P1634-SPT-05**	Matrix:	**Solid**
Date Sampled:	**01/06/2026 1400**	% Solids:	**90.3 01/09/2026 1838**
Date Received:	**01/09/2026**		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	01/13/2026 2044	BWS	01/12/2026 1419	29225

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Bis(trifluoromethylsulfonyl)amine (TFSI)	82113-65-3	1633	0.20	U	0.39	0.20	0.074	ng/g	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3...)	763051-92-9	1633	0.37	U	0.78	0.37	0.20	ng/g	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	1633	0.36	U	0.78	0.36	0.21	ng/g	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	1633	0.37	U	0.78	0.37	0.18	ng/g	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	1633	0.37	U	0.78	0.37	0.24	ng/g	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	1633	0.36	U	0.78	0.36	0.29	ng/g	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1633	0.56	U	0.78	0.56	0.51	ng/g	1
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1633	2.5	U	4.9	2.5	1.6	ng/g	1
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6	1633	0.39	U	0.78	0.39	0.21	ng/g	1
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	4151-50-2	1633	0.10	U	0.20	0.10	0.077	ng/g	1
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	1633	0.10	U	0.20	0.10	0.087	ng/g	1
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1633	1.0	U	2.0	1.0	0.66	ng/g	1
N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1633	0.10	U	0.20	0.10	0.059	ng/g	1
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	1633	0.15	U	0.20	0.15	0.15	ng/g	1
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1633	1.0	U	2.0	1.0	0.63	ng/g	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	1633	0.20	U	0.39	0.20	0.15	ng/g	1
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	1633	0.18	U	0.39	0.18	0.076	ng/g	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1633	0.20	U	0.39	0.20	0.13	ng/g	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	1633	0.20	U	0.39	0.20	0.13	ng/g	1
Perfluorobutanesulfonic acid (PFBS)	375-73-5	1633	0.089	U	0.20	0.089	0.077	ng/g	1
Perfluorobutanoic acid (PFBA)	375-22-4	1633	0.39	UM-03	0.78	0.39	0.24	ng/g	1
Perfluorodecanesulfonic acid (PFDS)	335-77-3	1633	0.10	U	0.20	0.10	0.039	ng/g	1
Perfluorodecanoic acid (PFDA)	335-76-2	1633	0.15	U	0.20	0.15	0.11	ng/g	1
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5	1633	0.10	U	0.20	0.10	0.066	ng/g	1
Perfluorododecanoic acid (PFDoA)	307-55-1	1633	0.10	U	0.20	0.10	0.095	ng/g	1
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	1633	0.10	U	0.20	0.10	0.080	ng/g	1
Perfluoroheptanoic acid (PFHpA)	375-85-9	1633	0.10	U	0.20	0.10	0.063	ng/g	1
3-Perfluoroheptyl propanoic acid (7:3FTCA)	812-70-4	1633	2.5	U	4.9	2.5	1.8	ng/g	1
Perfluorohexanesulfonic acid (PFHxS)	**355-46-4**	**1633**	**0.066**	**JM-03**	**0.20**	**0.091**	**0.063**	**ng/g**	**1**
Perfluorohexanoic acid (PFHxA)	307-24-4	1633	0.10	U	0.20	0.10	0.037	ng/g	1
Perfluorononanesulfonic acid (PFNS)	68259-12-1	1633	0.10	U	0.20	0.10	0.082	ng/g	1
Perfluorononanoic acid (PFNA)	375-95-1	1633	0.10	U	0.20	0.10	0.094	ng/g	1
Perfluorooctanesulfonamide (PFOSA)	754-91-6	1633	0.10	U	0.20	0.10	0.076	ng/g	1
Perfluorooctanesulfonic acid (PFOS)	**1763-23-1**	**1633**	**0.24**	**M-03**	**0.20**	**0.14**	**0.11**	**ng/g**	**1**
Perfluorooctanoic acid (PFOA)	335-67-1	1633	0.15	UM-03	0.20	0.15	0.11	ng/g	1
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	1633	0.094	U	0.20	0.094	0.050	ng/g	1
Perfluoropentanoic acid (PFPeA)	2706-90-3	1633	0.20	U	0.39	0.20	0.15	ng/g	1
Perfluoropropanoic acid (PFPrA)	422-64-0	1633	0.70	UM-03	0.78	0.70	0.66	ng/g	1
3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	1633	0.74	U	0.98	0.74	0.53	ng/g	1
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1633	0.10	U	0.20	0.10	0.097	ng/g	1
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	1633	0.10	U	0.20	0.10	0.057	ng/g	1
Perfluoroundecanoic acid (PFUnA)	2058-94-8	1633	0.098	U	0.20	0.098	0.098	ng/g	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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PFAS by LC/MS/MS

Client:	**Pace Analytical LLC**	Laboratory ID:	**BA09008-002**
Description:	**CL-P1634-SPT-05**	Matrix:	**Solid**
Date Sampled:	**01/06/2026 1400**	% Solids:	**90.3 01/09/2026 1838**
Date Received:	**01/09/2026**		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	01/13/2026 2044	BWS	01/12/2026 1419	29225

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C2-4:2FTS		104	40-165
13C2-6:2FTS		108	40-215
13C2-8:2FTS		96	40-275
13C8-PFOSA		77	40-130
D5-NEtFOSA	M-03	53	10-130
D3-NMeFOSA		60	10-130
D5-NEtFOSAA		61	40-150
D3-NMeFOSAA		71	40-135
13C4-PFBA		118	8-130
13C5-PFPeA	M-03	115	35-130
13C5-PFHxA		108	40-130
13C4-PFHpA		114	40-130
13C8-PFOA		111	40-130
13C9-PFNA		109	40-130
13C6-PFDA		92	40-130
13C3-PFBS		105	40-135
13C3-PFHxS		123	40-130
13C8-PFOS		109	40-130
13C7-PFUnA		72	40-130
13C2-PFDoA		56	40-130
13C2-PFTeDA		51	20-130
13C3-HFPO-DA		112	40-130
D7-NMeFOSE		67	20-130
D9-NEtFOSE		59	15-130
13C3-PFPrA		103	8-130

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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PFAS by LC/MS/MS

Client: **Pace Analytical LLC** | Laboratory ID: **BA09008-004**

Description: **CL-P1634-SPT-10** | Matrix: **Aqueous**

Date Sampled: **01/06/2026 1330**

Date Received: **01/09/2026**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	01/15/2026 1704	ERL	01/12/2026 0952	29215

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Bis(trifluoromethylsulfonyl)amine (TFSI)	82113-65-3	1633	1.4	U	2.7	1.4	0.43	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3...)	763051-92-9	1633	2.5	U	5.4	2.5	0.80	ng/L	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	1633	2.5	U	5.4	2.5	0.89	ng/L	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	1633	2.5	U	5.4	2.5	0.86	ng/L	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	1633	2.6	U	5.4	2.6	2.1	ng/L	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	1633	2.5	U	5.4	2.5	1.4	ng/L	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1633	2.5	U	5.4	2.5	1.7	ng/L	1
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1633	17	UL	34	17	5.6	ng/L	1
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6	1633	2.7	U	5.4	2.7	0.96	ng/L	1
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	4151-50-2	1633	0.65	U	1.3	0.65	0.37	ng/L	1
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	1633	0.98	U	1.3	0.98	0.78	ng/L	1
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1633	6.5	U	13	6.5	2.5	ng/L	1
N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1633	0.65	U	1.3	0.65	0.25	ng/L	1
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	1633	0.65	U	1.3	0.65	0.25	ng/L	1
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1633	6.5	U	13	6.5	2.8	ng/L	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	1633	1.4	U	2.7	1.4	0.67	ng/L	1
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	1633	1.2	U	2.7	1.2	0.25	ng/L	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1633	1.4	U	2.7	1.4	0.61	ng/L	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	1633	1.4	U	2.7	1.4	0.45	ng/L	1
Perfluorobutanesulfonic acid (PFBS)	**375-73-5**	**1633**	**2.9**		**1.3**	**1.1**	**1.0**	**ng/L**	**1**
Perfluorobutanoic acid (PFBA)	**375-22-4**	**1633**	**19**	**M-03**	**5.4**	**2.7**	**0.80**	**ng/L**	**1**
Perfluorodecanesulfonic acid (PFDS)	335-77-3	1633	0.63	U	1.3	0.63	0.35	ng/L	1
Perfluorodecanoic acid (PFDA)	335-76-2	1633	0.65	U	1.3	0.65	0.41	ng/L	1
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5	1633	0.63	U	1.3	0.63	0.30	ng/L	1
Perfluorododecanoic acid (PFDoA)	307-55-1	1633	0.65	U	1.3	0.65	0.16	ng/L	1
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	1633	0.62	U	1.3	0.62	0.49	ng/L	1
Perfluoroheptanoic acid (PFHpA)	**375-85-9**	**1633**	**16**		**1.3**	**0.65**	**0.27**	**ng/L**	**1**
3-Perfluoroheptyl propanoic acid (7:3FTCA)	812-70-4	1633	17	U	34	17	6.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	**355-46-4**	**1633**	**2.0**	**M-03**	**1.3**	**0.59**	**0.59**	**ng/L**	**1**
Perfluorohexanoic acid (PFHxA)	**307-24-4**	**1633**	**23**		**1.3**	**0.65**	**0.20**	**ng/L**	**1**
Perfluorononanesulfonic acid (PFNS)	68259-12-1	1633	0.63	U	1.3	0.63	0.39	ng/L	1
Perfluorononanoic acid (PFNA)	**375-95-1**	**1633**	**0.65**	**JM-03**	**1.3**	**0.65**	**0.51**	**ng/L**	**1**
Perfluorooctanesulfonamide (PFOSA)	754-91-6	1633	0.65	U	1.3	0.65	0.24	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	**1763-23-1**	**1633**	**7.1**	**M-03**	**1.3**	**0.60**	**0.46**	**ng/L**	**1**
Perfluorooctanoic acid (PFOA)	**335-67-1**	**1633**	**10**	**M-03**	**1.3**	**0.65**	**0.62**	**ng/L**	**1**
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	1633	0.61	U	1.3	0.61	0.37	ng/L	1
Perfluoropentanoic acid (PFPeA)	**2706-90-3**	**1633**	**42**	**M-03**	**2.7**	**1.4**	**0.37**	**ng/L**	**1**
Perfluoropropanoic acid (PFPrA)	**422-64-0**	**1633**	**31**	**M-03**	**5.4**	**2.7**	**2.1**	**ng/L**	**1**
3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	1633	3.4	UL	6.7	3.4	1.3	ng/L	1
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1633	0.65	U	1.3	0.65	0.36	ng/L	1
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	1633	0.65	U	1.3	0.65	0.51	ng/L	1
Perfluoroundecanoic acid (PFUnA)	2058-94-8	1633	0.98	U	1.3	0.98	0.69	ng/L	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

PFAS by LC/MS/MS

Client: **Pace Analytical LLC**
Laboratory ID: **BA09008-004**
Description: **CL-P1634-SPT-10**
Matrix: **Aqueous**
Date Sampled: **01/06/2026 1330**
Date Received: **01/09/2026**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	01/15/2026 1704	ERL	01/12/2026 0952	29215

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C2-4:2FTS		101	40-200
13C2-6:2FTS		105	40-200
13C2-8:2FTS		99	40-300
13C8-PFOSA		95	40-130
D5-NEtFOSA		69	10-130
D3-NMeFOSA	M-03	69	10-130
D5-NEtFOSAA		76	25-135
D3-NMeFOSAA		81	40-170
13C4-PFBA	M-03	99	5-130
13C5-PFPeA		105	40-130
13C5-PFHxA		97	40-130
13C4-PFHpA		99	40-130
13C8-PFOA		100	40-130
13C9-PFNA		102	40-130
13C6-PFDA		95	40-130
13C3-PFBS		91	40-135
13C3-PFHxS		96	40-130
13C8-PFOS		88	40-130
13C7-PFUnA		85	30-130
13C2-PFDoA	M-03	81	10-130
13C2-PFTeDA	M-03	78	10-130
13C3-HFPO-DA		101	40-130
D7-NMeFOSE		84	10-130
D9-NEtFOSE	M-03	83	10-130
13C3-PFPrA		81	5-130

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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QC Summary

PFAS by LC/MS/MS - MB

Sample ID: BQ29215-001
Batch: 29215
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
TFSI	1.6	U	1	3.2	1.6	0.51	ng/L	01/15/2026 1624
11Cl-PF3OUdS	3.0	U	1	6.4	3.0	0.95	ng/L	01/15/2026 1624
9Cl-PF3ONS	3.0	U	1	6.4	3.0	1.1	ng/L	01/15/2026 1624
ADONA	3.0	U	1	6.4	3.0	1.0	ng/L	01/15/2026 1624
8:2FTS	3.1	U	1	6.4	3.1	2.5	ng/L	01/15/2026 1624
4:2FTS	3.0	U	1	6.4	3.0	1.7	ng/L	01/15/2026 1624
6:2FTS	3.0	U	1	6.4	3.0	2.1	ng/L	01/15/2026 1624
5:3FTCA	20	U	1	40	20	6.6	ng/L	01/15/2026 1624
HFPO-DA	3.2	U	1	6.4	3.2	1.1	ng/L	01/15/2026 1624
NEtFOSA	0.80	U	1	1.6	0.80	0.44	ng/L	01/15/2026 1624
NEtFOSAA	1.2	U	1	1.6	1.2	0.93	ng/L	01/15/2026 1624
NEtFOSE	8.0	U	1	16	8.0	3.0	ng/L	01/15/2026 1624
NMeFOSA	0.80	U	1	1.6	0.80	0.30	ng/L	01/15/2026 1624
NMeFOSAA	0.80	U	1	1.6	0.80	0.30	ng/L	01/15/2026 1624
NMeFOSE	8.0	U	1	16	8.0	3.3	ng/L	01/15/2026 1624
NFDHA	1.6	U	1	3.2	1.6	0.79	ng/L	01/15/2026 1624
PFEESA	1.4	U	1	3.2	1.4	0.30	ng/L	01/15/2026 1624
PFMPA	1.6	U	1	3.2	1.6	0.72	ng/L	01/15/2026 1624
PFMBA	1.6	U	1	3.2	1.6	0.53	ng/L	01/15/2026 1624
PFBS	1.4	U	1	1.6	1.4	1.2	ng/L	01/15/2026 1624
PFBA	3.2	U	1	6.4	3.2	0.95	ng/L	01/15/2026 1624
PFDS	0.77	U	1	1.6	0.77	0.41	ng/L	01/15/2026 1624
PFDA	0.80	U	1	1.6	0.80	0.49	ng/L	01/15/2026 1624
PFDoS	0.77	U	1	1.6	0.77	0.36	ng/L	01/15/2026 1624
PFDoA	0.80	U	1	1.6	0.80	0.19	ng/L	01/15/2026 1624
PFHpS	0.76	U	1	1.6	0.76	0.58	ng/L	01/15/2026 1624
PFHpA	0.80	U	1	1.6	0.80	0.32	ng/L	01/15/2026 1624
7:3FTCA	20	U	1	40	20	8.1	ng/L	01/15/2026 1624
PFHxS	0.73	UM-03	1	1.6	0.73	0.71	ng/L	01/15/2026 1624
PFHxA	0.80	U	1	1.6	0.80	0.24	ng/L	01/15/2026 1624
PFNS	0.77	U	1	1.6	0.77	0.47	ng/L	01/15/2026 1624
PFNA	0.80	U	1	1.6	0.80	0.61	ng/L	01/15/2026 1624
PFOSA	0.80	U	1	1.6	0.80	0.29	ng/L	01/15/2026 1624
PFOS	0.74	U	1	1.6	0.74	0.55	ng/L	01/15/2026 1624
PFOA	0.80	U	1	1.6	0.80	0.73	ng/L	01/15/2026 1624
PFPeS	0.75	U	1	1.6	0.75	0.44	ng/L	01/15/2026 1624
PFPeA	1.6	U	1	3.2	1.6	0.44	ng/L	01/15/2026 1624
PFPrA	3.2	UM-03	1	6.4	3.2	2.5	ng/L	01/15/2026 1624
3:3FTCA	4.0	U	1	8.0	4.0	1.5	ng/L	01/15/2026 1624
PFTeDA	0.80	U	1	1.6	0.80	0.43	ng/L	01/15/2026 1624
PFTrDA	0.80	U	1	1.6	0.80	0.61	ng/L	01/15/2026 1624
PFUnA	1.2	U	1	1.6	1.2	0.82	ng/L	01/15/2026 1624

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29215-001
Batch: 29215
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		109	40-200
13C2-6:2FTS		111	40-200
13C2-8:2FTS	M-03	111	40-300
13C8-PFOSA		112	40-130
D5-NEtFOSA		64	10-130
D3-NMeFOSA		65	10-130
D5-NEtFOSAA		96	25-135
D3-NMeFOSAA		102	40-170
13C4-PFBA	M-03	105	5-130
13C5-PFPeA		115	40-130
13C5-PFHxA		109	40-130
13C4-PFHpA		107	40-130
13C8-PFOA		108	40-130
13C9-PFNA		105	40-130
13C6-PFDA		98	40-130
13C3-PFBS		103	40-135
13C3-PFHxS		103	40-130
13C8-PFOS		104	40-130
13C7-PFUnA		88	30-130
13C2-PFDoA		88	10-130
13C2-PFTeDA		76	10-130
13C3-HFPO-DA		106	40-130
D7-NMeFOSE	M-03	103	10-130
D9-NEtFOSE	M-03	97	10-130
13C3-PFPrA		119	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29215-002
Batch: 29215
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Parameter	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	78	88		1	112	70-140	01/15/2026 1634
11Cl-PF3OUdS	150	120		1	81	55-160	01/15/2026 1634
9Cl-PF3ONS	150	140		1	94	70-155	01/15/2026 1634
ADONA	150	140		1	91	65-145	01/15/2026 1634
8:2FTS	150	170		1	113	60-150	01/15/2026 1634
4:2FTS	150	150		1	99	70-145	01/15/2026 1634
6:2FTS	150	150		1	96	65-155	01/15/2026 1634
5:3FTCA	1000	1100		1	115	70-135	01/15/2026 1634
HFPO-DA	160	170		1	107	70-140	01/15/2026 1634
NEtFOSA	40	42	M-03	1	105	65-145	01/15/2026 1634
NEtFOSAA	40	41	M-03	1	103	70-145	01/15/2026 1634
NEtFOSE	400	410	M-03	1	103	70-135	01/15/2026 1634
NMeFOSA	40	40	M-03	1	100	60-150	01/15/2026 1634
NMeFOSAA	40	37	M-03	1	91	50-140	01/15/2026 1634
NMeFOSE	400	410	M-03	1	103	70-145	01/15/2026 1634
NFDHA	80	89		1	112	50-150	01/15/2026 1634
PFEESA	71	70		1	99	70-140	01/15/2026 1634
PFMPA	80	79	M-03	1	99	55-140	01/15/2026 1634
PFMBA	80	77	M-03	1	96	60-150	01/15/2026 1634
PFBS	36	38		1	107	60-145	01/15/2026 1634
PFBA	160	150	M-03	1	97	70-140	01/15/2026 1634
PFDS	39	30	M-03	1	79	60-145	01/15/2026 1634
PFDA	40	39		1	99	70-140	01/15/2026 1634
PFDoS	39	28	M-03	1	72	50-145	01/15/2026 1634
PFDoA	40	43	M-03	1	108	70-140	01/15/2026 1634
PFHpS	38	39	M-03	1	102	70-150	01/15/2026 1634
PFHpA	40	35		1	88	70-150	01/15/2026 1634
7:3FTCA	1000	1100		1	109	50-145	01/15/2026 1634
PFHxS	36	39	M-03	1	108	65-145	01/15/2026 1634
PFHxA	40	39		1	98	70-145	01/15/2026 1634
PFNS	38	35		1	90	65-145	01/15/2026 1634
PFNA	40	38	M-03	1	94	70-150	01/15/2026 1634
PFOSA	40	40	M-03	1	99	70-145	01/15/2026 1634
PFOS	37	32	M-03	1	87	55-150	01/15/2026 1634
PFOA	40	36		1	90	70-150	01/15/2026 1634
PFPeS	38	41		1	108	65-140	01/15/2026 1634
PFPeA	80	78	M-03	1	98	65-135	01/15/2026 1634
PFPrA	160	160		1	98	70-140	01/15/2026 1634
3:3FTCA	200	230	M-03	1	117	65-130	01/15/2026 1634
PFTeDA	40	37		1	92	60-140	01/15/2026 1634
PFTrDA	40	42	M-03	1	105	65-140	01/15/2026 1634
PFUnA	40	39	M-03	1	96	70-145	01/15/2026 1634

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29215-002
Batch: 29215
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		119	40-200
13C2-6:2FTS		124	40-200
13C2-8:2FTS		108	40-300
13C8-PFOSA		109	40-130
D5-NEtFOSA	M-03	71	10-130
D3-NMeFOSA		74	10-130
D5-NEtFOSAA		94	25-135
D3-NMeFOSAA		105	40-170
13C4-PFBA	M-03	105	5-130
13C5-PFPeA		102	40-130
13C5-PFHxA		97	40-130
13C4-PFHpA		107	40-130
13C8-PFOA		109	40-130
13C9-PFNA		102	40-130
13C6-PFDA		99	40-130
13C3-PFBS		99	40-135
13C3-PFHxS		103	40-130
13C8-PFOS		106	40-130
13C7-PFUnA		88	30-130
13C2-PFDoA		79	10-130
13C2-PFTeDA		86	10-130
13C3-HFPO-DA		96	40-130
D7-NMeFOSE	M-03	108	10-130
D9-NEtFOSE	M-03	106	10-130
13C3-PFPrA		107	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29215-102
Batch: 29215
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Parameter	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	6.3	6.3	M-03	1	101	70-140	01/15/2026 1644
11Cl-PF3OUdS	12	12	M-03	1	96	55-160	01/15/2026 1644
9Cl-PF3ONS	12	15	M-03	1	123	70-155	01/15/2026 1644
ADONA	12	16		1	131	65-145	01/15/2026 1644
8:2FTS	12	15	M-03	1	121	60-150	01/15/2026 1644
4:2FTS	12	14	M-03	1	119	70-145	01/15/2026 1644
6:2FTS	12	15		1	122	65-155	01/15/2026 1644
5:3FTCA	80	120	N	1	149	70-135	01/15/2026 1644
HFPO-DA	13	17		1	130	70-140	01/15/2026 1644
NEtFOSA	3.2	3.7	M-03	1	114	65-145	01/15/2026 1644
NEtFOSAA	3.2	3.9	M-03	1	121	70-145	01/15/2026 1644
NEtFOSE	32	41	M-03	1	128	70-135	01/15/2026 1644
NMeFOSA	3.2	4.2	M-03	1	130	60-150	01/15/2026 1644
NMeFOSAA	3.2	3.4	M-03	1	106	50-140	01/15/2026 1644
NMeFOSE	32	41	M-03	1	128	70-145	01/15/2026 1644
NFDHA	6.4	9.6	M-03	1	150	50-150	01/15/2026 1644
PFEESA	5.7	7.2		1	127	70-140	01/15/2026 1644
PFMPA	6.4	8.0	M-03	1	125	55-140	01/15/2026 1644
PFMBA	6.4	7.9	M-03	1	124	60-150	01/15/2026 1644
PFBS	2.8	3.5	M-03	1	123	60-145	01/15/2026 1644
PFBA	13	16	M-03	1	129	70-140	01/15/2026 1644
PFDS	3.1	2.7	M-03	1	87	60-145	01/15/2026 1644
PFDA	3.2	3.6		1	112	70-140	01/15/2026 1644
PFDoS	3.1	2.7	M-03	1	88	50-145	01/15/2026 1644
PFDoA	3.2	4.3	M-03	1	134	70-140	01/15/2026 1644
PFHpS	3.0	3.9	M-03	1	127	70-150	01/15/2026 1644
PFHpA	3.2	4.1	M-03	1	127	70-150	01/15/2026 1644
7:3FTCA	80	110	M-03	1	138	50-145	01/15/2026 1644
PFHxS	2.9	3.2	M-03	1	112	65-145	01/15/2026 1644
PFHxA	3.2	4.2	M-03	1	132	70-145	01/15/2026 1644
PFNS	3.1	3.5	M-03	1	114	65-145	01/15/2026 1644
PFNA	3.2	4.0	M-03	1	125	70-150	01/15/2026 1644
PFOSA	3.2	3.9	M-03	1	123	70-145	01/15/2026 1644
PFOS	3.0	3.5	M-03	1	119	55-150	01/15/2026 1644
PFOA	3.2	4.3	M-03	1	134	70-150	01/15/2026 1644
PFPeS	3.0	3.8	M-03	1	127	65-140	01/15/2026 1644
PFPeA	6.4	7.6	M-03	1	119	65-135	01/15/2026 1644
PFPrA	13	16		1	123	70-140	01/15/2026 1644
3:3FTCA	16	24	NM-03	1	152	65-130	01/15/2026 1644
PFTeDA	3.2	3.8	M-03	1	120	60-140	01/15/2026 1644
PFTrDA	3.2	4.3	M-03	1	135	65-140	01/15/2026 1644
PFUnA	3.2	4.0	M-03	1	124	70-145	01/15/2026 1644

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

PFAS by LC/MS/MS - LCS

Sample ID: BQ29215-102
Batch: 29215
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS	M-03	118	40-200
13C2-6:2FTS		125	40-200
13C2-8:2FTS	M-03	116	40-300
13C8-PFOSA		115	40-130
D5-NEtFOSA		65	10-130
D3-NMeFOSA		64	10-130
D5-NEtFOSAA	M-03	105	25-135
D3-NMeFOSAA		108	40-170
13C4-PFBA	M-03	108	5-130
13C5-PFPeA		109	40-130
13C5-PFHxA		100	40-130
13C4-PFHpA		102	40-130
13C8-PFOA		108	40-130
13C9-PFNA		102	40-130
13C6-PFDA		107	40-130
13C3-PFBS		104	40-135
13C3-PFHxS		105	40-130
13C8-PFOS		111	40-130
13C7-PFUnA		94	30-130
13C2-PFDoA	M-03	83	10-130
13C2-PFTeDA		85	10-130
13C3-HFPO-DA		106	40-130
D7-NMeFOSE		106	10-130
D9-NEtFOSE	M-03	108	10-130
13C3-PFPrA		122	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29225-001
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
TFSI	0.20	U	1	0.40	0.20	0.076	ng/g	01/13/2026 1706
11Cl-PF3OUdS	0.38	U	1	0.80	0.38	0.21	ng/g	01/13/2026 1706
9Cl-PF3ONS	0.37	U	1	0.80	0.37	0.21	ng/g	01/13/2026 1706
ADONA	0.38	U	1	0.80	0.38	0.18	ng/g	01/13/2026 1706
8:2FTS	0.38	U	1	0.80	0.38	0.25	ng/g	01/13/2026 1706
4:2FTS	0.37	U	1	0.80	0.37	0.30	ng/g	01/13/2026 1706
6:2FTS	0.57	U	1	0.80	0.57	0.52	ng/g	01/13/2026 1706
5:3FTCA	2.5	U	1	5.0	2.5	1.7	ng/g	01/13/2026 1706
HFPO-DA	0.40	U	1	0.80	0.40	0.21	ng/g	01/13/2026 1706
NEtFOSA	0.10	U	1	0.20	0.10	0.079	ng/g	01/13/2026 1706
NEtFOSAA	0.10	U	1	0.20	0.10	0.089	ng/g	01/13/2026 1706
NEtFOSE	1.0	U	1	2.0	1.0	0.67	ng/g	01/13/2026 1706
NMeFOSA	0.10	U	1	0.20	0.10	0.060	ng/g	01/13/2026 1706
NMeFOSAA	0.15	U	1	0.20	0.15	0.15	ng/g	01/13/2026 1706
NMeFOSE	1.0	U	1	2.0	1.0	0.64	ng/g	01/13/2026 1706
NFDHA	0.20	U	1	0.40	0.20	0.16	ng/g	01/13/2026 1706
PFEESA	0.18	U	1	0.40	0.18	0.078	ng/g	01/13/2026 1706
PFMPA	0.20	U	1	0.40	0.20	0.13	ng/g	01/13/2026 1706
PFMBA	0.20	U	1	0.40	0.20	0.14	ng/g	01/13/2026 1706
PFBS	0.089	U	1	0.20	0.089	0.079	ng/g	01/13/2026 1706
PFBA	0.40	U	1	0.80	0.40	0.25	ng/g	01/13/2026 1706
PFDS	0.10	U	1	0.20	0.10	0.040	ng/g	01/13/2026 1706
PFDA	0.15	U	1	0.20	0.15	0.11	ng/g	01/13/2026 1706
PFDoS	0.10	U	1	0.20	0.10	0.068	ng/g	01/13/2026 1706
PFDoA	0.10	U	1	0.20	0.10	0.097	ng/g	01/13/2026 1706
PFHpS	0.10	U	1	0.20	0.10	0.082	ng/g	01/13/2026 1706
PFHpA	0.10	U	1	0.20	0.10	0.065	ng/g	01/13/2026 1706
7:3FTCA	2.5	U	1	5.0	2.5	1.8	ng/g	01/13/2026 1706
PFHxS	0.091	U	1	0.20	0.091	0.065	ng/g	01/13/2026 1706
PFHxA	0.10	U	1	0.20	0.10	0.038	ng/g	01/13/2026 1706
PFNS	0.10	U	1	0.20	0.10	0.084	ng/g	01/13/2026 1706
PFNA	0.10	U	1	0.20	0.10	0.096	ng/g	01/13/2026 1706
PFOSA	0.10	U	1	0.20	0.10	0.078	ng/g	01/13/2026 1706
PFOS	0.14	UM-03	1	0.20	0.14	0.12	ng/g	01/13/2026 1706
PFOA	0.15	U	1	0.20	0.15	0.11	ng/g	01/13/2026 1706
PFPeS	0.094	U	1	0.20	0.094	0.051	ng/g	01/13/2026 1706
PFPeA	0.20	U	1	0.40	0.20	0.15	ng/g	01/13/2026 1706
PFPrA	0.72	U	1	0.80	0.72	0.67	ng/g	01/13/2026 1706
3:3FTCA	0.75	U	1	1.0	0.75	0.54	ng/g	01/13/2026 1706
PFTeDA	0.10	U	1	0.20	0.10	0.099	ng/g	01/13/2026 1706
PFTrDA	0.10	U	1	0.20	0.10	0.058	ng/g	01/13/2026 1706
PFUnA	0.10	U	1	0.20	0.10	0.10	ng/g	01/13/2026 1706

LOQ = Limit of Quantitation
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LOD = Limit of Detection

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J = Estimated result < LOQ and ≥ DL
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N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29225-001
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		106	40-165
13C2-6:2FTS		109	40-215
13C2-8:2FTS		90	40-275
13C8-PFOSA		89	40-130
D5-NEtFOSA		44	10-130
D3-NMeFOSA		57	10-130
D5-NEtFOSAA		85	40-150
D3-NMeFOSAA		88	40-135
13C4-PFBA		108	8-130
13C5-PFPeA	M-03	102	35-130
13C5-PFHxA		99	40-130
13C4-PFHpA		101	40-130
13C8-PFOA		96	40-130
13C9-PFNA		96	40-130
13C6-PFDA		87	40-130
13C3-PFBS		88	40-135
13C3-PFHxS		100	40-130
13C8-PFOS		106	40-130
13C7-PFUnA		70	40-130
13C2-PFDoA		56	40-130
13C2-PFTeDA		41	20-130
13C3-HFPO-DA		106	40-130
D7-NMeFOSE		76	20-130
D9-NEtFOSE		67	15-130
13C3-PFPrA		87	8-130

LOQ = Limit of Quantitation
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LOD = Limit of Detection

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J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29225-002
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	9.8	9.0		1	92	70-140	01/13/2026 1716
11Cl-PF3OUdS	19	13		1	67	45-160	01/13/2026 1716
9Cl-PF3ONS	19	18		1	94	70-150	01/13/2026 1716
ADONA	19	20		1	105	70-160	01/13/2026 1716
8:2FTS	19	23		1	119	70-150	01/13/2026 1716
4:2FTS	19	18		1	93	60-150	01/13/2026 1716
6:2FTS	19	19		1	99	55-200	01/13/2026 1716
5:3FTCA	130	140		1	110	60-130	01/13/2026 1716
HFPO-DA	20	21		1	106	70-145	01/13/2026 1716
NEtFOSA	5.0	5.6	M-03	1	112	70-140	01/13/2026 1716
NEtFOSAA	5.0	5.6	M-03	1	111	65-165	01/13/2026 1716
NEtFOSE	50	53	M-03	1	106	70-135	01/13/2026 1716
NMeFOSA	5.0	4.9	M-03	1	98	70-155	01/13/2026 1716
NMeFOSAA	5.0	5.2	M-03	1	104	65-155	01/13/2026 1716
NMeFOSE	50	51	M-03	1	103	70-140	01/13/2026 1716
NFDHA	10	11		1	111	60-155	01/13/2026 1716
PFEESA	8.9	11		1	118	70-140	01/13/2026 1716
PFMPA	10	10	M-03	1	101	30-140	01/13/2026 1716
PFMBA	10	11	M-03	1	107	60-150	01/13/2026 1716
PFBS	4.4	4.8		1	107	65-145	01/13/2026 1716
PFBA	20	22	M-03	1	108	70-140	01/13/2026 1716
PFDS	4.8	3.5		1	72	40-155	01/13/2026 1716
PFDA	5.0	4.8		1	95	70-155	01/13/2026 1716
PFDoS	4.8	2.1		1	44	25-160	01/13/2026 1716
PFDoA	5.0	4.8		1	97	70-150	01/13/2026 1716
PFHpS	4.8	4.6		1	97	65-155	01/13/2026 1716
PFHpA	5.0	4.8		1	97	65-145	01/13/2026 1716
7:3FTCA	130	120		1	93	60-150	01/13/2026 1716
PFHxS	4.6	4.1		1	90	60-150	01/13/2026 1716
PFHxA	5.0	5.4		1	108	65-140	01/13/2026 1716
PFNS	4.8	4.1	M-03	1	85	55-140	01/13/2026 1716
PFNA	5.0	4.5	M-03	1	90	70-155	01/13/2026 1716
PFOSA	5.0	4.8	M-03	1	97	70-140	01/13/2026 1716
PFOS	4.6	4.0	M-03	1	87	65-160	01/13/2026 1716
PFOA	5.0	5.5		1	111	70-150	01/13/2026 1716
PFPeS	4.7	4.6		1	97	55-160	01/13/2026 1716
PFPeA	10	11	M-03	1	106	60-150	01/13/2026 1716
PFPrA	20	20	M-03	1	98	70-140	01/13/2026 1716
3:3FTCA	25	25	M-03	1	99	45-130	01/13/2026 1716
PFTeDA	5.0	4.4		1	88	65-150	01/13/2026 1716
PFTrDA	5.0	3.7		1	74	65-150	01/13/2026 1716
PFUnA	5.0	4.6		1	91	70-155	01/13/2026 1716

LOQ = Limit of Quantitation
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LOD = Limit of Detection

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Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29225-002
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		102	40-165
13C2-6:2FTS		105	40-215
13C2-8:2FTS		89	40-275
13C8-PFOSA		98	40-130
D5-NEtFOSA		55	10-130
D3-NMeFOSA		69	10-130
D5-NEtFOSAA		93	40-150
D3-NMeFOSAA		101	40-135
13C4-PFBA		117	8-130
13C5-PFPeA	M-03	108	35-130
13C5-PFHxA		106	40-130
13C4-PFHpA		114	40-130
13C8-PFOA		107	40-130
13C9-PFNA		125	40-130
13C6-PFDA		108	40-130
13C3-PFBS		94	40-135
13C3-PFHxS		110	40-130
13C8-PFOS		119	40-130
13C7-PFUnA		92	40-130
13C2-PFDoA		76	40-130
13C2-PFTeDA		50	20-130
13C3-HFPO-DA		116	40-130
D7-NMeFOSE		89	20-130
D9-NEtFOSE		80	15-130
13C3-PFPrA		104	8-130

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P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29225-102
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	0.98	0.86	M-03	1	87	70-140	01/13/2026 1726
11Cl-PF3OUdS	1.9	1.1		1	61	45-160	01/13/2026 1726
9Cl-PF3ONS	1.9	1.7		1	94	70-150	01/13/2026 1726
ADONA	1.9	2.2		1	117	70-160	01/13/2026 1726
8:2FTS	1.9	2.0		1	102	70-150	01/13/2026 1726
4:2FTS	1.9	2.0		1	108	60-150	01/13/2026 1726
6:2FTS	1.9	2.1		1	110	55-200	01/13/2026 1726
5:3FTCA	13	15		1	122	60-130	01/13/2026 1726
HFPO-DA	2.0	2.3		1	114	70-145	01/13/2026 1726
NEtFOSA	0.50	0.64	M-03	1	127	70-140	01/13/2026 1726
NEtFOSAA	0.50	0.39		1	78	65-165	01/13/2026 1726
NEtFOSE	5.0	5.6	M-03	1	111	70-135	01/13/2026 1726
NMeFOSA	0.50	0.52	M-03	1	104	70-155	01/13/2026 1726
NMeFOSAA	0.50	0.54	M-03	1	108	65-155	01/13/2026 1726
NMeFOSE	5.0	5.3	M-03	1	105	70-140	01/13/2026 1726
NFDHA	1.0	1.2	M-03	1	116	60-155	01/13/2026 1726
PFEESA	0.89	1.0		1	117	70-140	01/13/2026 1726
PFMPA	1.0	1.1	M-03	1	108	30-140	01/13/2026 1726
PFMBA	1.0	1.1	M-03	1	114	60-150	01/13/2026 1726
PFBS	0.44	0.53		1	121	65-145	01/13/2026 1726
PFBA	2.0	2.2	M-03	1	111	70-140	01/13/2026 1726
PFDS	0.48	0.24	M-03	1	50	40-155	01/13/2026 1726
PFDA	0.50	0.46	M-03	1	91	70-155	01/13/2026 1726
PFDoS	0.48	0.18	M-03	1	38	25-160	01/13/2026 1726
PFDoA	0.50	0.56		1	111	70-150	01/13/2026 1726
PFHpS	0.47	0.48		1	103	65-155	01/13/2026 1726
PFHpA	0.50	0.49	M-03	1	98	65-145	01/13/2026 1726
7:3FTCA	13	13	M-03	1	107	60-150	01/13/2026 1726
PFHxS	0.45	0.47	M-03	1	104	60-150	01/13/2026 1726
PFHxA	0.50	0.55		1	110	65-140	01/13/2026 1726
PFNS	0.48	0.41		1	86	55-140	01/13/2026 1726
PFNA	0.50	0.49	M-03	1	97	70-155	01/13/2026 1726
PFOSA	0.50	0.52	M-03	1	103	70-140	01/13/2026 1726
PFOS	0.46	0.46	M-03	1	99	65-160	01/13/2026 1726
PFOA	0.50	0.56	M-03	1	112	70-150	01/13/2026 1726
PFPeS	0.47	0.47	M-03	1	99	55-160	01/13/2026 1726
PFPeA	1.0	1.1	M-03	1	111	60-150	01/13/2026 1726
PFPrA	2.0	2.0	M-03	1	100	70-140	01/13/2026 1726
3:3FTCA	2.5	2.3	M-03	1	90	45-130	01/13/2026 1726
PFTeDA	0.50	0.58	M-03	1	115	65-150	01/13/2026 1726
PFTrDA	0.50	0.38		1	76	65-150	01/13/2026 1726
PFUnA	0.50	0.53	M-03	1	106	70-155	01/13/2026 1726

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P = The RPD between two GC columns exceeds 40%
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Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29225-102
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		100	40-165
13C2-6:2FTS		105	40-215
13C2-8:2FTS		100	40-275
13C8-PFOSA		84	40-130
D5-NEtFOSA		42	10-130
D3-NMeFOSA		54	10-130
D5-NEtFOSAA		89	40-150
D3-NMeFOSAA		83	40-135
13C4-PFBA		106	8-130
13C5-PFPeA	M-03	96	35-130
13C5-PFHxA		90	40-130
13C4-PFHpA		95	40-130
13C8-PFOA		102	40-130
13C9-PFNA		111	40-130
13C6-PFDA		100	40-130
13C3-PFBS		93	40-135
13C3-PFHxS		109	40-130
13C8-PFOS		103	40-130
13C7-PFUnA		81	40-130
13C2-PFDoA		56	40-130
13C2-PFTeDA		35	20-130
13C3-HFPO-DA		95	40-130
D7-NMeFOSE		74	20-130
D9-NEtFOSE		65	15-130
13C3-PFPrA		88	8-130

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Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA09008

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BA09008-001	1	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	BA09008-001	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BA09008-001	1	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BA09008-001	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA09008-001	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA09008-001	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BA09008-001	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BA09008-001	1	D3-NMeFOSA	M-03
1633	BA09008-002	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BA09008-002	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BA09008-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA09008-002	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA09008-002	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BA09008-002	1	D5-NEtFOSA	M-03
1633	BA09008-002	1	13C5-PFPeA	M-03
1633	BA09008-003	1	Bis(trifluoromethylsulfonyl)amine (TFSI)	M-03
1633	BA09008-003	1	Hexafluoropropylene oxide dimer acid	M-03
1633	BA09008-003	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BA09008-003	1	Perfluorohexanoic acid (PFHxA)	M-03
1633	BA09008-003	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA09008-003	1	Perfluoropentanesulfonic acid (PFPeS)	M-03
1633	BA09008-003	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BA09008-003	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BA09008-003	1	13C2-8:2FTS	M-03
1633	BA09008-003	1	D5-NEtFOSA	M-03
1633	BA09008-003	1	13C4-PFBA	M-03
1633	BA09008-003	1	13C9-PFNA	M-03
1633	BA09008-003	1	13C2-PFDoA	M-03
1633	BA09008-003	1	D9-NEtFOSE	M-03
1633	BA09008-004	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BA09008-004	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BA09008-004	1	Perfluorononanoic acid (PFNA)	M-03
1633	BA09008-004	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA09008-004	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA09008-004	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BA09008-004	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BA09008-004	1	D3-NMeFOSA	M-03
1633	BA09008-004	1	13C4-PFBA	M-03
1633	BA09008-004	1	13C2-PFDoA	M-03
1633	BA09008-004	1	13C2-PFTeDA	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA09008

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BA09008-004	1	D9-NEtFOSE	M-03
1633	BQ29225-102	1	Bis(trifluoromethylsulfonyl)amine (TFSI)	M-03
1633	BQ29225-002	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29225-102	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29225-002	1	N-ethyl	M-03
1633	BQ29225-002	1	N-ethyl	M-03
1633	BQ29225-102	1	N-ethyl	M-03
1633	BQ29225-002	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29225-102	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29225-002	1	N-methyl	M-03
1633	BQ29225-102	1	N-methyl	M-03
1633	BQ29225-002	1	N-methyl	M-03
1633	BQ29225-102	1	N-methyl	M-03
1633	BQ29225-102	1	Nonafluoro-3,6-dioxaheptanoic acid	M-03
1633	BQ29225-002	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29225-102	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29225-002	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29225-102	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29225-002	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29225-102	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29225-102	1	Perfluorodecanesulfonic acid (PFDS)	M-03
1633	BQ29225-102	1	Perfluorodecanoic acid (PFDA)	M-03
1633	BQ29225-102	1	Perfluorododecanesulfonic acid (PFDoS)	M-03
1633	BQ29225-102	1	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BQ29225-102	1	3-Perfluoroheptyl propanoic acid	M-03
1633	BQ29225-102	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BQ29225-002	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BQ29225-002	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29225-102	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29225-002	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29225-102	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29225-001	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29225-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29225-102	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29225-102	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BQ29225-102	1	Perfluoropentanesulfonic acid (PFPeS)	M-03
1633	BQ29225-002	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29225-102	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29225-002	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29225-102	1	Perfluoropropanoic acid (PFPrA)	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA09008

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BQ29225-002	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29225-102	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29225-102	1	Perfluorotetradecanoic acid (PFTeDA)	M-03
1633	BQ29225-102	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BQ29225-001	1	13C5-PFPeA	M-03
1633	BQ29225-002	1	13C5-PFPeA	M-03
1633	BQ29225-102	1	13C5-PFPeA	M-03
1633	BQ29215-102	1	Bis(trifluoromethylsulfonyl)amine (TFSI)	M-03
1633	BQ29215-102	1	11-Chloroeicosafluoro-3-oxaundecane-	M-03
1633	BQ29215-102	1	9-Chlorohexadecafluoro-3-oxanonane-	M-03
1633	BQ29215-102	1	1H,1H,2H,2H-Perfluorodecane sulfonic	M-03
1633	BQ29215-102	1	1H,1H,2H,2H-Perfluorohexane sulfonic	M-03
1633	BQ29215-002	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29215-102	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29215-002	1	N-ethyl	M-03
1633	BQ29215-102	1	N-ethyl	M-03
1633	BQ29215-002	1	N-ethyl	M-03
1633	BQ29215-102	1	N-ethyl	M-03
1633	BQ29215-002	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29215-102	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29215-002	1	N-methyl	M-03
1633	BQ29215-102	1	N-methyl	M-03
1633	BQ29215-002	1	N-methyl	M-03
1633	BQ29215-102	1	N-methyl	M-03
1633	BQ29215-102	1	Nonafluoro-3,6-dioxaheptanoic acid	M-03
1633	BQ29215-002	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29215-102	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29215-002	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29215-102	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29215-102	1	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	BQ29215-002	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29215-102	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29215-002	1	Perfluorodecanesulfonic acid (PFDS)	M-03
1633	BQ29215-102	1	Perfluorodecanesulfonic acid (PFDS)	M-03
1633	BQ29215-002	1	Perfluorododecanesulfonic acid (PFDoS)	M-03
1633	BQ29215-102	1	Perfluorododecanesulfonic acid (PFDoS)	M-03
1633	BQ29215-002	1	Perfluorododecanoic acid (PFDoA)	M-03
1633	BQ29215-102	1	Perfluorododecanoic acid (PFDoA)	M-03
1633	BQ29215-002	1	Perfluoroheptanesulfonic acid (PFHpS)	M-03
1633	BQ29215-102	1	Perfluoroheptanesulfonic acid (PFHpS)	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA09008

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BQ29215-102	1	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BQ29215-102	1	3-Perfluoroheptyl propanoic acid	M-03
1633	BQ29215-001	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BQ29215-002	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BQ29215-102	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BQ29215-102	1	Perfluorohexanoic acid (PFHxA)	M-03
1633	BQ29215-102	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BQ29215-002	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29215-102	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29215-002	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29215-102	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29215-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29215-102	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29215-102	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BQ29215-102	1	Perfluoropentanesulfonic acid (PFPeS)	M-03
1633	BQ29215-002	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29215-102	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29215-001	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29215-002	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29215-102	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29215-102	1	Perfluorotetradecanoic acid (PFTeDA)	M-03
1633	BQ29215-002	1	Perfluorotridecanoic acid (PFTrDA)	M-03
1633	BQ29215-102	1	Perfluorotridecanoic acid (PFTrDA)	M-03
1633	BQ29215-002	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BQ29215-102	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BQ29215-102	1	13C2-4:2FTS	M-03
1633	BQ29215-001	1	13C2-8:2FTS	M-03
1633	BQ29215-102	1	13C2-8:2FTS	M-03
1633	BQ29215-002	1	D5-NEtFOSA	M-03
1633	BQ29215-102	1	D5-NEtFOSAA	M-03
1633	BQ29215-001	1	13C4-PFBA	M-03
1633	BQ29215-002	1	13C4-PFBA	M-03
1633	BQ29215-102	1	13C4-PFBA	M-03
1633	BQ29215-102	1	13C2-PFDoA	M-03
1633	BQ29215-001	1	D7-NMeFOSE	M-03
1633	BQ29215-002	1	D7-NMeFOSE	M-03
1633	BQ29215-001	1	D9-NEtFOSE	M-03
1633	BQ29215-002	1	D9-NEtFOSE	M-03
1633	BQ29215-102	1	D9-NEtFOSE	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA09008

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier

If you have any questions regarding this report, please contact the Pace Project Manager listed on the cover page.

Chain of Custody
and
Miscellaneous Documents

Sub-Contract Chain of Custody

Batch Date/Time: 01/08/26 14:53
Sub-Contract Lab: PACEWCSC
Address: 106 Vantage Point Dr.
City/State: West Columbia, SC 29172
Contact: Edward.Burnett@pacelabs.com
Owner Lab: PACEMTJL
Address: 12065 Lebanon Rd.
City/State: Mt. Juliet, TN 37122
Phone: (615) 773-9756
Fax: (615) 758-5859

WO: WG2671473
Email: MTJLSubcontTeam@pacelabs.com
Results Due Date: 01/22/26
ESC Purchase Order #: L1933601
Send Reports to: Skylar S DeBoer

Pace Analytical
12065 Lebanon Rd.
Mt. Juliet, TN 37122
Phone:(615) 773-9756
Fax:(615) 758-5859

Sample ID Container ID	Matrix	State	Collect Date	Description	Sample Number Lab Use Only	Sample Comments Lab Use Only
CL-P1634-SPT-02 PFAS-90mlPP-NoPres - 54988917	SS	NC	01/06/26 14:30	SUBPFAS1633	1. L1933601-01	DOD, QC4
CL-P1634-SPT-05 PFAS-90mlPP-NoPres - 54988919	SS	NC	01/06/26 14:00	SUBPFAS1633	2. L1933601-02	DOD, QC4
NR-P2803-SPT-07 PFAS-250HDPE-NoPres - 54988922 PFAS-250HDPE-NoPres - 54988923	GW	NC	01/06/26 10:50	PFAS1633	3. L1933601-03	DOD, QC4
CL-P1634-SPT-10 PFAS-250HDPE-NoPres - 54988924 PFAS-250HDPE-NoPres - 54988925	GW	NC	01/06/26 13:30	PFAS1633	4. L1933601-04	DOD, QC4

*= Container used for multiple Samples and/or Analyses

T=1.3°C

Relinquished by: [signature] Date 1-8-26

Received by: Date

Relinquished by: FEDEX Date 1/9/26 0912

Received by: [signature] PACE Date 1/9/26 0912

BA09008

DC#_Title: ENV-FRM-WCOL-0286 v02_Samples Receipt Checklist (SRC)
Effective Date: 8/2/2022

Sample Receipt Checklist (SRC)

Client: Pace National | Cooler Inspected by/date: MAL / 1/9/26 | Lot #: BA09008

Means of receipt: ☐ Pace ☐ Client ☐ UPS ☑ FedEx ☐ Other: _____

☑ Yes	☐ No		1. Were custody seals present on the cooler?
☑ Yes	☐ No	☐ NA	2. If custody seals were present, were they intact and unbroken?

pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA

Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: 337205

1.3 /1.3 °C NA / NA °C NA / NA °C NA / NA °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 8 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☑ Yes	☐ No	☐ NA	3. Were all coolers received at or below 6.0°C? If no, was Project Manager notified? PM was Notified by: phone / email / face-to-face (circle one).
☑ Yes	☐ No	☐ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC and all sample containers?
☑ Yes	☐ No		7. Was collection date & time listed on the COC and all sample containers?
☑ Yes	☐ No		8. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		9. Were tests to be performed listed on the COC?
☑ Yes	☐ No		10. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)? _____
☑ Yes	☐ No		11. Was adequate sample volume available?
~~☑ Yes~~	☑ No		12. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☑ Yes	☐ No		13. Were all samples containers accounted for? (No missing/excess)
☐ Yes	☐ No	☑ NA	14. Were VOA, 8015C and RSK-175 samples free of bubbles >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	15. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	16. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	17. Were all applicable NH_3/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
☐ Yes	☐ No	☑ NA	18. Was the quote number listed on the container label? If yes, Quote # _____

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) NA _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # NA _____. Time of preservation NA _____. If more than one preservative is needed, please note in the comments below.

Sample(s) NA _____ were received with bubbles >6 mm in diameter.

Samples(s) NA _____ were received with TRC > 0.5 mg/L (If #19 is *no*) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Unique ID: NA _____.

Comments:

Qualtrax ID: 56360 | Pace® Analytical Services, LLC | Page 1 of 1

Composite Soil and Groundwater Summary – TCLP (Metals, VOCs, SVOCs, Pesticides, Herbicides PCBs), TPH-DRO and TPH-GRO

Composite Soil Summary of Detections and Exceedances
Marine Corps Base Camp Lejeune - Jacksonville, North Carolina
Terracon Project # K625P194
CL-P1634

Boring ID:	CL-P1634-SPT-02	CL-P1634-SPT-05	CL-P1634-SPT-10	EPA Maximum Concentration for Toxicity Characteristic (mg/L)	NC DEQ PSRG Industrial/Commercial Health Based PSRG (mg/kg)	NC DEQ PSRG Protection of Groundwater PSRG (mg/kg)
Sample Collection Depth (feet below ground surface):	1 to 6	1 to 6	1 to 6			
Sample Delivery Group No.:	L1933598	L1933598	L1933584			
Sample Collection Date:	1/6/2026	1/6/2026	1/6/2026			
TCLP Metals (ICP) Method 6010D and 7470A (mg/L)						
Arsenic	ND	ND	ND	5.00	6.40	1.00
Barium	ND	ND	0.122	100.00	3.00	5.80
Cadmium	ND	ND	ND	1.00	47000.00	580.00
Chromium	ND	ND	ND	-	20.00	3.00
Lead	ND	ND	ND	5.00	NP	NP
Mercury	ND	ND	ND	0.20	800.00	270.00
Selenium	ND	ND	ND	1.00	1200.00	2.10
Silver	ND	ND	ND	-	1200.00	3.40
TCLP Volatile Organic Compounds Method 8260D (mg/L)						
	ND	ND	ND	-	-	-
TCLP Semi-Volatile Organic Compounds Method 8270E (mg/L)						
	ND	ND	ND	-	-	-
TCLP Pesticides Method 8081B (mg/L)						
	ND	ND	ND	-	-	-
TCLP Herbicides Method 8151A (mg/L)						
	ND	ND	ND	-	-	-
TCLP PCBs Method 8082 (mg/L)						
	ND	ND	ND	-	-	-
TPH DRO/GRO Method 8015 (mg/Kg)						
TPH-GRO	ND	ND	ND	-	400.00	400.00
TPH-DRO	45.60	7.35	11.90	-	700000.00	700000.00
pH (su)						
Initial pH	4.83	5.33	9.35	-	-	-
Final pH	5.24	5.14	5.75	-	-	-

Notes:
Detected Concentrations are reported in milligrams per kilograms (mg/kg) or milligrams per liter (mg/L)
NP = Not Published
ND = Not detected
RED = Exceeds respective PSRG Industrial/Commercial Health Based
RED = Exceeds respective PSRG Protection of Groundwater
TPH = Total Petroleum Hydrocarbons
GRO = Gasoline Range Organics
DRO = Diesel Range Organics
VOC = Volatile Organic Compound
SVOC = Semi-Volatile Organic Compound

Groundwater Summary of Detections and Exceedances
Marine Corps Base Camp Lejeune - Jacksonville, North Carolina
Terracon Project # K625P194
CL-P1634

Boring ID:	CL-P1634-SPT-10	15A NCAC 02L .0202 Groundwater Quality Standards
Sample Collection Depth (feet below ground surface):	-	
Sample Delivery Group No.:	L1933598	
Sample Collection Date:	1/6/2026	
Metals Method 6010D and 7470A (ug/L)		
Mercury	ND	1.00
Aluminum	749.00	NP
Antimony	ND	1.00
Arsenic	ND	10.00
Barium	17.00	700.00
Beryllium	ND	4.00
Cadmium	ND	2.00
Calcium	78300.00	NP
Chromium	ND	10.00
Cobalt	ND	1.00
Copper	ND	10000.00
Iron	1010.00	300.00
Lead	ND	15.00
Magnesium	2250.00	NP
Manganese	14.70	50.00
Nickel	ND	100.00
Potassium	816.00	NP
Selenium	ND	20.00
Silver	ND	20.00
Sodium	6340.00	NP
Thallium	ND	2.00
Vanadium	ND	7.00
Zinc	10.60	10000.00

Groundwater Summary of Detections and Exceedances
Marine Corps Base Camp Lejeune - Jacksonville, North Carolina
Terracon Project # K625P194
CL-P1634

Volatile Organic Compounds Method 8260D (ug/L)		
Acetone	ND	60000.00
Benzene	ND	1.00
Bromochloromethane	ND	NP
Bromodichloromethane	ND	0.60
Bromoform	ND	4.00
Bromomethane	ND	10.00
Carbon disulfide	ND	700.00
Carbon tetrachloride	ND	0.30
Chlorobenzene	ND	50.00
Chlorodibromomethane	ND	NP
Chloroethane	ND	30000.00
Chloroform	ND	70.00
Chloromethane	ND	3.00
Cyclohexane	ND	NP
1,2-Dibromoethane	ND	NP
1,2-Dibromo-3-Chloropropane	ND	0.04
1,2-Dichlorobenzene	ND	20.00
1,3-Dichlorobenzene	ND	200.00
1,4-Dichlorobenzene	ND	6.00
Dichlorodifluoromethane	ND	10000.00
1,1-Dichloroethane	ND	6.00
1,2-Dichloroethane	ND	0.40
1,1-Dichloroethene	ND	NP
cis-1,2-Dichloroethene	ND	70.00
trans-1,2-Dichloroethene	ND	100.00
1,2-Dichloropropane	ND	0.60
cis-1,3-Dichloropropene	ND	0.40
trans-1,3-Dichloropropene	ND	0.40
Ethylbenzene	ND	600.00
Isopropylbenzene	ND	70.00
2-Butanone (MEK)	ND	NP
2-Hexanone	ND	400.00

Groundwater Summary of Detections and Exceedances
Marine Corps Base Camp Lejeune - Jacksonville, North Carolina
Terracon Project # K625P194
CL-P1634

Methylene Chloride	ND	5.00
4-Methyl-2-pentanone (MIBK)	ND	NP
Methyl Acetate	ND	NP
Methyl Cyclohexane	ND	NP
Methyl tert-butyl ether	ND	20.00
Styrene	ND	70.00
1,1,2,2-Tetrachloroethane	ND	0.20
Tetrachloroethene	ND	NP
Toluene	ND	600.00
1,2,3-Trichlorobenzene	ND	NP
1,2,4-Trichlorobenzene	ND	NP
1,1,1-Trichloroethane	ND	200.00
1,1,2-Trichloroethane	ND	0.60
Trichloroethene	ND	NP
Trichlorofluoromethane	ND	20000.00
1,1,2-Trichlorotrifluoroethane	ND	200000.00
Vinyl chloride	ND	0.03
m&p-Xylene	ND	500.00
o-Xylene	ND	500.00
Xylenes, Total	ND	NP
Semi-Volatile Organic Compounds Method 8270E (ug/L)		
Acenaphthene	ND	80.00
Acenaphthylene	ND	200.00
Acetophenone	ND	700.00
Anthracene	ND	20000.00
Atrazine	ND	3.00
Benzaldehyde	ND	NP
Benzo(a)anthracene	ND	0.05
Benzo(b)fluoranthene	ND	0.05
Benzo(k)fluoranthene	ND	0.50
Benzo(g,h,i)perylene	ND	200.00
Benzo(a)pyrene	ND	0.005
Biphenyl	ND	NP

Groundwater Summary of Detections and Exceedances
Marine Corps Base Camp Lejeune - Jacksonville, North Carolina
Terracon Project # K625P194
CL-P1634

Bis(2-chlorethoxy)methane	ND	NP
Bis(2-chloroethyl)ether	ND	0.03
2,2-Oxybis(1-Chloropropane)	ND	NP
4-Bromophenyl-phenylether	ND	NP
2-Chloronaphthalene	ND	NP
4-Chlorophenyl-phenylether	ND	NP
Caprolactam	ND	40000.00
Carbazole	ND	NP
Chrysene	ND	5.00
Dibenz(a,h)anthracene	ND	0.005
Dibenzofuran	ND	NP
3,3-Dichlorobenzidine	ND	NP
2,4-Dinitrotoluene	ND	0.05
2,6-Dinitrotoluene	ND	0.05
Fluoranthene	ND	300.00
Fluorene	ND	300.00
Hexachlorobenzene	ND	0.02
Hexachloro-1,3-butadiene	ND	NP
Hexachlorocyclopentadiene	ND	NP
Hexachloroethane	ND	NP
Indeno(1,2,3-cd)pyrene	ND	0.05
Isophorone	ND	40.00
Naphthalene	ND	6.00
2-Methylnapthalene	ND	30.00
2-Methylphenol	ND	400.00
3&4-Methyl Phenol	ND	400.00/40.00
Nitrobenzene	ND	NP
n-Nitrosodiphenylamine	ND	0.001
n-Nitrosodi-n-propylamine	ND	NP
Phenanthrene	ND	200.00
Benzylbutyl phthalate	ND	NP
Bis(2-Ethylhexyl)phthalate	ND	NP
Di-n-butyl phthalate	ND	700.00

Groundwater Summary of Detections and Exceedances
Marine Corps Base Camp Lejeune - Jacksonville, North Carolina
Terracon Project # K625P194
CL-P1634

Diethyl phthalate	ND	NP
Dimethyl phthalate	ND	NP
Di-n-octyl phthalate	ND	100.00
Pyrene	ND	200.00
4-Chloro-3-methylphenol	ND	NP
2-Chlorophenol	ND	0.40
2,4-Dichlorophenol	ND	0.98
2,4-Dimethylphenol	ND	100.00
4,6-Dinitro-2-methylphenol	ND	NP
2,4,-Dinitrophenol	ND	NP
2-Nitrophenol	ND	NP
2-Nitroaniline	ND	NP
3-Nitroaniline	ND	NP
4-Chloroaniline	ND	NP
4-Nitroaniline	ND	NP
4-Nitrophenol	ND	NP
Pentachlorophenol	ND	0.30
Phenol	ND	30.00
2,4,6-Trichlorophenol	ND	200.00
2,4,5-Trichlorophenol	ND	63.00
1,2,4,5-Tetrachlorobenzene	ND	2.00
TPH DRO/GRO Method 8015 (mg/L)		
TPH-GRO	ND	0.70
TPH-DRO	0.0927	10.00

Notes:

Detected Concentrations are reported in nanograms per liter (ng/L) and milligrams per liter (mg/L)

NP = Not Published

ND = Not detected

RED = Exceeds respective 15A NCAC 02L .0202 Groundwater Quality Standards

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

VOC = Volatile Organic Compound

SVOC = Semi-Volatile Organic Compound

ANALYTICAL REPORT

January 19, 2026

Terracon - Wilmington, NC

Sample Delivery Group:	L1933584
Samples Received:	01/08/2026
Project Number:	K625P194
Description:	Marine Corps Base Camp Lejeune
Site:	MCAS CL
Report To:	Danielle Foster 2108 Capital Drive Suite 103 Wilmington, NC 28405

Entire Report Reviewed By:

Heather J Wagner
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

CL-P1634-SPT-10 L1933584-07

Collected by: Danielle Foster
Collected date/time: 01/06/26 12:45
Received date/time: 01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2671783	1	01/09/26 10:02	01/09/26 10:12	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015C	WG2674239	25.8	01/06/26 12:45	01/13/26 20:13	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015C	WG2672075	1	01/09/26 15:01	01/10/26 14:52	JAS	Mt. Juliet, TN

CL-P1634-SPT-10 L1933584-08

Collected by: Danielle Foster
Collected date/time: 01/06/26 12:45
Received date/time: 01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG2671396	1	01/10/26 07:07	01/10/26 07:07	PNK	Mt. Juliet, TN
Preparation by Method 1311	WG2671436	1	01/09/26 10:31	01/09/26 10:31	JWS	Mt. Juliet, TN
Mercury by Method 7470A	WG2672625	1	01/10/26 11:46	01/11/26 18:39	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2672696	1	01/12/26 09:23	01/13/26 02:58	MAP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2672942	1	01/11/26 15:46	01/11/26 15:46	DWR	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG2672840	1	01/11/26 07:20	01/12/26 15:24	HLA	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG2674665	1	01/14/26 15:30	01/15/26 14:15	MEW	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG2674665	1	01/14/26 15:30	01/15/26 14:15	LJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG2674770	1	01/14/26 16:33	01/15/26 13:22	JRM	Mt. Juliet, TN

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Surrogate recovery limits have been exceeded; values are outside lower control limits.

Batch	Analyte	Lab Sample ID
WG2672900	2,4,6-Tribromophenol	L1933584-02

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2672900	(MSD) R4324624-4	Pyridine

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.5		1	01/09/2026 10:12	WG2671783

Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result (dry) mg/kg	Qualifier	DL (dry) mg/kg	LOD (dry) mg/kg	LOQ (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	8006-61-9	5.14	U	3.04	5.14	5.70	25	01/10/2026 09:02	WG2672385
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*92.6*				*59.0-128*		*01/10/2026 09:02*	WG2672385

Semi-Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result (dry) mg/kg	Qualifier	DL (dry) mg/kg	LOD (dry) mg/kg	LOQ (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	68334-30-5	5.04	B	0.955	2.48	4.97	1	01/10/2026 04:39	WG2672075
(S) o-Terphenyl	*84-15-1*	*69.5*				*18.0-148*		*01/10/2026 04:39*	WG2672075

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.9		1	01/09/2026 10:12	WG2671783

Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result (dry) mg/kg	Qualifier	DL (dry) mg/kg	LOD (dry) mg/kg	LOQ (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	8006-61-9	4.08	U	2.42	4.08	4.54	25.8	01/13/2026 20:13	WG2674239
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*93.6*				*59.0-128*		*01/13/2026 20:13*	WG2674239

Semi-Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result (dry) mg/kg	Qualifier	DL (dry) mg/kg	LOD (dry) mg/kg	LOQ (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	68334-30-5	11.9		0.837	2.18	4.35	1	01/10/2026 14:52	WG2672075
(S) o-Terphenyl	*84-15-1*	*75.6*				*18.0-148*		*01/10/2026 14:52*	WG2672075

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		1/9/2026 10:31:38 AM	WG2671436
TCLP ZHE Extraction	-		1/10/2026 7:07:55 AM	WG2671396
Initial pH	9.35		1/9/2026 10:31:38 AM	WG2671436
Final pH	5.74		1/9/2026 10:31:38 AM	WG2671436

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	01/11/2026 18:39	WG2672625

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	01/13/2026 02:58	WG2672696
Barium	0.122		0.100	100	1	01/13/2026 02:58	WG2672696
Cadmium	ND		0.100	1	1	01/13/2026 02:58	WG2672696
Chromium	ND		0.100	5	1	01/13/2026 02:58	WG2672696
Lead	ND		0.100	5	1	01/13/2026 02:58	WG2672696
Selenium	ND		0.100	1	1	01/13/2026 02:58	WG2672696
Silver	ND		0.100	5	1	01/13/2026 02:58	WG2672696

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.0500	0.50	1	01/11/2026 15:46	WG2672942
Carbon tetrachloride	ND		0.0500	0.50	1	01/11/2026 15:46	WG2672942
Chlorobenzene	ND		0.0500	100	1	01/11/2026 15:46	WG2672942
Chloroform	ND	J3	0.250	6	1	01/11/2026 15:46	WG2672942
1,2-Dichloroethane	ND		0.0500	0.50	1	01/11/2026 15:46	WG2672942
1,1-Dichloroethene	ND		0.0500	0.70	1	01/11/2026 15:46	WG2672942
2-Butanone (MEK)	ND	J3	0.500	200	1	01/11/2026 15:46	WG2672942
Tetrachloroethene	ND		0.0500	0.70	1	01/11/2026 15:46	WG2672942
Trichloroethene	ND		0.0500	0.50	1	01/11/2026 15:46	WG2672942
Vinyl chloride	ND		0.0500	0.20	1	01/11/2026 15:46	WG2672942
(S) Toluene-d8	*97.2*		*89.0-112*			*01/11/2026 15:46*	WG2672942
(S) 4-Bromofluorobenzene	*102*		*85.0-114*			*01/11/2026 15:46*	WG2672942
(S) 1,2-Dichloroethane-d4	*101*		*81.0-118*			*01/11/2026 15:46*	WG2672942

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
2,4,5-TP (Silvex)	ND		0.00200	1	1	01/12/2026 15:24	WG2672840
2,4-D	ND		0.00200	10	1	01/12/2026 15:24	WG2672840
(S) 2,4-Dichlorophenyl Acetic Acid	*76.2*		*32.0-138*			*01/12/2026 15:24*	WG2672840

Pesticides (GC) by Method 8081

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Chlordane	ND		0.00500	0.03	1	01/15/2026 14:15	WG2674665
Endrin	ND		0.00500	0.02	1	01/15/2026 14:15	WG2674665
Heptachlor	ND		0.00500	0.0080	1	01/15/2026 14:15	WG2674665
Lindane	ND		0.00500	0.40	1	01/15/2026 14:15	WG2674665
Methoxychlor	ND		0.00500	10	1	01/15/2026 14:15	WG2674665

Pesticides (GC) by Method 8081

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Toxaphene	ND		0.0100	0.50	1	01/15/2026 14:15	WG2674665
(S) Decachlorobiphenyl	*79.0*		*10.0-145*			*01/15/2026 14:15*	WG2674665
(S) Tetrachloro-m-xylene	*77.5*		*44.0-124*			*01/15/2026 14:15*	WG2674665

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.000500	50	1	01/15/2026 14:15	WG2674665
PCB 1221	ND		0.000500	50	1	01/15/2026 14:15	WG2674665
PCB 1232	ND		0.000500	50	1	01/15/2026 14:15	WG2674665
PCB 1242	ND		0.000500	50	1	01/15/2026 14:15	WG2674665
PCB 1248	ND		0.000500	50	1	01/15/2026 14:15	WG2674665
PCB 1254	ND		0.000500	50	1	01/15/2026 14:15	WG2674665
PCB 1260	ND		0.000500	50	1	01/15/2026 14:15	WG2674665
(S) Decachlorobiphenyl	*89.2*		*10.0-145*			*01/15/2026 14:15*	WG2674665
(S) Tetrachloro-m-xylene	*81.8*		*44.0-124*			*01/15/2026 14:15*	WG2674665

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
1,4-Dichlorobenzene	ND		0.100	7.50	1	01/15/2026 13:22	WG2674770
2,4-Dinitrotoluene	ND		0.100	0.13	1	01/15/2026 13:22	WG2674770
Hexachlorobenzene	ND		0.100	0.13	1	01/15/2026 13:22	WG2674770
Hexachloro-1,3-butadiene	ND		0.100	0.50	1	01/15/2026 13:22	WG2674770
Hexachloroethane	ND		0.100	3	1	01/15/2026 13:22	WG2674770
Nitrobenzene	ND		0.100	2	1	01/15/2026 13:22	WG2674770
Pyridine	ND		0.100	5	1	01/15/2026 13:22	WG2674770
3&4-Methyl Phenol	ND		0.100	400	1	01/15/2026 13:22	WG2674770
2-Methylphenol	ND		0.100	200	1	01/15/2026 13:22	WG2674770
Pentachlorophenol	ND		0.100	100	1	01/15/2026 13:22	WG2674770
2,4,5-Trichlorophenol	ND		0.100	400	1	01/15/2026 13:22	WG2674770
2,4,6-Trichlorophenol	ND		0.100	2	1	01/15/2026 13:22	WG2674770
(S) 2-Fluorophenol	*35.3*		*19.0-119*			*01/15/2026 13:22*	WG2674770
(S) Phenol-d5	*24.9*		*10.0-120*			*01/15/2026 13:22*	WG2674770
(S) Nitrobenzene-d5	*59.8*		*44.0-120*			*01/15/2026 13:22*	WG2674770
(S) 2-Fluorobiphenyl	*58.2*		*44.0-119*			*01/15/2026 13:22*	WG2674770
(S) 2,4,6-Tribromophenol	*68.0*		*43.0-140*			*01/15/2026 13:22*	WG2674770
(S) p-Terphenyl-d14	*72.8*		*50.0-134*			*01/15/2026 13:22*	WG2674770

QUALITY CONTROL SUMMARY

L1933584-01,03,05,07

Method Blank (MB)

(MB) R4323332-1 01/09/26 10:12

Analyte	MB Result %	MB Qualifier	MB DL %	MB LOD %	MB LOQ %
Total Solids	0.000			0.200	

L1933584-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1933584-01 01/09/26 10:12 • (DUP) R4323332-3 01/09/26 10:12

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	80.5	84.1	1	4.32		10

Laboratory Control Sample (LCS)

(LCS) R4323332-2 01/09/26 10:12

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	90.0-110	

QUALITY CONTROL SUMMARY

L1933584-02,04,06,08

Method Blank (MB)

(MB) R4323587-1 01/11/26 17:41

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Mercury	0.00500	U	0.00333	0.00500	0.0100

Laboratory Control Sample (LCS)

(LCS) R4323587-6 01/11/26 19:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.0300	0.0275	91.7	82.0-119	

L1933543-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933543-01 01/11/26 17:47 • (MS) R4323587-4 01/11/26 17:58 • (MSD) R4323587-5 01/11/26 18:01

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.0300	ND	0.0304	0.0308	101	103	1	82.0-119			1.23	20

QUALITY CONTROL SUMMARY

L1933584-02,04,06,08

Method Blank (MB)

(MB) R4324065-5 01/13/26 07:18

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Arsenic	0.0500	U	0.0333	0.0500	0.100
Barium	0.0500	U	0.0333	0.0500	0.100
Cadmium	0.0500	U	0.0333	0.0500	0.100
Chromium	0.0500	U	0.0333	0.0500	0.100
Lead	0.0500	U	0.0333	0.0500	0.100
Selenium	0.0500	U	0.0333	0.0500	0.100
Silver	0.0500	U	0.0333	0.0500	0.100

Laboratory Control Sample (LCS)

(LCS) R4324065-1 01/13/26 02:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	10.0	9.82	98.2	87.0-113	
Barium	10.0	10.2	102	88.0-113	
Cadmium	10.0	9.95	99.5	88.0-113	
Chromium	10.0	9.74	97.4	90.0-113	
Lead	10.0	9.78	97.8	86.0-113	
Selenium	10.0	9.67	96.7	83.0-114	
Silver	2.00	1.98	98.9	84.0-115	

L1933543-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933543-01 01/13/26 02:18 • (MS) R4324065-3 01/13/26 02:23 • (MSD) R4324065-4 01/13/26 02:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	10.0	ND	10.7	10.1	107	101	1	87.0-113			5.33	20
Barium	10.0	ND	11.1	10.4	111	104	1	88.0-113			6.03	20
Cadmium	10.0	ND	10.8	10.2	108	102	1	88.0-113			5.43	20
Chromium	10.0	ND	10.6	9.79	106	97.9	1	90.0-113			8.35	20
Lead	10.0	ND	10.6	10.0	106	100	1	86.0-113			5.98	20
Selenium	10.0	ND	10.5	9.86	104	98.0	1	83.0-114			6.16	20
Silver	2.00	ND	2.15	1.99	107	99.6	1	84.0-115			7.44	20

Method Blank (MB)

(MB) R4324380-3 01/10/26 03:09

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
TPH (GC/FID) Low Fraction	3.38	U	2.00	3.38	3.75
(S) a,a,a-Trifluorotoluene(FID)	*92.1*				*59.0-128*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4324380-1 01/10/26 01:15 • (LCSD) R4324380-2 01/10/26 01:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.00	4.43	4.58	88.6	91.6	79.0-122			3.33	30
(S) a,a,a-Trifluorotoluene(FID)				*104*	*104*	*59.0-128*				

Method Blank (MB)

(MB) R4324748-2 01/13/26 12:29

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
TPH (GC/FID) Low Fraction	3.38	U	2.00	3.38	3.75
(S) a,a,a-Trifluorotoluene(FID)	*93.3*				*59.0-128*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4324748-1 01/13/26 11:23 • (LCSD) R4324748-3 01/13/26 19:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.00	4.47	5.03	89.4	101	79.0-122			11.8	30
(S) a,a,a-Trifluorotoluene(FID)				*105*	*95.7*	*59.0-128*				

Method Blank (MB)

(MB) R4324177-3 01/11/26 10:26

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Benzene	0.0250	U	0.0167	0.0250	0.0500
Carbon tetrachloride	0.0250	U	0.0167	0.0250	0.0500
Chlorobenzene	0.0250	U	0.0167	0.0250	0.0500
Chloroform	0.125	U	0.0833	0.125	0.250
1,2-Dichloroethane	0.0250	U	0.0167	0.0250	0.0500
1,1-Dichloroethene	0.0250	U	0.0167	0.0250	0.0500
2-Butanone (MEK)	0.250	U	0.167	0.250	0.500
Tetrachloroethene	0.0250	U	0.0167	0.0250	0.0500
Trichloroethene	0.0250	U	0.0167	0.0250	0.0500
Vinyl chloride	0.0250	U	0.0167	0.0250	0.0500
(S) Toluene-d8	*98.9*				*89.0-112*
(S) 4-Bromofluorobenzene	*102*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*96.2*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4324177-1 01/11/26 09:07 • (LCSD) R4324177-2 01/11/26 09:27

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	0.483	0.576	96.6	115	79.0-120			17.6	20
Carbon tetrachloride	0.500	0.511	0.602	102	120	72.0-136			16.4	20
Chlorobenzene	0.500	0.478	0.561	95.6	112	82.0-118			16.0	20
Chloroform	0.500	0.441	0.540	88.2	108	79.0-124		J3	20.2	20
1,2-Dichloroethane	0.500	0.448	0.537	89.6	107	73.0-128			18.1	20
1,1-Dichloroethene	0.500	0.514	0.588	103	118	71.0-131			13.4	20
2-Butanone (MEK)	2.50	2.17	2.66	86.8	106	56.0-143		J3	20.3	20
Tetrachloroethene	0.500	0.517	0.591	103	118	74.0-129			13.4	20
Trichloroethene	0.500	0.492	0.598	98.4	120	79.0-123			19.4	20
Vinyl chloride	0.500	0.406	0.460	81.2	92.0	58.0-137			12.5	20
(S) Toluene-d8				*101*	*99.4*	*89.0-112*				
(S) 4-Bromofluorobenzene				*102*	*104*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*98.4*	*95.0*	*81.0-118*				

L1933318-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933318-01 01/11/26 11:06 • (MS) R4324177-4 01/11/26 17:46 • (MSD) R4324177-5 01/11/26 18:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	ND	0.604	0.587	121	117	1	79.0-120	J5		2.85	20
Carbon tetrachloride	0.500	ND	0.677	0.651	135	130	1	72.0-136			3.92	20
Chlorobenzene	0.500	ND	0.583	0.556	117	111	1	82.0-118			4.74	20
Chloroform	0.500	ND	0.595	0.580	119	116	1	79.0-124			2.55	20
1,2-Dichloroethane	0.500	ND	0.648	0.631	130	126	1	73.0-128	J5		2.66	20
1,1-Dichloroethene	0.500	ND	0.594	0.571	119	114	1	71.0-131			3.95	20
2-Butanone (MEK)	2.50	ND	2.37	2.32	94.8	92.8	1	56.0-143			2.13	20
Tetrachloroethene	0.500	ND	0.617	0.580	123	116	1	74.0-129			6.18	20
Trichloroethene	0.500	ND	0.617	0.602	123	120	1	79.0-123			2.46	20
Vinyl chloride	0.500	ND	0.443	0.427	88.6	85.4	1	58.0-137			3.68	20
(S) Toluene-d8					*98.9*	*94.3*		*89.0-112*				
(S) 4-Bromofluorobenzene					*103*	*101*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*116*	*109*		*81.0-118*				

Method Blank (MB)

(MB) R4323351-1 01/10/26 03:11

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
TPH (GC/FID) High Fraction	0.987	J	0.769	2.00	4.00
(S) o-Terphenyl	*84.2*				*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R4323351-2 01/10/26 03:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	37.8	75.6	50.0-150	
(S) o-Terphenyl			*86.2*	*18.0-148*	

L1933613-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933613-03 01/10/26 13:03 • (MS) R4323679-1 01/10/26 13:16 • (MSD) R4323679-2 01/10/26 13:30

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	56.8	48.8	107	168	103	211	2	50.0-150		J3 J5	44.2	20
(S) o-Terphenyl					*143*	*99.5*		*18.0-148*				

Sample Narrative:

OS: Dilution due to matrix impact during extract concentration procedure.

QUALITY CONTROL SUMMARY

L1933584-02,04,06,08

Method Blank (MB)

(MB) R4323955-1 01/12/26 11:36

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
2,4,5-TP (Silvex)	0.00100	U	0.000667	0.00100	0.00200
2,4-D	0.00100	U	0.000667	0.00100	0.00200
(S) 2,4-Dichlorophenyl Acetic Acid	*72.4*				*32.0-138*

Laboratory Control Sample (LCS)

(LCS) R4323955-2 01/12/26 11:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2,4,5-TP (Silvex)	0.0250	0.0221	88.4	51.0-134	
2,4-D	0.0250	0.0237	94.8	45.0-152	
(S) 2,4-Dichlorophenyl Acetic Acid			*89.4*	*32.0-138*	

L1933246-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933246-01 01/12/26 16:47 • (MS) R4323955-3 01/12/26 16:57 • (MSD) R4323955-4 01/12/26 17:07

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,4,5-TP (Silvex)	0.0250	ND	0.0184	0.0189	73.6	75.6	1	51.0-134			2.68	30
2,4-D	0.0250	ND	0.0195	0.0204	78.0	81.6	1	45.0-152			4.51	30
(S) 2,4-Dichlorophenyl Acetic Acid					*73.6*	*77.8*		*32.0-138*				

Method Blank (MB)

(MB) R4325197-1 01/14/26 23:59

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Chlordane	0.00250	U	0.00167	0.00250	0.00500
Endrin	0.00250	U	0.00167	0.00250	0.00500
Heptachlor	0.00250	U	0.00133	0.00250	0.00500
Lindane	0.00250	U	0.00167	0.00250	0.00500
Methoxychlor	0.00250	U	0.00167	0.00250	0.00500
Toxaphene	0.00500	U	0.00333	0.00500	0.0100
(S) Decachlorobiphenyl	*97.0*				*10.0-145*
(S) Tetrachloro-m-xylene	*68.6*				*44.0-124*

Laboratory Control Sample (LCS)

(LCS) R4325197-2 01/15/26 00:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endrin	0.0100	0.0110	110	60.0-138	
Heptachlor	0.0100	0.0101	101	54.0-130	
Lindane	0.0100	0.0105	105	59.0-134	
Methoxychlor	0.0100	0.0120	120	54.0-145	
(S) Decachlorobiphenyl			*98.1*	*10.0-145*	
(S) Tetrachloro-m-xylene			*74.7*	*44.0-124*	

L1933577-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933577-06 01/15/26 01:08 • (MS) R4325197-3 01/15/26 01:18 • (MSD) R4325197-4 01/15/26 01:28

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Endrin	0.0100	ND	0.0123	0.0115	123	115	1	60.0-138			6.72	30
Heptachlor	0.0100	ND	0.0115	0.0106	115	106	1	54.0-130			8.14	30
Lindane	0.0100	ND	0.0115	0.0111	115	111	1	59.0-134			3.54	30
Methoxychlor	0.0100	ND	0.0138	0.0126	138	126	1	54.0-145			9.09	30
(S) Decachlorobiphenyl					*108*	*105*		*10.0-145*				
(S) Tetrachloro-m-xylene					*83.9*	*74.9*		*44.0-124*				

Method Blank (MB)

(MB) R4325197-1 01/14/26 23:59

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
PCB 1016	0.000250	U	0.000167	0.000250	0.000500
PCB 1221	0.000250	U	0.000167	0.000250	0.000500
PCB 1232	0.000250	U	0.000167	0.000250	0.000500
PCB 1242	0.000250	U	0.000167	0.000250	0.000500
PCB 1248	0.000250	U	0.000167	0.000250	0.000500
PCB 1254	0.000250	U	0.000167	0.000250	0.000500
PCB 1260	0.000250	U	0.000167	0.000250	0.000500
(S) Decachlorobiphenyl	*90.4*				*10.0-145*
(S) Tetrachloro-m-xylene	*68.3*				*44.0-124*

Laboratory Control Sample (LCS)

(LCS) R4325197-5 01/15/26 00:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1016	0.0250	0.0194	77.6	46.0-129	
PCB 1260	0.0250	0.0232	92.8	45.0-134	
(S) Decachlorobiphenyl			*93.2*	*10.0-145*	
(S) Tetrachloro-m-xylene			*72.8*	*44.0-124*	

L1933577-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933577-08 01/15/26 01:38 • (MS) R4325197-6 01/15/26 01:47 • (MSD) R4325197-7 01/15/26 01:57

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
PCB 1016	0.0250	ND	0.0202	0.0217	80.8	86.8	1	46.0-129			7.16	30
PCB 1260	0.0250	ND	0.0231	0.0237	92.4	94.8	1	45.0-134			2.56	30
(S) Decachlorobiphenyl					*98.4*	*100*		*10.0-145*				
(S) Tetrachloro-m-xylene					*84.1*	*82.3*		*44.0-124*				

Method Blank (MB)

(MB) R4324624-2 01/13/26 21:04

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
1,4-Dichlorobenzene	0.0500	U	0.000401	0.0500	0.100
2,4-Dinitrotoluene	0.0500	U	0.00165	0.0500	0.100
Hexachlorobenzene	0.0500	U	0.000341	0.0500	0.100
Hexachloro-1,3-butadiene	0.0500	U	0.000329	0.0500	0.100
Hexachloroethane	0.0500	U	0.000365	0.0500	0.100
Nitrobenzene	0.0500	U	0.000367	0.0500	0.100
Pyridine	0.0500	U	0.00137	0.0500	0.100
3&4-Methyl Phenol	0.0500	U	0.0333	0.0500	0.100
2-Methylphenol	0.0500	U	0.00312	0.0500	0.100
Pentachlorophenol	0.0500	U	0.00313	0.0500	0.100
2,4,5-Trichlorophenol	0.0500	U	0.0333	0.0500	0.100
2,4,6-Trichlorophenol	0.0500	U	0.0333	0.0500	0.100
(S) 2-Fluorophenol	*40.0*				*19.0-119*
(S) Phenol-d5	*25.1*				*10.0-120*
(S) Nitrobenzene-d5	*62.8*				*44.0-120*
(S) 2-Fluorobiphenyl	*68.8*				*44.0-119*
(S) 2,4,6-Tribromophenol	*47.8*				*43.0-140*
(S) p-Terphenyl-d14	*79.3*				*50.0-134*

Laboratory Control Sample (LCS)

(LCS) R4324624-1 01/13/26 20:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,4-Dichlorobenzene	0.500	0.298	59.6	29.0-112	
2,4-Dinitrotoluene	0.500	0.373	74.6	57.0-128	
Hexachlorobenzene	0.500	0.352	70.4	53.0-125	
Hexachloro-1,3-butadiene	0.500	0.219	43.8	22.0-124	
Hexachloroethane	0.500	0.270	54.0	21.0-115	
Nitrobenzene	0.500	0.275	55.0	45.0-121	
Pyridine	0.500	0.0523	10.5	10.0-120	J
3&4-Methyl Phenol	0.500	0.251	50.2	29.0-110	
2-Methylphenol	0.500	0.232	46.4	30.0-117	
Pentachlorophenol	0.500	0.272	54.4	35.0-138	
2,4,5-Trichlorophenol	0.500	0.366	73.2	53.0-123	
2,4,6-Trichlorophenol	0.500	0.340	68.0	50.0-125	
(S) 2-Fluorophenol			*38.4*	*19.0-119*	
(S) Phenol-d5			*26.9*	*10.0-120*	
(S) Nitrobenzene-d5			*61.8*	*44.0-120*	

Laboratory Control Sample (LCS)

(LCS) R4324624-1 01/13/26 20:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) 2-Fluorobiphenyl			*68.8*	*44.0-119*	
(S) 2,4,6-Tribromophenol			*61.0*	*43.0-140*	
(S) p-Terphenyl-d14			*78.5*	*50.0-134*	

L1933550-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933550-02 01/14/26 04:20 • (MS) R4324624-3 01/14/26 04:41 • (MSD) R4324624-4 01/14/26 05:03

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,4-Dichlorobenzene	0.500	ND	0.301	0.244	60.2	48.8	1	29.0-112			20.9	30
2,4-Dinitrotoluene	0.500	ND	0.421	0.423	84.2	84.6	1	57.0-128			0.474	30
Hexachlorobenzene	0.500	ND	0.360	0.379	72.0	75.8	1	53.0-125			5.14	30
Hexachloro-1,3-butadiene	0.500	ND	0.210	0.182	42.0	36.4	1	22.0-124			14.3	30
Hexachloroethane	0.500	ND	0.270	0.231	54.0	46.2	1	21.0-115			15.6	30
Nitrobenzene	0.500	ND	0.276	0.240	55.2	48.0	1	45.0-121			14.0	30
Pyridine	0.500	ND	0.173	0.115	34.6	23.0	1	13.5-58.9		J3	40.3	30
3&4-Methyl Phenol	0.500	ND	0.259	0.247	51.8	49.4	1	29.0-110			4.74	30
2-Methylphenol	0.500	ND	0.240	0.215	48.0	43.0	1	30.0-117			11.0	30
Pentachlorophenol	0.500	ND	0.283	0.298	56.6	59.6	1	35.0-138			5.16	30
2,4,5-Trichlorophenol	0.500	ND	0.363	0.399	72.6	79.8	1	53.0-123			9.45	30
2,4,6-Trichlorophenol	0.500	ND	0.332	0.357	66.4	71.4	1	50.0-125			7.26	30
(S) 2-Fluorophenol					*33.0*	*30.4*		*19.0-119*				
(S) Phenol-d5					*27.9*	*23.7*		*10.0-120*				
(S) Nitrobenzene-d5					*57.1*	*50.3*		*44.0-120*				
(S) 2-Fluorobiphenyl					*65.3*	*64.4*		*44.0-119*				
(S) 2,4,6-Tribromophenol					*63.0*	*71.0*		*43.0-140*				
(S) p-Terphenyl-d14					*85.4*	*81.4*		*50.0-134*				

Method Blank (MB)

(MB) R4325407-2 01/15/26 13:01

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
1,4-Dichlorobenzene	0.0500	U	0.000401	0.0500	0.100
2,4-Dinitrotoluene	0.0500	U	0.00165	0.0500	0.100
Hexachlorobenzene	0.0500	U	0.000341	0.0500	0.100
Hexachloro-1,3-butadiene	0.0500	U	0.000329	0.0500	0.100
Hexachloroethane	0.0500	U	0.000365	0.0500	0.100
Nitrobenzene	0.000716		0.000367	0.0500	0.100
Pyridine	0.0500	U	0.00137	0.0500	0.100
3&4-Methyl Phenol	0.0500	U	0.0333	0.0500	0.100
2-Methylphenol	0.0500	U	0.00312	0.0500	0.100
Pentachlorophenol	0.0500	U	0.00313	0.0500	0.100
2,4,5-Trichlorophenol	0.0500	U	0.0333	0.0500	0.100
2,4,6-Trichlorophenol	0.0500	U	0.0333	0.0500	0.100
(S) 2-Fluorophenol	*33.2*				*19.0-119*
(S) Phenol-d5	*22.4*				*10.0-120*
(S) Nitrobenzene-d5	*58.6*				*44.0-120*
(S) 2-Fluorobiphenyl	*56.0*				*44.0-119*
(S) 2,4,6-Tribromophenol	*66.5*				*43.0-140*
(S) p-Terphenyl-d14	*70.6*				*50.0-134*

Laboratory Control Sample (LCS)

(LCS) R4325407-1 01/15/26 12:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,4-Dichlorobenzene	0.500	0.239	47.8	29.0-112	
2,4-Dinitrotoluene	0.500	0.380	76.0	57.0-128	
Hexachlorobenzene	0.500	0.322	64.4	53.0-125	
Hexachloro-1,3-butadiene	0.500	0.226	45.2	22.0-124	
Hexachloroethane	0.500	0.220	44.0	21.0-115	
Nitrobenzene	0.500	0.241	48.2	45.0-121	
Pyridine	0.500	0.114	22.8	10.0-120	
3&4-Methyl Phenol	0.500	0.181	36.2	29.0-110	
2-Methylphenol	0.500	0.174	34.8	30.0-117	
Pentachlorophenol	0.500	0.340	68.0	35.0-138	
2,4,5-Trichlorophenol	0.500	0.312	62.4	53.0-123	
2,4,6-Trichlorophenol	0.500	0.301	60.2	50.0-125	
(S) 2-Fluorophenol			*23.8*	*19.0-119*	
(S) Phenol-d5			*19.2*	*10.0-120*	
(S) Nitrobenzene-d5			*48.5*	*44.0-120*	

Laboratory Control Sample (LCS)

(LCS) R4325407-1 01/15/26 12:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) 2-Fluorobiphenyl			*54.0*	*44.0-119*	
(S) 2,4,6-Tribromophenol			*71.5*	*43.0-140*	
(S) p-Terphenyl-d14			*67.9*	*50.0-134*	

L1933584-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933584-08 01/15/26 13:22 • (MS) R4325407-3 01/15/26 13:43 • (MSD) R4325407-4 01/15/26 14:05

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,4-Dichlorobenzene	0.500	ND	0.281	0.244	56.2	48.8	1	29.0-112			14.1	30
2,4-Dinitrotoluene	0.500	ND	0.413	0.373	82.6	74.6	1	57.0-128			10.2	30
Hexachlorobenzene	0.500	ND	0.353	0.325	70.6	65.0	1	53.0-125			8.26	30
Hexachloro-1,3-butadiene	0.500	ND	0.266	0.241	53.2	48.2	1	22.0-124			9.86	30
Hexachloroethane	0.500	ND	0.261	0.229	52.2	45.8	1	21.0-115			13.1	30
Nitrobenzene	0.500	ND	0.288	0.250	57.6	50.0	1	45.0-121			14.1	30
Pyridine	0.500	ND	0.147	0.129	29.4	25.8	1	13.5-58.9			13.0	30
3&4-Methyl Phenol	0.500	ND	0.269	0.221	53.8	44.2	1	29.0-110			19.6	30
2-Methylphenol	0.500	ND	0.266	0.213	53.2	42.6	1	30.0-117			22.1	30
Pentachlorophenol	0.500	ND	0.373	0.350	74.6	70.0	1	35.0-138			6.36	30
2,4,5-Trichlorophenol	0.500	ND	0.374	0.331	74.8	66.2	1	53.0-123			12.2	30
2,4,6-Trichlorophenol	0.500	ND	0.359	0.317	71.8	63.4	1	50.0-125			12.4	30
(S) 2-Fluorophenol					*35.8*	*28.9*		*19.0-119*				
(S) Phenol-d5					*25.7*	*21.1*		*10.0-120*				
(S) Nitrobenzene-d5					*57.6*	*51.8*		*44.0-120*				
(S) 2-Fluorobiphenyl					*57.8*	*56.8*		*44.0-119*				
(S) 2,4,6-Tribromophenol					*80.0*	*73.5*		*43.0-140*				
(S) p-Terphenyl-d14					*74.2*	*64.8*		*50.0-134*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
DL	Detection Limit.
DL (dry)	Detection Limit.
LOD (dry)	Limit of Detection.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
ND	Not detected at the Reporting Limit (or DL where applicable).
LOQ (dry)	Limit of Quantitation.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.

GLOSSARY OF TERMS

Qualifier	Description
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Terracon - Wilmington, NC
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Billing Information:
Accounts Payable
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Pres Chk

Report to: Danielle Foster

Email To: danielle.foster@terracon.com;nick.lin

Project Description: Marin Corps Base Camp Lejeune

City/State Collected: Jacksonville, NC

Please Circle: PT MT CT ET

Phone: 910-229-8597

Client Project # K625P194

Lab Project # TERRACWNC-LEJEUNE

Collected by (print): Danielle Foster

Site/Facility ID # MCAS CL

P.O. # —

Collected by (signature): Danielle Foster

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day X 10 Day (Rad Only)
___ Three Day

Quote # —

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE
12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1933584

Tal H085

Acctnum: TERRACWNC

Template: T286013

Prelogin: P1200317

PM: Heather Wagner

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	DOD 6010 TAL Metals	DOD RCI	DOD8270TCL	DODDRO	DODPaint Filter	DODGRO	DODV8260BTEX	DODV8260TCL	DOD PFAS 1633	DOD Full TCLP+TCLP PCB	Remarks	Sample # (lab only)
NR-P2803-SPT-07	Comp	S	1-6	1/6/25	0950	4				X		X			X	X	-01,02	-01
NR-P2803-SPT-02	↓	↓	↓	↓	1030	1				↓		↓			↓	↓	-03,04	-02
NR-P2803-SPT-04	↓	↓	↓	↓	1130	1				↓		↓			↓	↓	-05,06	-03
CL-P1634-SPT-10	↓	↓	↓	↓	1245	1				↓		↓			↓	↓	-07,08	-04
						N/A												
						1/8												

1/8/26

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other _____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS X FedEx __ Courier __ _____

Tracking # 7920 9198 6656
~~7920 9198 6656~~

Sample Receipt Checklist
COC Seal Present/Intact: X NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Danielle Foster	1/6/25	1700		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 16
				TLA 9 2.3 + 0.0 = 2.3C
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/8/26 Time: 9:00am
			Stewart Frances	

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

January 19, 2026

Terracon - Wilmington, NC

Sample Delivery Group:	L1933598
Samples Received:	01/08/2026
Project Number:	K625P194
Description:	Marine Corps Base Camp Lejune
Site:	MCAS CL
Report To:	Danielle Foster 2108 Capital Drive Suite 103 Wilmington, NC 28405

Entire Report Reviewed By:

Heather J Wagner
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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CL-P1634-SPT-02 L1933598-01

Collected by: Danielle Foster | Collected date/time: 01/06/26 14:30 | Received date/time: 01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2672022	1	01/09/26 11:54	01/09/26 12:03	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015C	WG2674239	28	01/06/26 14:30	01/13/26 20:35	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015C	WG2672075	2	01/09/26 15:01	01/10/26 13:57	JAS	Mt. Juliet, TN

CL-P1634-SPT-02 L1933598-02

Collected by: Danielle Foster | Collected date/time: 01/06/26 14:30 | Received date/time: 01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG2671396	1	01/10/26 07:07	01/10/26 07:07	PNK	Mt. Juliet, TN
Preparation by Method 1311	WG2671436	1	01/09/26 10:31	01/09/26 10:31	JWS	Mt. Juliet, TN
Mercury by Method 7470A	WG2672625	1	01/10/26 11:46	01/11/26 18:42	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2672696	1	01/12/26 09:23	01/13/26 03:00	MAP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2672942	1	01/11/26 16:06	01/11/26 16:06	DWR	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG2672840	1	01/11/26 07:20	01/12/26 15:34	HLA	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG2674665	1	01/14/26 15:30	01/15/26 14:25	MEW	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG2674665	1	01/14/26 15:30	01/15/26 14:25	LJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG2672900	1	01/13/26 07:58	01/14/26 01:03	KB	Mt. Juliet, TN

CL-P1634-SPT-05 L1933598-03

Collected by: Danielle Foster | Collected date/time: 01/06/26 14:00 | Received date/time: 01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2672022	1	01/09/26 11:54	01/09/26 12:03	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015C	WG2672385	25	01/06/26 14:00	01/10/26 09:46	AEB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015C	WG2672075	1	01/09/26 15:01	01/10/26 05:17	GTW	Mt. Juliet, TN

CL-P1634-SPT-05 L1933598-04

Collected by: Danielle Foster | Collected date/time: 01/06/26 14:00 | Received date/time: 01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG2671396	1	01/10/26 07:07	01/10/26 07:07	PNK	Mt. Juliet, TN
Preparation by Method 1311	WG2671436	1	01/09/26 10:31	01/09/26 10:31	JWS	Mt. Juliet, TN
Mercury by Method 7470A	WG2672625	1	01/10/26 11:46	01/11/26 18:44	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2672696	1	01/12/26 09:23	01/13/26 03:03	MAP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2672942	1	01/11/26 16:26	01/11/26 16:26	DWR	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG2673610	1	01/13/26 06:27	01/14/26 14:37	HCS	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG2674665	1	01/14/26 15:30	01/15/26 14:35	MEW	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG2674665	1	01/14/26 15:30	01/15/26 14:35	LJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG2672900	1	01/13/26 07:58	01/14/26 01:25	KB	Mt. Juliet, TN

CL-P1634-SPT-10 L1933598-06

Collected by	Collected date/time	Received date/time
Danielle Foster	01/06/26 13:30	01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG2671392	1	01/10/26 11:46	01/11/26 13:28	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2671411	1	01/11/26 14:27	01/11/26 17:05	NMM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015C	WG2671549	1	01/08/26 18:03	01/08/26 18:03	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2671917	1	01/09/26 14:47	01/09/26 14:47	DYW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2673419	1	01/13/26 14:52	01/13/26 14:52	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015C	WG2671371	1	01/08/26 18:07	01/12/26 13:57	RF	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG2671743	1	01/09/26 08:09	01/09/26 21:55	KB	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Heather J Wagner
Project Manager

Project Comments

Method 8260: Samples L1933598-05,-06 are reporting from a batch with low recovery of acetone in the opening CCV. This is a method defined poor performer.

Method 8270TCLP; WG2672900 This sample will be reporting with a low failure in the opening CCV at 62.1% for Pentachlorophenol because this exceedance is within the DOD defined gross exceedance criteria for opening CCVs (50-150% recovery).

Metals (ICP) by Method 6010D

The sample concentration is too high to evaluate accurate spike recoveries.

Batch	Lab Sample ID	Analytes
WG2671411	(MS) R4323594-4, (MS) R4323594-6, (MSD) R4323594-5, (MSD) R4323594-7	Calcium and Sodium

Volatile Organic Compounds (GC/MS) by Method 8260D

The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.

Batch	Lab Sample ID	Analytes
WG2673419	L1933598-05	Acetone
WG2673419	L1933598-06	Acetone

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2672942	(LCSD) R4324177-2, L1933598-02, 04	2-Butanone (MEK) and Chloroform

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2671917	(MS) R4323802-4, (MSD) R4323802-5	1,1,1-Trichloroethane, 1,1-Dichloroethene, Benzene, Carbon tetrachloride, Chloroethane, Chloroform, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene and Trichloroethene

The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Batch	Lab Sample ID	Analytes
WG2671917	(MSD) R4323802-5	1,1,2,2-Tetrachloroethane and 1,2-Dichlorobenzene
WG2672942	(MS) R4324177-4	1,2-Dichloroethane and Benzene

Semi-Volatile Organic Compounds (GC) by Method 8015C

The same analyte is found in the associated blank.

Batch	Analyte	Lab Sample ID
WG2672075	TPH (GC/FID) High Fraction	L1933598-03

The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Batch	Lab Sample ID	Analytes
WG2672075	(MSD) R4323679-2	TPH (GC/FID) High Fraction

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2672075	(MSD) R4323679-2	TPH (GC/FID) High Fraction

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.

Batch	Lab Sample ID	Analytes
WG2671743	L1933598-05	2,4-Dimethylphenol, Benzaldehyde and Pentachlorophenol
WG2671743	L1933598-06	2,4-Dimethylphenol, Benzaldehyde and Pentachlorophenol
WG2672900	L1933598-02	Pentachlorophenol
WG2672900	L1933598-04	Pentachlorophenol

The initial calibration verification standard (SSCV) associated with this data responded high.

Batch	Lab Sample ID	Analytes
WG2671743	L1933598-05	Benzaldehyde
WG2671743	L1933598-06	Benzaldehyde

Surrogate recovery limits have been exceeded; values are outside lower control limits.

Batch	Analyte	Lab Sample ID
WG2671743	2,4,6-Tribromophenol	(BLANK) R4324041-2, L1933598-06
WG2671743	2-Fluorobiphenyl	(LCS) R4324041-1, L1933598-05, 06
WG2671743	Nitrobenzene-d5	(LCS) R4324041-1, L1933598-05, 06

The associated batch QC was below the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG2671743	(LCS) R4324041-1, L1933598-05, 06	19 analytes

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2672900	(MSD) R4324624-4	Pyridine

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.6		1	01/09/2026 12:03	WG2672022

Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result (dry) mg/kg	Qualifier	DL (dry) mg/kg	LOD (dry) mg/kg	LOQ (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	8006-61-9	4.98	U	2.95	4.98	5.53	28	01/13/2026 20:35	WG2674239
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*92.5*				*59.0-128*		*01/13/2026 20:35*	WG2674239

Semi-Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result (dry) mg/kg	Qualifier	DL (dry) mg/kg	LOD (dry) mg/kg	LOQ (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	68334-30-5	45.6		1.80	4.67	9.35	2	01/10/2026 13:57	WG2672075
(S) o-Terphenyl	*84-15-1*	*107*				*18.0-148*		*01/10/2026 13:57*	WG2672075

Sample Narrative:

L1933598-01 WG2672075: Dilution due to matrix impact during extract concentration procedure.

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		1/9/2026 10:31:38 AM	WG2671436
TCLP ZHE Extraction	-		1/10/2026 7:07:55 AM	WG2671396
Initial pH	4.83		1/9/2026 10:31:38 AM	WG2671436
Final pH	5.24		1/9/2026 10:31:38 AM	WG2671436

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	01/11/2026 18:42	WG2672625

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	01/13/2026 03:00	WG2672696
Barium	ND		0.100	100	1	01/13/2026 03:00	WG2672696
Cadmium	ND		0.100	1	1	01/13/2026 03:00	WG2672696
Chromium	ND		0.100	5	1	01/13/2026 03:00	WG2672696
Lead	ND		0.100	5	1	01/13/2026 03:00	WG2672696
Selenium	ND		0.100	1	1	01/13/2026 03:00	WG2672696
Silver	ND		0.100	5	1	01/13/2026 03:00	WG2672696

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.0500	0.50	1	01/11/2026 16:06	WG2672942
Carbon tetrachloride	ND		0.0500	0.50	1	01/11/2026 16:06	WG2672942
Chlorobenzene	ND		0.0500	100	1	01/11/2026 16:06	WG2672942
Chloroform	ND	J3	0.250	6	1	01/11/2026 16:06	WG2672942
1,2-Dichloroethane	ND		0.0500	0.50	1	01/11/2026 16:06	WG2672942
1,1-Dichloroethene	ND		0.0500	0.70	1	01/11/2026 16:06	WG2672942
2-Butanone (MEK)	ND	J3	0.500	200	1	01/11/2026 16:06	WG2672942
Tetrachloroethene	ND		0.0500	0.70	1	01/11/2026 16:06	WG2672942
Trichloroethene	ND		0.0500	0.50	1	01/11/2026 16:06	WG2672942
Vinyl chloride	ND		0.0500	0.20	1	01/11/2026 16:06	WG2672942
(S) Toluene-d8	*99.6*		*89.0-112*			*01/11/2026 16:06*	WG2672942
(S) 4-Bromofluorobenzene	*102*		*85.0-114*			*01/11/2026 16:06*	WG2672942
(S) 1,2-Dichloroethane-d4	*98.3*		*81.0-118*			*01/11/2026 16:06*	WG2672942

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
2,4,5-TP (Silvex)	ND		0.00200	1	1	01/12/2026 15:34	WG2672840
2,4-D	ND		0.00200	10	1	01/12/2026 15:34	WG2672840
(S) 2,4-Dichlorophenyl Acetic Acid	*72.2*		*32.0-138*			*01/12/2026 15:34*	WG2672840

Pesticides (GC) by Method 8081

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Chlordane	ND		0.00500	0.03	1	01/15/2026 14:25	WG2674665
Endrin	ND		0.00500	0.02	1	01/15/2026 14:25	WG2674665
Heptachlor	ND		0.00500	0.0080	1	01/15/2026 14:25	WG2674665
Lindane	ND		0.00500	0.40	1	01/15/2026 14:25	WG2674665
Methoxychlor	ND		0.00500	10	1	01/15/2026 14:25	WG2674665

Pesticides (GC) by Method 8081

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Toxaphene	ND		0.0100	0.50	1	01/15/2026 14:25	WG2674665
(S) Decachlorobiphenyl	*74.8*		*10.0-145*			*01/15/2026 14:25*	WG2674665
(S) Tetrachloro-m-xylene	*77.8*		*44.0-124*			*01/15/2026 14:25*	WG2674665

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.000500	50	1	01/15/2026 14:25	WG2674665
PCB 1221	ND		0.000500	50	1	01/15/2026 14:25	WG2674665
PCB 1232	ND		0.000500	50	1	01/15/2026 14:25	WG2674665
PCB 1242	ND		0.000500	50	1	01/15/2026 14:25	WG2674665
PCB 1248	ND		0.000500	50	1	01/15/2026 14:25	WG2674665
PCB 1254	ND		0.000500	50	1	01/15/2026 14:25	WG2674665
PCB 1260	ND		0.000500	50	1	01/15/2026 14:25	WG2674665
(S) Decachlorobiphenyl	*103*		*10.0-145*			*01/15/2026 14:25*	WG2674665
(S) Tetrachloro-m-xylene	*83.3*		*44.0-124*			*01/15/2026 14:25*	WG2674665

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
1,4-Dichlorobenzene	ND		0.100	7.50	1	01/14/2026 01:03	WG2672900
2,4-Dinitrotoluene	ND		0.100	0.13	1	01/14/2026 01:03	WG2672900
Hexachlorobenzene	ND		0.100	0.13	1	01/14/2026 01:03	WG2672900
Hexachloro-1,3-butadiene	ND		0.100	0.50	1	01/14/2026 01:03	WG2672900
Hexachloroethane	ND		0.100	3	1	01/14/2026 01:03	WG2672900
Nitrobenzene	ND		0.100	2	1	01/14/2026 01:03	WG2672900
Pyridine	ND		0.100	5	1	01/14/2026 01:03	WG2672900
3&4-Methyl Phenol	ND		0.100	400	1	01/14/2026 01:03	WG2672900
2-Methylphenol	ND		0.100	200	1	01/14/2026 01:03	WG2672900
Pentachlorophenol	ND	C3	0.100	100	1	01/14/2026 01:03	WG2672900
2,4,5-Trichlorophenol	ND		0.100	400	1	01/14/2026 01:03	WG2672900
2,4,6-Trichlorophenol	ND		0.100	2	1	01/14/2026 01:03	WG2672900
(S) 2-Fluorophenol	*37.1*		*19.0-119*			*01/14/2026 01:03*	WG2672900
(S) Phenol-d5	*23.8*		*10.0-120*			*01/14/2026 01:03*	WG2672900
(S) Nitrobenzene-d5	*59.1*		*44.0-120*			*01/14/2026 01:03*	WG2672900
(S) 2-Fluorobiphenyl	*63.9*		*44.0-119*			*01/14/2026 01:03*	WG2672900
(S) 2,4,6-Tribromophenol	*43.8*		*43.0-140*			*01/14/2026 01:03*	WG2672900
(S) p-Terphenyl-d14	*78.4*		*50.0-134*			*01/14/2026 01:03*	WG2672900

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.3		1	01/09/2026 12:03	WG2672022

Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result (dry) mg/kg	Qualifier	DL (dry) mg/kg	LOD (dry) mg/kg	LOQ (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	8006-61-9	4.03	U	2.38	4.03	4.47	25	01/10/2026 09:46	WG2672385
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*93.3*				*59.0-128*		*01/10/2026 09:46*	WG2672385

Semi-Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result (dry) mg/kg	Qualifier	DL (dry) mg/kg	LOD (dry) mg/kg	LOQ (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	68334-30-5	7.35	B	0.842	2.19	4.38	1	01/10/2026 05:17	WG2672075
(S) o-Terphenyl	*84-15-1*	*85.1*				*18.0-148*		*01/10/2026 05:17*	WG2672075

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		1/9/2026 10:31:38 AM	WG2671436
TCLP ZHE Extraction	-		1/10/2026 7:07:55 AM	WG2671396
Initial pH	5.33		1/9/2026 10:31:38 AM	WG2671436
Final pH	5.14		1/9/2026 10:31:38 AM	WG2671436

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	01/11/2026 18:44	WG2672625

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	01/13/2026 03:03	WG2672696
Barium	ND		0.100	100	1	01/13/2026 03:03	WG2672696
Cadmium	ND		0.100	1	1	01/13/2026 03:03	WG2672696
Chromium	ND		0.100	5	1	01/13/2026 03:03	WG2672696
Lead	ND		0.100	5	1	01/13/2026 03:03	WG2672696
Selenium	ND		0.100	1	1	01/13/2026 03:03	WG2672696
Silver	ND		0.100	5	1	01/13/2026 03:03	WG2672696

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.0500	0.50	1	01/11/2026 16:26	WG2672942
Carbon tetrachloride	ND		0.0500	0.50	1	01/11/2026 16:26	WG2672942
Chlorobenzene	ND		0.0500	100	1	01/11/2026 16:26	WG2672942
Chloroform	ND	J3	0.250	6	1	01/11/2026 16:26	WG2672942
1,2-Dichloroethane	ND		0.0500	0.50	1	01/11/2026 16:26	WG2672942
1,1-Dichloroethene	ND		0.0500	0.70	1	01/11/2026 16:26	WG2672942
2-Butanone (MEK)	ND	J3	0.500	200	1	01/11/2026 16:26	WG2672942
Tetrachloroethene	ND		0.0500	0.70	1	01/11/2026 16:26	WG2672942
Trichloroethene	ND		0.0500	0.50	1	01/11/2026 16:26	WG2672942
Vinyl chloride	ND		0.0500	0.20	1	01/11/2026 16:26	WG2672942
(S) Toluene-d8	*99.1*		*89.0-112*			*01/11/2026 16:26*	WG2672942
(S) 4-Bromofluorobenzene	*101*		*85.0-114*			*01/11/2026 16:26*	WG2672942
(S) 1,2-Dichloroethane-d4	*103*		*81.0-118*			*01/11/2026 16:26*	WG2672942

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
2,4,5-TP (Silvex)	ND		0.00200	1	1	01/14/2026 14:37	WG2673610
2,4-D	ND		0.00200	10	1	01/14/2026 14:37	WG2673610
(S) 2,4-Dichlorophenyl Acetic Acid	*81.2*		*32.0-138*			*01/14/2026 14:37*	WG2673610

Pesticides (GC) by Method 8081

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Chlordane	ND		0.00500	0.03	1	01/15/2026 14:35	WG2674665
Endrin	ND		0.00500	0.02	1	01/15/2026 14:35	WG2674665
Heptachlor	ND		0.00500	0.0080	1	01/15/2026 14:35	WG2674665
Lindane	ND		0.00500	0.40	1	01/15/2026 14:35	WG2674665
Methoxychlor	ND		0.00500	10	1	01/15/2026 14:35	WG2674665

Pesticides (GC) by Method 8081

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Toxaphene	ND		0.0100	0.50	1	01/15/2026 14:35	WG2674665
(S) Decachlorobiphenyl	*73.2*		*10.0-145*			*01/15/2026 14:35*	WG2674665
(S) Tetrachloro-m-xylene	*72.2*		*44.0-124*			*01/15/2026 14:35*	WG2674665

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.000500	50	1	01/15/2026 14:35	WG2674665
PCB 1221	ND		0.000500	50	1	01/15/2026 14:35	WG2674665
PCB 1232	ND		0.000500	50	1	01/15/2026 14:35	WG2674665
PCB 1242	ND		0.000500	50	1	01/15/2026 14:35	WG2674665
PCB 1248	ND		0.000500	50	1	01/15/2026 14:35	WG2674665
PCB 1254	ND		0.000500	50	1	01/15/2026 14:35	WG2674665
PCB 1260	ND		0.000500	50	1	01/15/2026 14:35	WG2674665
(S) Decachlorobiphenyl	*98.4*		*10.0-145*			*01/15/2026 14:35*	WG2674665
(S) Tetrachloro-m-xylene	*76.4*		*44.0-124*			*01/15/2026 14:35*	WG2674665

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
1,4-Dichlorobenzene	ND		0.100	7.50	1	01/14/2026 01:25	WG2672900
2,4-Dinitrotoluene	ND		0.100	0.13	1	01/14/2026 01:25	WG2672900
Hexachlorobenzene	ND		0.100	0.13	1	01/14/2026 01:25	WG2672900
Hexachloro-1,3-butadiene	ND		0.100	0.50	1	01/14/2026 01:25	WG2672900
Hexachloroethane	ND		0.100	3	1	01/14/2026 01:25	WG2672900
Nitrobenzene	ND		0.100	2	1	01/14/2026 01:25	WG2672900
Pyridine	ND		0.100	5	1	01/14/2026 01:25	WG2672900
3&4-Methyl Phenol	ND		0.100	400	1	01/14/2026 01:25	WG2672900
2-Methylphenol	ND		0.100	200	1	01/14/2026 01:25	WG2672900
Pentachlorophenol	ND	C3	0.100	100	1	01/14/2026 01:25	WG2672900
2,4,5-Trichlorophenol	ND		0.100	400	1	01/14/2026 01:25	WG2672900
2,4,6-Trichlorophenol	ND		0.100	2	1	01/14/2026 01:25	WG2672900
(S) 2-Fluorophenol	*42.2*		*19.0-119*			*01/14/2026 01:25*	WG2672900
(S) Phenol-d5	*26.3*		*10.0-120*			*01/14/2026 01:25*	WG2672900
(S) Nitrobenzene-d5	*64.6*		*44.0-120*			*01/14/2026 01:25*	WG2672900
(S) 2-Fluorobiphenyl	*70.0*		*44.0-119*			*01/14/2026 01:25*	WG2672900
(S) 2,4,6-Tribromophenol	*47.4*		*43.0-140*			*01/14/2026 01:25*	WG2672900
(S) p-Terphenyl-d14	*81.1*		*50.0-134*			*01/14/2026 01:25*	WG2672900

Mercury by Method 7470A

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Mercury	7439-97-6	0.100	U	0.0700	0.100	0.200	1	01/11/2026 13:28	WG2671392

Metals (ICP) by Method 6010D

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Aluminum	7429-90-5	749		69.2	100	200	1	01/11/2026 17:05	WG2671411
Antimony	7440-36-0	6.00	U	5.06	6.00	10.0	1	01/11/2026 17:05	WG2671411
Arsenic	7440-38-2	8.00	U	7.83	8.00	10.0	1	01/11/2026 17:05	WG2671411
Barium	7440-39-3	17.0		0.773	2.50	5.00	1	01/11/2026 17:05	WG2671411
Beryllium	7440-41-7	1.00	U	0.501	1.00	2.00	1	01/11/2026 17:05	WG2671411
Cadmium	7440-43-9	1.00	U	0.538	1.00	2.00	1	01/11/2026 17:05	WG2671411
Calcium	7440-70-2	78300		153	500	1000	1	01/11/2026 17:05	WG2671411
Chromium	7440-47-3	5.00	U	1.51	5.00	10.0	1	01/11/2026 17:05	WG2671411
Cobalt	7440-48-4	5.00	U	1.41	5.00	10.0	1	01/11/2026 17:05	WG2671411
Copper	7440-50-8	5.00	U	2.26	5.00	10.0	1	01/11/2026 17:05	WG2671411
Iron	7439-89-6	1010		20.5	50.0	100	1	01/11/2026 17:05	WG2671411
Lead	7439-92-1	3.00	U	2.43	3.00	6.00	1	01/11/2026 17:05	WG2671411
Magnesium	7439-95-4	2250		101	500	1000	1	01/11/2026 17:05	WG2671411
Manganese	7439-96-5	14.7		1.01	5.00	10.0	1	01/11/2026 17:05	WG2671411
Nickel	7440-02-0	5.00	U	1.96	5.00	10.0	1	01/11/2026 17:05	WG2671411
Potassium	7440-09-7	816	J	624	1000	2000	1	01/11/2026 17:05	WG2671411
Selenium	7782-49-2	7.00	U	6.16	7.00	10.0	1	01/11/2026 17:05	WG2671411
Silver	7440-22-4	3.00	U	2.89	3.00	5.00	1	01/11/2026 17:05	WG2671411
Sodium	7440-23-5	6340		444	1500	3000	1	01/11/2026 17:05	WG2671411
Thallium	7440-28-0	7.00	U	6.63	7.00	10.0	1	01/11/2026 17:05	WG2671411
Vanadium	7440-62-2	10.0	U	5.64	10.0	20.0	1	01/11/2026 17:05	WG2671411
Zinc	7440-66-6	10.6	J	4.67	25.0	50.0	1	01/11/2026 17:05	WG2671411

Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	8006-61-9	75.0	U	59.4	75.0	150	1	01/08/2026 18:03	WG2671549
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*101*				*62.0-128*		*01/08/2026 18:03*	WG2671549

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	47.0	C3 U	46.9	47.0	50.0	1	01/13/2026 14:52	WG2673419
Benzene	71-43-2	0.500	U	0.320	0.500	1.00	1	01/09/2026 14:47	WG2671917
Bromochloromethane	74-97-5	0.500	U	0.437	0.500	1.00	1	01/09/2026 14:47	WG2671917
Bromodichloromethane	75-27-4	0.500	U	0.371	0.500	1.00	1	01/09/2026 14:47	WG2671917
Bromoform	75-25-2	0.900	U	0.548	0.900	1.00	1	01/09/2026 14:47	WG2671917
Bromomethane	74-83-9	4.90	U	4.85	4.90	5.00	1	01/09/2026 14:47	WG2671917
Carbon disulfide	75-15-0	0.900	U	0.510	0.900	1.00	1	01/13/2026 14:52	WG2673419
Carbon tetrachloride	56-23-5	0.500	U	0.360	0.500	1.00	1	01/09/2026 14:47	WG2671917
Chlorobenzene	108-90-7	0.500	U	0.266	0.500	1.00	1	01/09/2026 14:47	WG2671917
Chlorodibromomethane	124-48-1	0.500	U	0.398	0.500	1.00	1	01/09/2026 14:47	WG2671917
Chloroethane	75-00-3	4.50	U	2.79	4.50	5.00	1	01/09/2026 14:47	WG2671917
Chloroform	67-66-3	2.50	U	1.28	2.50	5.00	1	01/09/2026 14:47	WG2671917
Chloromethane	74-87-3	2.00	U	1.70	2.00	5.00	1	01/09/2026 14:47	WG2671917
Cyclohexane	110-82-7	0.900	U	0.693	0.900	1.00	1	01/09/2026 14:47	WG2671917
1,2-Dibromoethane	106-93-4	0.500	U	0.341	0.500	1.00	1	01/09/2026 14:47	WG2671917
1,2-Dibromo-3-Chloropropane	96-12-8	2.50	U	1.25	2.50	5.00	1	01/09/2026 14:47	WG2671917
1,2-Dichlorobenzene	95-50-1	0.500	U	0.304	0.500	1.00	1	01/09/2026 14:47	WG2671917

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	541-73-1	0.500	U	0.282	0.500	1.00	1	01/09/2026 14:47	WG2671917
1,4-Dichlorobenzene	106-46-7	0.500	U	0.277	0.500	1.00	1	01/09/2026 14:47	WG2671917
Dichlorodifluoromethane	75-71-8	2.50	U	2.41	2.50	5.00	1	01/09/2026 14:47	WG2671917
1,1-Dichloroethane	75-34-3	0.500	U	0.389	0.500	1.00	1	01/09/2026 14:47	WG2671917
1,2-Dichloroethane	107-06-2	0.500	U	0.395	0.500	1.00	1	01/09/2026 14:47	WG2671917
1,1-Dichloroethene	75-35-4	0.500	U	0.422	0.500	1.00	1	01/09/2026 14:47	WG2671917
cis-1,2-Dichloroethene	156-59-2	0.500	U	0.323	0.500	1.00	1	01/09/2026 14:47	WG2671917
trans-1,2-Dichloroethene	156-60-5	0.500	U	0.348	0.500	1.00	1	01/09/2026 14:47	WG2671917
1,2-Dichloropropane	78-87-5	0.500	U	0.427	0.500	1.00	1	01/09/2026 14:47	WG2671917
cis-1,3-Dichloropropene	10061-01-5	0.500	U	0.348	0.500	1.00	1	01/09/2026 14:47	WG2671917
trans-1,3-Dichloropropene	10061-02-6	0.500	U	0.313	0.500	1.00	1	01/09/2026 14:47	WG2671917
Ethylbenzene	100-41-4	0.500	U	0.234	0.500	1.00	1	01/09/2026 14:47	WG2671917
Isopropylbenzene	98-82-8	0.500	U	0.105	0.500	1.00	1	01/09/2026 14:47	WG2671917
2-Butanone (MEK)	78-93-3	18.0	U	9.00	18.0	20.0	1	01/09/2026 14:47	WG2671917
2-Hexanone	591-78-6	18.0	U	5.80	18.0	20.0	1	01/09/2026 14:47	WG2671917
Methylene Chloride	75-09-2	2.50	U	1.48	2.50	5.00	1	01/09/2026 14:47	WG2671917
4-Methyl-2-pentanone (MIBK)	108-10-1	9.00	U	7.52	9.00	20.0	1	01/09/2026 14:47	WG2671917
Methyl Acetate	79-20-9	18.0	U	17.5	18.0	20.0	1	01/09/2026 14:47	WG2671917
Methyl Cyclohexane	108-87-2	5.00	U	0.701	5.00	10.0	1	01/09/2026 14:47	WG2671917
Methyl tert-butyl ether	1634-04-4	0.500	U	0.357	0.500	1.00	1	01/09/2026 14:47	WG2671917
Styrene	100-42-5	0.500	U	0.342	0.500	1.00	1	01/09/2026 14:47	WG2671917
1,1,2,2-Tetrachloroethane	79-34-5	0.500	U	0.354	0.500	1.00	1	01/09/2026 14:47	WG2671917
Tetrachloroethene	127-18-4	0.600	U	0.358	0.600	1.00	1	01/09/2026 14:47	WG2671917
Toluene	108-88-3	0.600	U	0.274	0.600	1.00	1	01/09/2026 14:47	WG2671917
1,2,3-Trichlorobenzene	87-61-6	0.940	U	0.935	0.940	1.00	1	01/09/2026 14:47	WG2671917
1,2,4-Trichlorobenzene	120-82-1	1.00	U	0.691	1.00	2.00	1	01/09/2026 14:47	WG2671917
1,1,1-Trichloroethane	71-55-6	0.500	U	0.336	0.500	1.00	1	01/09/2026 14:47	WG2671917
1,1,2-Trichloroethane	79-00-5	0.500	U	0.375	0.500	1.00	1	01/09/2026 14:47	WG2671917
Trichloroethene	79-01-6	0.500	U	0.383	0.500	1.00	1	01/09/2026 14:47	WG2671917
Trichlorofluoromethane	75-69-4	4.50	U	3.04	4.50	5.00	1	01/09/2026 14:47	WG2671917
1,1,2-Trichlorotrifluoroethane	76-13-1	0.900	U	0.643	0.900	1.00	1	01/09/2026 14:47	WG2671917
Vinyl chloride	75-01-4	0.500	U	0.458	0.500	1.00	1	01/09/2026 14:47	WG2671917
m&p-Xylene		1.00	U	0.549	1.00	2.00	1	01/09/2026 14:47	WG2671917
o-Xylene	95-47-6	0.500	U	0.319	0.500	1.00	1	01/09/2026 14:47	WG2671917
Xylenes, Total	1330-20-7	1.50	U	0.319	1.50	3.00	1	01/09/2026 14:47	WG2671917
(S) Toluene-d8	*2037-26-5*	*111*				*89.0-112*		*01/09/2026 14:47*	WG2671917
(S) Toluene-d8	*2037-26-5*	*101*				*89.0-112*		*01/13/2026 14:52*	WG2673419
(S) 4-Bromofluorobenzene	*460-00-4*	*95.6*				*85.0-114*		*01/09/2026 14:47*	WG2671917
(S) 4-Bromofluorobenzene	*460-00-4*	*91.6*				*85.0-114*		*01/13/2026 14:52*	WG2673419
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*100*				*81.0-118*		*01/09/2026 14:47*	WG2671917
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*106*				*81.0-118*		*01/13/2026 14:52*	WG2673419

Semi-Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	68334-30-5	92.7	J	60.5	90.0	100	1	01/12/2026 13:57	WG2671371
(S) o-Terphenyl	*84-15-1*	*94.2*				*56.0-125*		*01/12/2026 13:57*	WG2671371

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	83-32-9	0.500	J4 U	0.246	0.500	1.00	1	01/09/2026 21:55	WG2671743
Acenaphthylene	208-96-8	0.500	U	0.265	0.500	1.00	1	01/09/2026 21:55	WG2671743
Acetophenone	98-86-2	5.00	J4 U	2.05	5.00	10.0	1	01/09/2026 21:55	WG2671743
Anthracene	120-12-7	0.500	U	0.196	0.500	1.00	1	01/09/2026 21:55	WG2671743

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Atrazine	1912-24-9	5.00	U	2.44	5.00	10.0	1	01/09/2026 21:55	WG2671743
Benzaldehyde	100-52-7	9.00	C3 C7 U	8.66	9.00	10.0	1	01/09/2026 21:55	WG2671743
Benzo(a)anthracene	56-55-3	0.500	U	0.208	0.500	1.00	1	01/09/2026 21:55	WG2671743
Benzo(b)fluoranthene	205-99-2	0.500	U	0.280	0.500	1.00	1	01/09/2026 21:55	WG2671743
Benzo(k)fluoranthene	207-08-9	0.500	U	0.247	0.500	1.00	1	01/09/2026 21:55	WG2671743
Benzo(g,h,i)perylene	191-24-2	0.500	U	0.254	0.500	1.00	1	01/09/2026 21:55	WG2671743
Benzo(a)pyrene	50-32-8	0.500	U	0.128	0.500	1.00	1	01/09/2026 21:55	WG2671743
Biphenyl	92-52-4	5.00	J4 U	2.74	5.00	10.0	1	01/09/2026 21:55	WG2671743
Bis(2-chlorethoxy)methane	111-91-1	5.00	J4 U	1.88	5.00	10.0	1	01/09/2026 21:55	WG2671743
Bis(2-chloroethyl)ether	111-44-4	5.00	J4 U	2.05	5.00	10.0	1	01/09/2026 21:55	WG2671743
2,2-Oxybis(1-Chloropropane)	108-60-1	5.00	U	1.91	5.00	10.0	1	01/09/2026 21:55	WG2671743
4-Bromophenyl-phenylether	101-55-3	5.00	J4 U	2.67	5.00	10.0	1	01/09/2026 21:55	WG2671743
2-Chloronaphthalene	91-58-7	0.500	J4 U	0.259	0.500	1.00	1	01/09/2026 21:55	WG2671743
4-Chlorophenyl-phenylether	7005-72-3	5.00	J4 U	2.22	5.00	10.0	1	01/09/2026 21:55	WG2671743
Caprolactam	105-60-2	5.00	U	0.736	5.00	10.0	1	01/09/2026 21:55	WG2671743
Carbazole	86-74-8	5.00	U	2.11	5.00	10.0	1	01/09/2026 21:55	WG2671743
Chrysene	218-01-9	0.500	U	0.279	0.500	1.00	1	01/09/2026 21:55	WG2671743
Dibenz(a,h)anthracene	53-70-3	0.500	U	0.148	0.500	1.00	1	01/09/2026 21:55	WG2671743
Dibenzofuran	132-64-9	5.00	J4 U	2.51	5.00	10.0	1	01/09/2026 21:55	WG2671743
3,3-Dichlorobenzidine	91-94-1	9.00	U	7.58	9.00	10.0	1	01/09/2026 21:55	WG2671743
2,4-Dinitrotoluene	121-14-2	5.00	U	1.87	5.00	10.0	1	01/09/2026 21:55	WG2671743
2,6-Dinitrotoluene	606-20-2	5.00	J4 U	1.86	5.00	10.0	1	01/09/2026 21:55	WG2671743
Fluoranthene	206-44-0	0.500	U	0.229	0.500	1.00	1	01/09/2026 21:55	WG2671743
Fluorene	86-73-7	0.500	J4 U	0.277	0.500	1.00	1	01/09/2026 21:55	WG2671743
Hexachlorobenzene	118-74-1	0.500	U	0.259	0.500	1.00	1	01/09/2026 21:55	WG2671743
Hexachloro-1,3-butadiene	87-68-3	5.00	U	2.27	5.00	10.0	1	01/09/2026 21:55	WG2671743
Hexachlorocyclopentadiene	77-47-4	5.00	U	2.81	5.00	10.0	1	01/09/2026 21:55	WG2671743
Hexachloroethane	67-72-1	5.00	U	2.15	5.00	10.0	1	01/09/2026 21:55	WG2671743
Indeno(1,2,3-cd)pyrene	193-39-5	0.500	U	0.285	0.500	1.00	1	01/09/2026 21:55	WG2671743
Isophorone	78-59-1	5.00	J4 U	1.72	5.00	10.0	1	01/09/2026 21:55	WG2671743
Naphthalene	91-20-3	0.900	J4 U	0.678	0.900	1.00	1	01/09/2026 21:55	WG2671743
2-Methylnaphthalene	91-57-6	0.500	J4 U	0.276	0.500	1.00	1	01/09/2026 21:55	WG2671743
2-Methylphenol	95-48-7	5.00	U	1.70	5.00	10.0	1	01/09/2026 21:55	WG2671743
3&4-Methyl Phenol	3&4-Methyl Phenol	5.00	U	1.54	5.00	10.0	1	01/09/2026 21:55	WG2671743
Nitrobenzene	98-95-3	5.00	J4 U	1.97	5.00	10.0	1	01/09/2026 21:55	WG2671743
n-Nitrosodiphenylamine	86-30-6	5.00	U	2.02	5.00	10.0	1	01/09/2026 21:55	WG2671743
n-Nitrosodi-n-propylamine	621-64-7	5.00	J4 U	2.02	5.00	10.0	1	01/09/2026 21:55	WG2671743
Phenanthrene	85-01-8	0.500	U	0.219	0.500	1.00	1	01/09/2026 21:55	WG2671743
Benzylbutyl phthalate	85-68-7	1.50	U	1.13	1.50	3.00	1	01/09/2026 21:55	WG2671743
Bis(2-Ethylhexyl)phthalate	117-81-7	2.70	U	1.65	2.70	3.00	1	01/09/2026 21:55	WG2671743
Di-n-butyl phthalate	84-74-2	1.50	U	0.794	1.50	3.00	1	01/09/2026 21:55	WG2671743
Diethyl phthalate	84-66-2	1.50	U	0.861	1.50	3.00	1	01/09/2026 21:55	WG2671743
Dimethyl phthalate	131-11-3	1.50	U	0.772	1.50	3.00	1	01/09/2026 21:55	WG2671743
Di-n-octyl phthalate	117-84-0	1.50	U	1.33	1.50	3.00	1	01/09/2026 21:55	WG2671743
Pyrene	129-00-0	0.500	U	0.259	0.500	1.00	1	01/09/2026 21:55	WG2671743
4-Chloro-3-methylphenol	59-50-7	5.00	U	2.28	5.00	10.0	1	01/09/2026 21:55	WG2671743
2-Chlorophenol	95-57-8	5.00	U	2.11	5.00	10.0	1	01/09/2026 21:55	WG2671743
2,4-Dichlorophenol	120-83-2	5.00	J4 U	2.41	5.00	10.0	1	01/09/2026 21:55	WG2671743
2,4-Dimethylphenol	105-67-9	5.00	C3 U	4.33	5.00	10.0	1	01/09/2026 21:55	WG2671743
4,6-Dinitro-2-methylphenol	534-52-1	5.00	U	3.49	5.00	10.0	1	01/09/2026 21:55	WG2671743
2,4-Dinitrophenol	51-28-5	9.00	U	5.71	9.00	10.0	1	01/09/2026 21:55	WG2671743
2-Nitrophenol	88-75-5	5.00	J4 U	2.60	5.00	10.0	1	01/09/2026 21:55	WG2671743
2-Nitroaniline	88-74-4	5.00	U	2.36	5.00	10.0	1	01/09/2026 21:55	WG2671743
3-Nitroaniline	99-09-2	5.00	U	1.20	5.00	10.0	1	01/09/2026 21:55	WG2671743
4-Chloroaniline	106-47-8	9.00	U	5.06	9.00	10.0	1	01/09/2026 21:55	WG2671743
4-Nitroaniline	100-01-6	5.00	U	2.11	5.00	10.0	1	01/09/2026 21:55	WG2671743

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
4-Nitrophenol	100-02-7	9.00	U	7.55	9.00	10.0	1	01/09/2026 21:55	WG2671743
Pentachlorophenol	87-86-5	5.00	C3 U	0.708	5.00	10.0	1	01/09/2026 21:55	WG2671743
Phenol	108-95-2	5.00	U	0.757	5.00	10.0	1	01/09/2026 21:55	WG2671743
2,4,6-Trichlorophenol	88-06-2	5.00	J4 U	2.38	5.00	10.0	1	01/09/2026 21:55	WG2671743
2,4,5-Trichlorophenol	95-95-4	5.00	U	2.70	5.00	10.0	1	01/09/2026 21:55	WG2671743
1,2,4,5-Tetrachlorobenzene	95-94-3	5.00	U	2.43	5.00	10.0	1	01/09/2026 21:55	WG2671743
(S) 2-Fluorophenol	*367-12-4*	*26.5*				*19.0-119*		*01/09/2026 21:55*	WG2671743
(S) Phenol-d5	*4165-62-2*	*19.9*				*10.0-120*		*01/09/2026 21:55*	WG2671743
(S) Nitrobenzene-d5	*4165-60-0*	*33.3*	J2			*44.0-120*		*01/09/2026 21:55*	WG2671743
(S) 2-Fluorobiphenyl	*321-60-8*	*31.9*	J2			*44.0-119*		*01/09/2026 21:55*	WG2671743
(S) 2,4,6-Tribromophenol	*118-79-6*	*40.5*	J2			*43.0-140*		*01/09/2026 21:55*	WG2671743
(S) p-Terphenyl-d14	*1718-51-0*	*61.6*				*50.0-134*		*01/09/2026 21:55*	WG2671743

Sample Narrative:

L1933598-06 WG2671743: Duplicate Analysis performed due to QC failure. Reporting most compliant data.

Method Blank (MB)

(MB) R4323349-1 01/09/26 12:03

Analyte	MB Result %	MB Qualifier	MB DL %	MB LOD %	MB LOQ %
Total Solids	0.00100			0.200	

L1933776-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1933776-02 01/09/26 12:03 • (DUP) R4323349-3 01/09/26 12:03

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	78.2	78.4	1	0.351		10

Laboratory Control Sample (LCS)

(LCS) R4323349-2 01/09/26 12:03

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	90.0-110	

QUALITY CONTROL SUMMARY

L1933598-05,06

Method Blank (MB)

(MB) R4323540-1 01/11/26 12:47

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Mercury	0.100	U	0.0700	0.100	0.200

Laboratory Control Sample (LCS)

(LCS) R4323540-2 01/11/26 12:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	3.00	3.15	105	82.0-119	

L1933573-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933573-01 01/11/26 12:53 • (MS) R4323540-4 01/11/26 12:58 • (MSD) R4323540-5 01/11/26 13:01

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	3.00	0.100	2.78	3.08	92.7	103	1	82.0-119			10.1	20

QUALITY CONTROL SUMMARY

L1933598-02,04

Method Blank (MB)

(MB) R4323587-1 01/11/26 17:41

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Mercury	0.00500	U	0.00333	0.00500	0.0100

Laboratory Control Sample (LCS)

(LCS) R4323587-6 01/11/26 19:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.0300	0.0275	91.7	82.0-119	

L1933543-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933543-01 01/11/26 17:47 • (MS) R4323587-4 01/11/26 17:58 • (MSD) R4323587-5 01/11/26 18:01

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.0300	ND	0.0304	0.0308	101	103	1	82.0-119			1.23	20

QUALITY CONTROL SUMMARY

L1933598-05,06

Method Blank (MB)

(MB) R4323594-1 01/11/26 17:12

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Aluminum	100	U	69.2	100	200
Antimony	6.00	U	5.06	6.00	10.0
Arsenic	8.00	U	7.83	8.00	10.0
Barium	2.50	U	0.773	2.50	5.00
Beryllium	1.00	U	0.501	1.00	2.00
Cadmium	1.00	U	0.538	1.00	2.00
Calcium	500	U	153	500	1000
Chromium	5.00	U	1.51	5.00	10.0
Cobalt	5.00	U	1.41	5.00	10.0
Copper	5.00	U	2.26	5.00	10.0
Iron	49.2	J	20.5	50.0	100
Lead	3.00	U	2.43	3.00	6.00
Magnesium	500	U	101	500	1000
Manganese	5.00	U	1.01	5.00	10.0
Nickel	5.00	U	1.96	5.00	10.0
Potassium	1000	U	624	1000	2000
Selenium	7.00	U	6.16	7.00	10.0
Silver	3.00	U	2.89	3.00	5.00
Sodium	1500	U	444	1500	3000
Thallium	7.00	U	6.63	7.00	10.0
Vanadium	10.0	U	5.64	10.0	20.0
Zinc	25.0	U	4.67	25.0	50.0

Laboratory Control Sample (LCS)

(LCS) R4323594-2 01/11/26 17:14

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum	10000	9720	97.2	86.0-115	
Antimony	1000	923	92.3	88.0-113	
Arsenic	1000	940	94.0	87.0-113	
Barium	1000	981	98.1	88.0-113	
Beryllium	1000	975	97.5	89.0-112	
Cadmium	1000	938	93.8	88.0-113	
Calcium	10000	9790	97.9	87.0-113	
Chromium	1000	1000	100	90.0-113	
Cobalt	1000	922	92.2	89.0-114	
Copper	1000	984	98.4	86.0-114	
Iron	10000	9810	98.1	87.0-115	

QUALITY CONTROL SUMMARY

L1933598-05,06

Laboratory Control Sample (LCS)

(LCS) R4323594-2 01/11/26 17:14

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Lead	1000	928	92.8	86.0-113	
Magnesium	10000	9630	96.3	85.0-113	
Manganese	1000	1010	101	90.0-114	
Nickel	1000	916	91.6	88.0-113	
Potassium	10000	9490	94.9	86.0-114	
Selenium	1000	914	91.4	83.0-114	
Silver	200	188	94.0	84.0-115	
Sodium	10000	9610	96.1	87.0-115	
Thallium	1000	949	94.9	85.0-114	
Vanadium	1000	943	94.3	90.0-111	
Zinc	1000	951	95.1	87.0-115	

L1933554-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933554-04 01/11/26 17:25 • (MS) R4323594-4 01/11/26 17:29 • (MSD) R4323594-5 01/11/26 17:32

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum	10000	503	10400	10700	99.4	102	1	86.0-115			2.19	20
Antimony	1000	6.00	954	938	95.4	93.8	1	88.0-113			1.66	20
Arsenic	1000	8.00	985	967	98.5	96.7	1	87.0-113			1.85	20
Barium	1000	159	1140	1120	97.8	96.5	1	88.0-113			1.16	20
Beryllium	1000	1.00	993	986	99.3	98.6	1	89.0-112			0.650	20
Cadmium	1000	1.00	959	951	95.9	95.1	1	88.0-113			0.825	20
Calcium	10000	170000	181000	176000	114	66.1	1	87.0-113	V	V	2.68	20
Chromium	1000	5.00	994	1000	99.4	100	1	90.0-113			1.07	20
Cobalt	1000	5.00	950	937	95.0	93.7	1	89.0-114			1.46	20
Copper	1000	5.14	982	993	97.7	98.8	1	86.0-114			1.09	20
Iron	10000	524	10400	10500	99.0	99.9	1	87.0-115			0.813	20
Lead	1000	3.00	955	940	95.5	94.0	1	86.0-113			1.64	20
Magnesium	10000	41100	51200	50600	101	94.7	1	85.0-113			1.28	20
Manganese	1000	40.3	1030	1040	99.5	100	1	90.0-114			0.807	20
Nickel	1000	2.21	956	931	95.4	92.9	1	88.0-113			2.60	20
Potassium	10000	1030	10800	10800	98.2	97.4	1	86.0-114			0.736	20
Selenium	1000	7.00	962	945	96.2	94.5	1	83.0-114			1.79	20
Silver	200	3.00	193	192	96.5	95.9	1	84.0-115			0.601	20
Sodium	10000	107000	119000	116000	118	92.8	1	87.0-115	V		2.11	20
Thallium	1000	7.00	968	957	96.8	95.7	1	85.0-114			1.14	20
Vanadium	1000	10.0	962	955	96.2	95.5	1	90.0-111			0.730	20
Zinc	1000	5.24	963	952	95.8	94.6	1	87.0-115			1.18	20

QUALITY CONTROL SUMMARY

L1933598-05,06

L1933588-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933588-02 01/11/26 17:34 • (MS) R4323594-6 01/11/26 17:37 • (MSD) R4323594-7 01/11/26 17:39

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum	10000	100	9820	9760	98.2	97.6	1	86.0-115			0.582	20
Antimony	1000	6.00	949	950	94.9	95.0	1	88.0-113			0.122	20
Arsenic	1000	8.00	978	966	97.8	96.6	1	87.0-113			1.23	20
Barium	1000	42.2	1030	1030	98.9	98.7	1	88.0-113			0.193	20
Beryllium	1000	1.00	980	972	98.0	97.2	1	89.0-112			0.810	20
Cadmium	1000	1.00	957	953	95.7	95.3	1	88.0-113			0.455	20
Calcium	10000	58700	67200	67200	84.9	84.9	1	87.0-113	V	V	0.00347	20
Chromium	1000	5.00	1030	989	103	98.9	1	90.0-113			3.74	20
Cobalt	1000	5.00	942	936	94.2	93.6	1	89.0-114			0.689	20
Copper	1000	5.00	998	973	99.8	97.3	1	86.0-114			2.49	20
Iron	10000	50.0	9790	9730	97.9	97.3	1	87.0-115			0.627	20
Lead	1000	3.00	956	948	95.6	94.8	1	86.0-113			0.781	20
Magnesium	10000	37700	46400	46500	86.7	87.5	1	85.0-113			0.172	20
Manganese	1000	6.71	1030	1000	102	99.6	1	90.0-114			2.55	20
Nickel	1000	5.00	945	934	94.5	93.4	1	88.0-113			1.17	20
Potassium	10000	2580	12100	12100	95.1	94.9	1	86.0-114			0.149	20
Selenium	1000	7.00	950	946	95.0	94.6	1	83.0-114			0.418	20
Silver	200	3.00	191	187	95.3	93.4	1	84.0-115			2.01	20
Sodium	10000	17500	26900	27100	93.8	95.8	1	87.0-115			0.741	20
Thallium	1000	7.00	976	970	97.6	97.0	1	85.0-114			0.656	20
Vanadium	1000	10.0	946	941	94.6	94.1	1	90.0-111			0.579	20
Zinc	1000	14.3	978	970	96.4	95.6	1	87.0-115			0.800	20

QUALITY CONTROL SUMMARY

L1933598-02,04

Method Blank (MB)

(MB) R4324065-5 01/13/26 07:18

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Arsenic	0.0500	U	0.0333	0.0500	0.100
Barium	0.0500	U	0.0333	0.0500	0.100
Cadmium	0.0500	U	0.0333	0.0500	0.100
Chromium	0.0500	U	0.0333	0.0500	0.100
Lead	0.0500	U	0.0333	0.0500	0.100
Selenium	0.0500	U	0.0333	0.0500	0.100
Silver	0.0500	U	0.0333	0.0500	0.100

Laboratory Control Sample (LCS)

(LCS) R4324065-1 01/13/26 02:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	10.0	9.82	98.2	87.0-113	
Barium	10.0	10.2	102	88.0-113	
Cadmium	10.0	9.95	99.5	88.0-113	
Chromium	10.0	9.74	97.4	90.0-113	
Lead	10.0	9.78	97.8	86.0-113	
Selenium	10.0	9.67	96.7	83.0-114	
Silver	2.00	1.98	98.9	84.0-115	

L1933543-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933543-01 01/13/26 02:18 • (MS) R4324065-3 01/13/26 02:23 • (MSD) R4324065-4 01/13/26 02:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	10.0	ND	10.7	10.1	107	101	1	87.0-113			5.33	20
Barium	10.0	ND	11.1	10.4	111	104	1	88.0-113			6.03	20
Cadmium	10.0	ND	10.8	10.2	108	102	1	88.0-113			5.43	20
Chromium	10.0	ND	10.6	9.79	106	97.9	1	90.0-113			8.35	20
Lead	10.0	ND	10.6	10.0	106	100	1	86.0-113			5.98	20
Selenium	10.0	ND	10.5	9.86	104	98.0	1	83.0-114			6.16	20
Silver	2.00	ND	2.15	1.99	107	99.6	1	84.0-115			7.44	20

Method Blank (MB)

(MB) R4323022-4 01/08/26 15:53

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
TPH (GC/FID) Low Fraction	75.0	U	59.4	75.0	150
(S) a,a,a-Trifluorotoluene(FID)	*101*				*62.0-128*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4323022-2 01/08/26 14:35 • (LCSD) R4323022-3 01/08/26 14:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5000	5530	5320	111	106	78.0-122			3.87	30
(S) a,a,a-Trifluorotoluene(FID)				*107*	*107*	*62.0-128*				

Method Blank (MB)

(MB) R4324380-3 01/10/26 03:09

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
TPH (GC/FID) Low Fraction	3.38	U	2.00	3.38	3.75
(S) a,a,a-Trifluorotoluene(FID)	*92.1*				*59.0-128*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4324380-1 01/10/26 01:15 • (LCSD) R4324380-2 01/10/26 01:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.00	4.43	4.58	88.6	91.6	79.0-122			3.33	30
(S) a,a,a-Trifluorotoluene(FID)				*104*	*104*	*59.0-128*				

Method Blank (MB)

(MB) R4324748-2 01/13/26 12:29

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
TPH (GC/FID) Low Fraction	3.38	U	2.00	3.38	3.75
(S) a,a,a-Trifluorotoluene(FID)	*93.3*				*59.0-128*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4324748-1 01/13/26 11:23 • (LCSD) R4324748-3 01/13/26 19:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.00	4.47	5.03	89.4	101	79.0-122			11.8	30
(S) a,a,a-Trifluorotoluene(FID)				*105*	*95.7*	*59.0-128*				

Method Blank (MB)

(MB) R4323802-3 01/09/26 09:53

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Benzene	0.500	U	0.320	0.500	1.00
Bromochloromethane	0.500	U	0.437	0.500	1.00
Bromodichloromethane	0.500	U	0.371	0.500	1.00
Bromoform	0.900	U	0.548	0.900	1.00
Bromomethane	4.90	U	4.85	4.90	5.00
Carbon tetrachloride	0.500	U	0.360	0.500	1.00
Chlorobenzene	0.500	U	0.266	0.500	1.00
Chlorodibromomethane	0.500	U	0.398	0.500	1.00
Chloroethane	4.50	U	2.79	4.50	5.00
Chloroform	2.50	U	1.28	2.50	5.00
Chloromethane	2.00	U	1.70	2.00	5.00
Cyclohexane	0.900	U	0.693	0.900	1.00
1,2-Dibromoethane	0.500	U	0.341	0.500	1.00
1,2-Dibromo-3-Chloropropane	2.50	U	1.25	2.50	5.00
1,2-Dichlorobenzene	0.500	U	0.304	0.500	1.00
1,3-Dichlorobenzene	0.500	U	0.282	0.500	1.00
1,4-Dichlorobenzene	0.500	U	0.277	0.500	1.00
Dichlorodifluoromethane	2.50	U	2.41	2.50	5.00
1,1-Dichloroethane	0.500	U	0.389	0.500	1.00
1,2-Dichloroethane	0.500	U	0.395	0.500	1.00
1,1-Dichloroethene	0.500	U	0.422	0.500	1.00
cis-1,2-Dichloroethene	0.500	U	0.323	0.500	1.00
trans-1,2-Dichloroethene	0.500	U	0.348	0.500	1.00
1,2-Dichloropropane	0.500	U	0.427	0.500	1.00
cis-1,3-Dichloropropene	0.500	U	0.348	0.500	1.00
trans-1,3-Dichloropropene	0.500	U	0.313	0.500	1.00
Ethylbenzene	0.500	U	0.234	0.500	1.00
Isopropylbenzene	0.500	U	0.105	0.500	1.00
2-Butanone (MEK)	18.0	U	9.00	18.0	20.0
2-Hexanone	18.0	U	5.80	18.0	20.0
Methylene Chloride	2.50	U	1.48	2.50	5.00
4-Methyl-2-pentanone (MIBK)	9.00	U	7.52	9.00	20.0
Methyl Acetate	18.0	U	17.5	18.0	20.0
Methyl Cyclohexane	5.00	U	0.701	5.00	10.0
Methyl tert-butyl ether	0.500	U	0.357	0.500	1.00
Styrene	0.500	U	0.342	0.500	1.00
1,1,2,2-Tetrachloroethane	0.500	U	0.354	0.500	1.00
Tetrachloroethene	0.600	U	0.358	0.600	1.00
Toluene	0.600	U	0.274	0.600	1.00
1,2,3-Trichlorobenzene	0.940	U	0.935	0.940	1.00

Method Blank (MB)

(MB) R4323802-3 01/09/26 09:53

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
1,2,4-Trichlorobenzene	1.00	U	0.691	1.00	2.00
1,1,1-Trichloroethane	0.500	U	0.336	0.500	1.00
1,1,2-Trichloroethane	0.500	U	0.375	0.500	1.00
Trichloroethene	0.500	U	0.383	0.500	1.00
Trichlorofluoromethane	4.50	U	3.04	4.50	5.00
1,1,2-Trichlorotrifluoroethane	0.900	U	0.643	0.900	1.00
Vinyl chloride	0.500	U	0.458	0.500	1.00
m&p-Xylene	1.00	U	0.549	1.00	2.00
o-Xylene	0.500	U	0.319	0.500	1.00
Xylenes, Total	1.50	U	0.319	1.50	3.00
(S) Toluene-d8	*111*				*89.0-112*
(S) 4-Bromofluorobenzene	*94.6*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*99.2*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4323802-1 01/09/26 08:52 • (LCSD) R4323802-2 01/09/26 09:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	10.0	9.25	9.46	92.5	94.6	79.0-120			2.24	20
Bromochloromethane	10.0	9.25	9.55	92.5	95.5	78.0-123			3.19	20
Bromodichloromethane	10.0	8.62	8.85	86.2	88.5	79.0-125			2.63	20
Bromoform	10.0	8.88	9.14	88.8	91.4	66.0-130			2.89	20
Bromomethane	10.0	10.4	10.9	104	109	53.0-141			4.69	20
Carbon tetrachloride	10.0	9.13	9.35	91.3	93.5	72.0-136			2.38	20
Chlorobenzene	10.0	10.6	10.8	106	108	82.0-118			1.87	20
Chlorodibromomethane	10.0	9.23	9.44	92.3	94.4	74.0-126			2.25	20
Chloroethane	10.0	11.3	11.4	113	114	60.0-138			0.881	20
Chloroform	10.0	9.08	9.43	90.8	94.3	79.0-124			3.78	20
Chloromethane	10.0	11.2	11.5	112	115	50.0-139			2.64	20
Cyclohexane	10.0	9.76	10.1	97.6	101	71.0-130			3.42	20
1,2-Dibromoethane	10.0	10.2	10.5	102	105	77.0-121			2.90	20
1,2-Dibromo-3-Chloropropane	10.0	9.59	9.82	95.9	98.2	62.0-128			2.37	20
1,2-Dichlorobenzene	10.0	11.3	11.7	113	117	80.0-119			3.48	20
1,3-Dichlorobenzene	10.0	11.4	11.6	114	116	80.0-119			1.74	20
1,4-Dichlorobenzene	10.0	11.6	11.8	116	118	79.0-118			1.71	20
Dichlorodifluoromethane	10.0	12.1	12.1	121	121	32.0-152			0.000	20
1,1-Dichloroethane	10.0	9.46	9.82	94.6	98.2	77.0-125			3.73	20
1,2-Dichloroethane	10.0	9.35	9.75	93.5	97.5	73.0-128			4.19	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4323802-1 01/09/26 08:52 • (LCSD) R4323802-2 01/09/26 09:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	10.0	9.49	9.63	94.9	96.3	71.0-131			1.46	20
cis-1,2-Dichloroethene	10.0	9.12	9.55	91.2	95.5	78.0-123			4.61	20
trans-1,2-Dichloroethene	10.0	9.33	9.59	93.3	95.9	75.0-124			2.75	20
1,2-Dichloropropane	10.0	9.21	9.47	92.1	94.7	78.0-122			2.78	20
cis-1,3-Dichloropropene	10.0	8.71	9.04	87.1	90.4	75.0-124			3.72	20
trans-1,3-Dichloropropene	10.0	10.3	10.7	103	107	73.0-127			3.81	20
Ethylbenzene	10.0	10.3	10.5	103	105	79.0-121			1.92	20
Isopropylbenzene	10.0	10.5	10.6	105	106	72.0-131			0.948	20
2-Butanone (MEK)	50.0	42.6	44.2	85.2	88.4	56.0-143			3.69	20
2-Hexanone	50.0	53.8	55.9	108	112	57.0-139			3.83	20
Methylene Chloride	10.0	9.36	9.54	93.6	95.4	74.0-124			1.90	20
4-Methyl-2-pentanone (MIBK)	50.0	52.3	54.7	105	109	67.0-130			4.49	20
Methyl Acetate	50.0	49.1	51.3	98.2	103	56.0-136			4.38	20
Methyl Cyclohexane	10.0	9.79	10.0	97.9	100	72.0-132	J		2.12	20
Methyl tert-butyl ether	10.0	9.02	9.38	90.2	93.8	71.0-124			3.91	20
Styrene	10.0	9.35	9.46	93.5	94.6	78.0-123			1.17	20
1,1,2,2-Tetrachloroethane	10.0	11.4	11.8	114	118	71.0-121			3.45	20
Tetrachloroethene	10.0	10.7	10.9	107	109	74.0-129			1.85	20
Toluene	10.0	10.6	10.9	106	109	80.0-121			2.79	20
1,2,3-Trichlorobenzene	10.0	11.2	12.0	112	120	69.0-129			6.90	20
1,2,4-Trichlorobenzene	10.0	10.5	10.9	105	109	69.0-130			3.74	20
1,1,1-Trichloroethane	10.0	9.51	9.64	95.1	96.4	74.0-131			1.36	20
1,1,2-Trichloroethane	10.0	10.5	11.0	105	110	80.0-119			4.65	20
Trichloroethene	10.0	9.10	9.31	91.0	93.1	79.0-123			2.28	20
Trichlorofluoromethane	10.0	10.4	10.7	104	107	65.0-141			2.84	20
1,1,2-Trichlorotrifluoroethane	10.0	10.2	10.1	102	101	70.0-136			0.985	20
Vinyl chloride	10.0	11.0	11.3	110	113	58.0-137			2.69	20
m&p-Xylene	20.0	20.9	21.4	105	107	80.0-121			2.36	20
o-Xylene	10.0	10.1	10.4	101	104	78.0-122			2.93	20
Xylenes, Total	30.0	31.0	31.8	103	106	79.0-121			2.55	20
(S) Toluene-d8				*107*	*108*	*89.0-112*				
(S) 4-Bromofluorobenzene				*93.1*	*95.1*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*100*	*102*	*81.0-118*				

L1933628-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933628-07 01/09/26 18:13 • (MS) R4323802-4 01/09/26 19:34 • (MSD) R4323802-5 01/09/26 19:54

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	10.0	0.500	7.48	7.69	74.8	76.9	1	79.0-120	J6	J6	2.77	20
Bromochloromethane	10.0	0.500	8.31	8.78	83.1	87.8	1	78.0-123			5.50	20
Bromodichloromethane	10.0	0.500	7.90	8.11	79.0	81.1	1	79.0-125			2.62	20
Bromoform	10.0	0.900	9.11	9.49	91.1	94.9	1	66.0-130			4.09	20
Bromomethane	10.0	4.90	6.68	7.29	66.8	72.9	1	53.0-141			8.73	20
Carbon tetrachloride	10.0	0.500	6.79	7.03	67.9	70.3	1	72.0-136	J6	J6	3.47	20
Chlorobenzene	10.0	0.810	9.87	10.3	90.6	94.9	1	82.0-118			4.26	20
Chlorodibromomethane	10.0	0.500	8.93	9.23	89.3	92.3	1	74.0-126			3.30	20
Chloroethane	10.0	4.50	4.36	4.99	43.6	49.9	1	60.0-138	J J6	J J6	13.5	20
Chloroform	10.0	2.50	7.78	8.16	77.8	81.6	1	79.0-124	J6		4.77	20
Chloromethane	10.0	2.00	8.76	9.11	87.6	91.1	1	50.0-139			3.92	20
Cyclohexane	10.0	0.900	7.13	7.22	71.3	72.2	1	71.0-130			1.25	20
1,2-Dibromoethane	10.0	0.500	10.1	10.5	101	105	1	77.0-121			3.88	20
1,2-Dibromo-3-Chloropropane	10.0	2.50	10.1	10.3	101	103	1	62.0-128			1.96	20
1,2-Dichlorobenzene	10.0	7.53	19.2	19.8	117	123	1	80.0-119		J5	3.08	20
1,3-Dichlorobenzene	10.0	1.48	11.9	12.5	104	110	1	80.0-119			4.92	20
1,4-Dichlorobenzene	10.0	3.67	14.8	15.2	111	115	1	79.0-118			2.67	20
Dichlorodifluoromethane	10.0	2.50	9.95	10.0	99.5	100	1	32.0-152			0.501	20
1,1-Dichloroethane	10.0	0.500	7.74	7.99	77.4	79.9	1	77.0-125			3.18	20
1,2-Dichloroethane	10.0	0.500	8.84	9.29	88.4	92.9	1	73.0-128			4.96	20
1,1-Dichloroethene	10.0	0.500	6.98	7.09	69.8	70.9	1	71.0-131	J6	J6	1.56	20
cis-1,2-Dichloroethene	10.0	6.98	13.2	13.6	62.2	66.2	1	78.0-123	J6	J6	2.99	20
trans-1,2-Dichloroethene	10.0	0.706	7.71	8.01	70.0	73.0	1	75.0-124	J6	J6	3.82	20
1,2-Dichloropropane	10.0	0.500	8.19	8.62	81.9	86.2	1	78.0-122			5.12	20
cis-1,3-Dichloropropene	10.0	0.500	7.88	8.16	78.8	81.6	1	75.0-124			3.49	20
trans-1,3-Dichloropropene	10.0	0.500	9.82	10.2	98.2	102	1	73.0-127			3.80	20
Ethylbenzene	10.0	0.500	8.48	8.75	84.8	87.5	1	79.0-121			3.13	20
Isopropylbenzene	10.0	0.500	8.59	8.75	85.9	87.5	1	72.0-131			1.85	20
2-Butanone (MEK)	50.0	18.0	43.2	43.9	86.4	87.8	1	56.0-143			1.61	20
2-Hexanone	50.0	18.0	59.4	59.6	119	119	1	57.0-139			0.336	20
Methylene Chloride	10.0	2.50	8.18	8.51	81.8	85.1	1	74.0-124			3.95	20
4-Methyl-2-pentanone (MIBK)	50.0	9.00	58.0	58.7	116	117	1	67.0-130			1.20	20
Methyl Acetate	50.0	18.0	53.1	53.1	106	106	1	56.0-136			0.000	20
Methyl Cyclohexane	10.0	5.00	7.33	7.35	73.3	73.5	1	72.0-132	J	J	0.272	20
Methyl tert-butyl ether	10.0	0.500	9.33	9.64	93.3	96.4	1	71.0-124			3.27	20
Styrene	10.0	0.500	8.39	8.68	83.9	86.8	1	78.0-123			3.40	20
1,1,2,2-Tetrachloroethane	10.0	0.500	11.9	12.5	119	125	1	71.0-121		J5	4.92	20
Tetrachloroethene	10.0	0.600	8.19	8.42	81.9	84.2	1	74.0-129			2.77	20
Toluene	10.0	0.600	8.69	8.98	86.9	89.8	1	80.0-121			3.28	20
1,2,3-Trichlorobenzene	10.0	0.940	11.2	11.7	112	117	1	69.0-129			4.37	20

L1933628-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933628-07 01/09/26 18:13 • (MS) R4323802-4 01/09/26 19:34 • (MSD) R4323802-5 01/09/26 19:54

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2,4-Trichlorobenzene	10.0	1.00	10.3	10.9	103	109	1	69.0-130			5.66	20
1,1,1-Trichloroethane	10.0	0.500	7.27	7.37	72.7	73.7	1	74.0-131	J6	J6	1.37	20
1,1,2-Trichloroethane	10.0	0.500	10.5	10.9	105	109	1	80.0-119			3.74	20
Trichloroethene	10.0	1.66	8.58	8.79	69.2	71.3	1	79.0-123	J6	J6	2.42	20
Trichlorofluoromethane	10.0	4.50	7.93	7.73	79.3	77.3	1	65.0-141			2.55	20
1,1,2-Trichlorotrifluoroethane	10.0	0.900	7.51	7.58	75.1	75.8	1	70.0-136			0.928	20
Vinyl chloride	10.0	0.756	8.74	8.76	79.8	80.0	1	58.0-137			0.229	20
m&p-Xylene	20.0	1.00	17.1	17.9	85.5	89.5	1	80.0-121			4.57	20
o-Xylene	10.0	0.500	8.63	9.05	86.3	90.5	1	78.0-122			4.75	20
Xylenes, Total	30.0	1.50	25.7	27.0	85.7	90.0	1	79.0-121			4.93	20
(S) Toluene-d8					*107*	*108*		*89.0-112*				
(S) 4-Bromofluorobenzene					*96.1*	*94.6*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*99.6*	*100*		*81.0-118*				

Method Blank (MB)

(MB) R4325097-3 01/13/26 10:59

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Acetone	47.0	U	46.9	47.0	50.0
Carbon disulfide	0.900	U	0.510	0.900	1.00
(S) Toluene-d8	*101*				*89.0-112*
(S) 4-Bromofluorobenzene	*93.3*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*100*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4325097-1 01/13/26 09:14 • (LCSD) R4325097-2 01/13/26 09:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	50.0	36.7	36.9	73.4	73.8	39.0-160	J	J	0.543	20
Carbon disulfide	10.0	9.15	7.57	91.5	75.7	64.0-133			18.9	20
(S) Toluene-d8				*100*	*98.7*	*89.0-112*				
(S) 4-Bromofluorobenzene				*96.5*	*95.5*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*102*	*99.1*	*81.0-118*				

L1933588-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933588-02 01/13/26 12:25 • (MS) R4325097-4 01/13/26 18:43 • (MSD) R4325097-5 01/13/26 19:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	50.0	47.0	47.0	47.0	71.4	68.0	1	39.0-160	U	U	4.88	20
Carbon disulfide	10.0	0.900	10.5	10.1	105	101	1	64.0-133			3.88	20
(S) Toluene-d8					*95.8*	*97.9*		*89.0-112*				
(S) 4-Bromofluorobenzene					*94.1*	*95.1*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*105*	*105*		*81.0-118*				

Method Blank (MB)

(MB) R4324177-3 01/11/26 10:26

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Benzene	0.0250	U	0.0167	0.0250	0.0500
Carbon tetrachloride	0.0250	U	0.0167	0.0250	0.0500
Chlorobenzene	0.0250	U	0.0167	0.0250	0.0500
Chloroform	0.125	U	0.0833	0.125	0.250
1,2-Dichloroethane	0.0250	U	0.0167	0.0250	0.0500
1,1-Dichloroethene	0.0250	U	0.0167	0.0250	0.0500
2-Butanone (MEK)	0.250	U	0.167	0.250	0.500
Tetrachloroethene	0.0250	U	0.0167	0.0250	0.0500
Trichloroethene	0.0250	U	0.0167	0.0250	0.0500
Vinyl chloride	0.0250	U	0.0167	0.0250	0.0500
(S) Toluene-d8	*98.9*				*89.0-112*
(S) 4-Bromofluorobenzene	*102*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*96.2*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4324177-1 01/11/26 09:07 • (LCSD) R4324177-2 01/11/26 09:27

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	0.483	0.576	96.6	115	79.0-120			17.6	20
Carbon tetrachloride	0.500	0.511	0.602	102	120	72.0-136			16.4	20
Chlorobenzene	0.500	0.478	0.561	95.6	112	82.0-118			16.0	20
Chloroform	0.500	0.441	0.540	88.2	108	79.0-124		J3	20.2	20
1,2-Dichloroethane	0.500	0.448	0.537	89.6	107	73.0-128			18.1	20
1,1-Dichloroethene	0.500	0.514	0.588	103	118	71.0-131			13.4	20
2-Butanone (MEK)	2.50	2.17	2.66	86.8	106	56.0-143		J3	20.3	20
Tetrachloroethene	0.500	0.517	0.591	103	118	74.0-129			13.4	20
Trichloroethene	0.500	0.492	0.598	98.4	120	79.0-123			19.4	20
Vinyl chloride	0.500	0.406	0.460	81.2	92.0	58.0-137			12.5	20
(S) Toluene-d8				*101*	*99.4*	*89.0-112*				
(S) 4-Bromofluorobenzene				*102*	*104*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*98.4*	*95.0*	*81.0-118*				

L1933318-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933318-01 01/11/26 11:06 • (MS) R4324177-4 01/11/26 17:46 • (MSD) R4324177-5 01/11/26 18:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	ND	0.604	0.587	121	117	1	79.0-120	J5		2.85	20
Carbon tetrachloride	0.500	ND	0.677	0.651	135	130	1	72.0-136			3.92	20
Chlorobenzene	0.500	ND	0.583	0.556	117	111	1	82.0-118			4.74	20
Chloroform	0.500	ND	0.595	0.580	119	116	1	79.0-124			2.55	20
1,2-Dichloroethane	0.500	ND	0.648	0.631	130	126	1	73.0-128	J5		2.66	20
1,1-Dichloroethene	0.500	ND	0.594	0.571	119	114	1	71.0-131			3.95	20
2-Butanone (MEK)	2.50	ND	2.37	2.32	94.8	92.8	1	56.0-143			2.13	20
Tetrachloroethene	0.500	ND	0.617	0.580	123	116	1	74.0-129			6.18	20
Trichloroethene	0.500	ND	0.617	0.602	123	120	1	79.0-123			2.46	20
Vinyl chloride	0.500	ND	0.443	0.427	88.6	85.4	1	58.0-137			3.68	20
(S) Toluene-d8					*98.9*	*94.3*		*89.0-112*				
(S) 4-Bromofluorobenzene					*103*	*101*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*116*	*109*		*81.0-118*				

QUALITY CONTROL SUMMARY

L1933598-05,06

Method Blank (MB)

(MB) R4323885-1 01/12/26 11:43

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
TPH (GC/FID) High Fraction	90.0	U	60.5	90.0	100
(S) o-Terphenyl	*92.5*				*56.0-125*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4323885-2 01/12/26 12:05 • (LCSD) R4323885-3 01/12/26 12:28

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1500	1260	1320	84.0	88.0	36.0-132			4.65	30
(S) o-Terphenyl				*103*	*102*	*56.0-125*				

Method Blank (MB)

(MB) R4323351-1 01/10/26 03:11

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
TPH (GC/FID) High Fraction	0.987	J	0.769	2.00	4.00
(S) o-Terphenyl	*84.2*				*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R4323351-2 01/10/26 03:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	37.8	75.6	50.0-150	
(S) o-Terphenyl			*86.2*	*18.0-148*	

L1933613-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933613-03 01/10/26 13:03 • (MS) R4323679-1 01/10/26 13:16 • (MSD) R4323679-2 01/10/26 13:30

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	56.8	48.8	107	168	103	211	2	50.0-150		J3 J5	44.2	20
(S) o-Terphenyl					*143*	*99.5*		*18.0-148*				

Sample Narrative:

OS: Dilution due to matrix impact during extract concentration procedure.

Method Blank (MB)

(MB) R4323955-1 01/12/26 11:36

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
2,4,5-TP (Silvex)	0.00100	U	0.000667	0.00100	0.00200
2,4-D	0.00100	U	0.000667	0.00100	0.00200
(S) 2,4-Dichlorophenyl Acetic Acid	*72.4*				*32.0-138*

Laboratory Control Sample (LCS)

(LCS) R4323955-2 01/12/26 11:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2,4,5-TP (Silvex)	0.0250	0.0221	88.4	51.0-134	
2,4-D	0.0250	0.0237	94.8	45.0-152	
(S) 2,4-Dichlorophenyl Acetic Acid			*89.4*	*32.0-138*	

L1933246-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933246-01 01/12/26 16:47 • (MS) R4323955-3 01/12/26 16:57 • (MSD) R4323955-4 01/12/26 17:07

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,4,5-TP (Silvex)	0.0250	ND	0.0184	0.0189	73.6	75.6	1	51.0-134			2.68	30
2,4-D	0.0250	ND	0.0195	0.0204	78.0	81.6	1	45.0-152			4.51	30
(S) 2,4-Dichlorophenyl Acetic Acid					*73.6*	*77.8*		*32.0-138*				

QUALITY CONTROL SUMMARY

L1933598-04

Method Blank (MB)

(MB) R4325011-1 01/14/26 13:41

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
2,4,5-TP (Silvex)	0.00100	U	0.000667	0.00100	0.00200
2,4-D	0.00100	U	0.000667	0.00100	0.00200
(S) 2,4-Dichlorophenyl Acetic Acid	*80.6*				*32.0-138*

Laboratory Control Sample (LCS)

(LCS) R4325011-2 01/14/26 13:52

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2,4,5-TP (Silvex)	0.0250	0.0236	94.4	51.0-134	
2,4-D	0.0250	0.0233	93.2	45.0-152	
(S) 2,4-Dichlorophenyl Acetic Acid			*85.8*	*32.0-138*	

L1933598-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933598-04 01/14/26 14:37 • (MS) R4325011-3 01/14/26 14:48 • (MSD) R4325011-4 01/14/26 14:59

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,4,5-TP (Silvex)	0.0250	ND	0.0233	0.0232	93.2	92.8	1	51.0-134			0.430	30
2,4-D	0.0250	ND	0.0231	0.0233	92.4	93.2	1	45.0-152			0.862	30
(S) 2,4-Dichlorophenyl Acetic Acid					*82.6*	*80.2*		*32.0-138*				

Method Blank (MB)

(MB) R4325197-1 01/14/26 23:59

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Chlordane	0.00250	U	0.00167	0.00250	0.00500
Endrin	0.00250	U	0.00167	0.00250	0.00500
Heptachlor	0.00250	U	0.00133	0.00250	0.00500
Lindane	0.00250	U	0.00167	0.00250	0.00500
Methoxychlor	0.00250	U	0.00167	0.00250	0.00500
Toxaphene	0.00500	U	0.00333	0.00500	0.0100
(S) Decachlorobiphenyl	*97.0*				*10.0-145*
(S) Tetrachloro-m-xylene	*68.6*				*44.0-124*

Laboratory Control Sample (LCS)

(LCS) R4325197-2 01/15/26 00:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endrin	0.0100	0.0110	110	60.0-138	
Heptachlor	0.0100	0.0101	101	54.0-130	
Lindane	0.0100	0.0105	105	59.0-134	
Methoxychlor	0.0100	0.0120	120	54.0-145	
(S) Decachlorobiphenyl			*98.1*	*10.0-145*	
(S) Tetrachloro-m-xylene			*74.7*	*44.0-124*	

L1933577-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933577-06 01/15/26 01:08 • (MS) R4325197-3 01/15/26 01:18 • (MSD) R4325197-4 01/15/26 01:28

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Endrin	0.0100	ND	0.0123	0.0115	123	115	1	60.0-138			6.72	30
Heptachlor	0.0100	ND	0.0115	0.0106	115	106	1	54.0-130			8.14	30
Lindane	0.0100	ND	0.0115	0.0111	115	111	1	59.0-134			3.54	30
Methoxychlor	0.0100	ND	0.0138	0.0126	138	126	1	54.0-145			9.09	30
(S) Decachlorobiphenyl					*108*	*105*		*10.0-145*				
(S) Tetrachloro-m-xylene					*83.9*	*74.9*		*44.0-124*				

Method Blank (MB)

(MB) R4325197-1 01/14/26 23:59

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
PCB 1016	0.000250	U	0.000167	0.000250	0.000500
PCB 1221	0.000250	U	0.000167	0.000250	0.000500
PCB 1232	0.000250	U	0.000167	0.000250	0.000500
PCB 1242	0.000250	U	0.000167	0.000250	0.000500
PCB 1248	0.000250	U	0.000167	0.000250	0.000500
PCB 1254	0.000250	U	0.000167	0.000250	0.000500
PCB 1260	0.000250	U	0.000167	0.000250	0.000500
(S) Decachlorobiphenyl	*90.4*				*10.0-145*
(S) Tetrachloro-m-xylene	*68.3*				*44.0-124*

Laboratory Control Sample (LCS)

(LCS) R4325197-5 01/15/26 00:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1016	0.0250	0.0194	77.6	46.0-129	
PCB 1260	0.0250	0.0232	92.8	45.0-134	
(S) Decachlorobiphenyl			*93.2*	*10.0-145*	
(S) Tetrachloro-m-xylene			*72.8*	*44.0-124*	

L1933577-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933577-08 01/15/26 01:38 • (MS) R4325197-6 01/15/26 01:47 • (MSD) R4325197-7 01/15/26 01:57

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
PCB 1016	0.0250	ND	0.0202	0.0217	80.8	86.8	1	46.0-129			7.16	30
PCB 1260	0.0250	ND	0.0231	0.0237	92.4	94.8	1	45.0-134			2.56	30
(S) Decachlorobiphenyl					*98.4*	*100*		*10.0-145*				
(S) Tetrachloro-m-xylene					*84.1*	*82.3*		*44.0-124*				

Method Blank (MB)

(MB) R4324041-2 01/09/26 20:29

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Acenaphthene	0.500	U	0.246	0.500	1.00
Acenaphthylene	0.500	U	0.265	0.500	1.00
Acetophenone	5.00	U	2.05	5.00	10.0
Anthracene	0.500	U	0.196	0.500	1.00
Atrazine	5.00	U	2.44	5.00	10.0
Benzaldehyde	9.00	U	8.66	9.00	10.0
Benzo(a)anthracene	0.500	U	0.208	0.500	1.00
Benzo(b)fluoranthene	0.500	U	0.280	0.500	1.00
Benzo(k)fluoranthene	0.500	U	0.247	0.500	1.00
Benzo(g,h,i)perylene	0.500	U	0.254	0.500	1.00
Benzo(a)pyrene	0.500	U	0.128	0.500	1.00
Biphenyl	5.00	U	2.74	5.00	10.0
Bis(2-chlorethoxy)methane	5.00	U	1.88	5.00	10.0
Bis(2-chloroethyl)ether	5.00	U	2.05	5.00	10.0
2,2-Oxybis(1-Chloropropane)	5.00	U	1.91	5.00	10.0
4-Bromophenyl-phenylether	5.00	U	2.67	5.00	10.0
2-Chloronaphthalene	0.500	U	0.259	0.500	1.00
4-Chlorophenyl-phenylether	5.00	U	2.22	5.00	10.0
Caprolactam	5.00	U	0.736	5.00	10.0
Carbazole	5.00	U	2.11	5.00	10.0
Chrysene	0.500	U	0.279	0.500	1.00
Dibenz(a,h)anthracene	0.500	U	0.148	0.500	1.00
Dibenzofuran	5.00	U	2.51	5.00	10.0
3,3-Dichlorobenzidine	9.00	U	7.58	9.00	10.0
2,4-Dinitrotoluene	5.00	U	1.87	5.00	10.0
2,6-Dinitrotoluene	5.00	U	1.86	5.00	10.0
Fluoranthene	0.500	U	0.229	0.500	1.00
Fluorene	0.500	U	0.277	0.500	1.00
Hexachlorobenzene	0.500	U	0.259	0.500	1.00
Hexachloro-1,3-butadiene	5.00	U	2.27	5.00	10.0
Hexachlorocyclopentadiene	5.00	U	2.81	5.00	10.0
Hexachloroethane	5.00	U	2.15	5.00	10.0
Indeno(1,2,3-cd)pyrene	0.500	U	0.285	0.500	1.00
Isophorone	5.00	U	1.72	5.00	10.0
Naphthalene	0.900	U	0.678	0.900	1.00
2-Methylnaphthalene	0.500	U	0.276	0.500	1.00
2-Methylphenol	5.00	U	1.70	5.00	10.0
3&4-Methyl Phenol	5.00	U	1.54	5.00	10.0
Nitrobenzene	5.00	U	1.97	5.00	10.0
n-Nitrosodiphenylamine	5.00	U	2.02	5.00	10.0

Method Blank (MB)

(MB) R4324041-2 01/09/26 20:29

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
n-Nitrosodi-n-propylamine	5.00	U	2.02	5.00	10.0
Phenanthrene	0.500	U	0.219	0.500	1.00
Benzylbutyl phthalate	1.50	U	1.13	1.50	3.00
Bis(2-Ethylhexyl)phthalate	2.70	U	1.65	2.70	3.00
Di-n-butyl phthalate	1.50	U	0.794	1.50	3.00
Diethyl phthalate	1.50	U	0.861	1.50	3.00
Dimethyl phthalate	1.50	U	0.772	1.50	3.00
Di-n-octyl phthalate	1.50	U	1.33	1.50	3.00
Pyrene	0.500	U	0.259	0.500	1.00
4-Chloro-3-methylphenol	5.00	U	2.28	5.00	10.0
2-Chlorophenol	5.00	U	2.11	5.00	10.0
2,4-Dichlorophenol	5.00	U	2.41	5.00	10.0
2,4-Dimethylphenol	5.00	U	4.33	5.00	10.0
4,6-Dinitro-2-methylphenol	5.00	U	3.49	5.00	10.0
2,4-Dinitrophenol	9.00	U	5.71	9.00	10.0
2-Nitrophenol	5.00	U	2.60	5.00	10.0
2-Nitroaniline	5.00	U	2.36	5.00	10.0
3-Nitroaniline	5.00	U	1.20	5.00	10.0
4-Chloroaniline	9.00	U	5.06	9.00	10.0
4-Nitroaniline	5.00	U	2.11	5.00	10.0
4-Nitrophenol	9.00	U	7.55	9.00	10.0
Pentachlorophenol	5.00	U	0.708	5.00	10.0
Phenol	5.00	U	0.757	5.00	10.0
2,4,6-Trichlorophenol	5.00	U	2.38	5.00	10.0
2,4,5-Trichlorophenol	5.00	U	2.70	5.00	10.0
1,2,4,5-Tetrachlorobenzene	5.00	U	2.43	5.00	10.0
(S) 2-Fluorophenol	*35.3*				*19.0-119*
(S) Phenol-d5	*22.6*				*10.0-120*
(S) Nitrobenzene-d5	*51.9*				*44.0-120*
(S) 2-Fluorobiphenyl	*52.6*				*44.0-119*
(S) 2,4,6-Tribromophenol	*33.5*	J2			*43.0-140*
(S) p-Terphenyl-d14	*75.2*				*50.0-134*

Laboratory Control Sample (LCS)

(LCS) R4324041-1 01/09/26 20:08

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	50.0	19.9	39.8	47.0-122	J4
Acenaphthylene	50.0	22.2	44.4	41.0-130	
Acetophenone	50.0	20.3	40.6	46.0-118	J4
Anthracene	50.0	33.4	66.8	57.0-123	
Atrazine	50.0	35.4	70.8	44.0-142	
Benzaldehyde	50.0	36.9	73.8	10.0-160	
Benzo(a)anthracene	50.0	35.8	71.6	58.0-125	
Benzo(b)fluoranthene	50.0	35.1	70.2	53.0-131	
Benzo(k)fluoranthene	50.0	38.2	76.4	57.0-129	
Benzo(g,h,i)perylene	50.0	34.2	68.4	50.0-134	
Benzo(a)pyrene	50.0	31.3	62.6	54.0-128	
Biphenyl	50.0	20.1	40.2	49.0-115	J4
Bis(2-chlorethoxy)methane	50.0	18.2	36.4	48.0-120	J4
Bis(2-chloroethyl)ether	50.0	19.1	38.2	43.0-118	J4
2,2-Oxybis(1-Chloropropane)	50.0	19.4	38.8	28.0-120	
4-Bromophenyl-phenylether	50.0	26.6	53.2	55.0-124	J4
2-Chloronaphthalene	50.0	19.1	38.2	40.0-116	J4
4-Chlorophenyl-phenylether	50.0	22.9	45.8	53.0-121	J4
Caprolactam	50.0	14.3	28.6	10.0-120	
Carbazole	50.0	39.3	78.6	60.0-122	
Chrysene	50.0	35.4	70.8	59.0-123	
Dibenz(a,h)anthracene	50.0	33.5	67.0	51.0-134	
Dibenzofuran	50.0	21.2	42.4	53.0-118	J4
3,3-Dichlorobenzidine	100	64.8	64.8	27.0-129	
2,4-Dinitrotoluene	50.0	30.9	61.8	57.0-128	
2,6-Dinitrotoluene	50.0	26.4	52.8	57.0-124	J4
Fluoranthene	50.0	36.6	73.2	57.0-128	
Fluorene	50.0	23.5	47.0	52.0-124	J4
Hexachlorobenzene	50.0	27.2	54.4	53.0-125	
Hexachloro-1,3-butadiene	50.0	13.5	27.0	22.0-124	
Hexachlorocyclopentadiene	50.0	9.41	18.8	15.0-120	J
Hexachloroethane	50.0	18.2	36.4	21.0-115	
Indeno(1,2,3-cd)pyrene	50.0	32.5	65.0	52.0-134	
Isophorone	50.0	19.3	38.6	42.0-124	J4
Naphthalene	50.0	16.6	33.2	40.0-121	J4
2-Methylnaphthalene	50.0	18.8	37.6	40.0-121	J4
2-Methylphenol	50.0	19.8	39.6	30.0-117	
3&4-Methyl Phenol	50.0	22.8	45.6	29.0-110	
Nitrobenzene	50.0	16.2	32.4	45.0-121	J4
n-Nitrosodiphenylamine	50.0	27.7	55.4	51.0-123	

Laboratory Control Sample (LCS)

(LCS) R4324041-1 01/09/26 20:08

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
n-Nitrosodi-n-propylamine	50.0	21.3	42.6	49.0-119	J4
Phenanthrene	50.0	32.0	64.0	59.0-120	
Benzylbutyl phthalate	50.0	36.7	73.4	53.0-134	
Bis(2-Ethylhexyl)phthalate	50.0	36.7	73.4	55.0-135	
Di-n-butyl phthalate	50.0	39.8	79.6	59.0-127	
Diethyl phthalate	50.0	36.6	73.2	56.0-125	
Dimethyl phthalate	50.0	33.2	66.4	45.0-127	
Di-n-octyl phthalate	50.0	35.2	70.4	51.0-140	
Pyrene	50.0	35.1	70.2	57.0-126	
4-Chloro-3-methylphenol	50.0	30.2	60.4	52.0-119	
2-Chlorophenol	50.0	19.4	38.8	38.0-117	
2,4-Dichlorophenol	50.0	20.6	41.2	47.0-121	J4
2,4-Dimethylphenol	50.0	23.3	46.6	31.0-124	
4,6-Dinitro-2-methylphenol	50.0	31.4	62.8	44.0-137	
2,4-Dinitrophenol	50.0	28.2	56.4	23.0-143	
2-Nitrophenol	50.0	20.1	40.2	47.0-123	J4
2-Nitroaniline	50.0	29.1	58.2	55.0-127	
3-Nitroaniline	50.0	37.7	75.4	41.0-128	
4-Chloroaniline	50.0	22.3	44.6	33.0-117	
4-Nitroaniline	50.0	39.1	78.2	18.0-160	
4-Nitrophenol	50.0	15.4	30.8	10.0-120	
Pentachlorophenol	50.0	19.9	39.8	35.0-138	
Phenol	50.0	10.6	21.2	10.0-120	
2,4,6-Trichlorophenol	50.0	23.1	46.2	50.0-125	J4
2,4,5-Trichlorophenol	50.0	27.7	55.4	53.0-123	
1,2,4,5-Tetrachlorobenzene	50.0	18.0	36.0	35.0-121	
(S) 2-Fluorophenol			*28.7*	*19.0-119*	
(S) Phenol-d5			*21.7*	*10.0-120*	
(S) Nitrobenzene-d5			*35.0*	*44.0-120*	J2
(S) 2-Fluorobiphenyl			*39.0*	*44.0-119*	J2
(S) 2,4,6-Tribromophenol			*55.5*	*43.0-140*	
(S) p-Terphenyl-d14			*70.3*	*50.0-134*	

Method Blank (MB)

(MB) R4324624-2 01/13/26 21:04

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
1,4-Dichlorobenzene	0.0500	U	0.000401	0.0500	0.100
2,4-Dinitrotoluene	0.0500	U	0.00165	0.0500	0.100
Hexachlorobenzene	0.0500	U	0.000341	0.0500	0.100
Hexachloro-1,3-butadiene	0.0500	U	0.000329	0.0500	0.100
Hexachloroethane	0.0500	U	0.000365	0.0500	0.100
Nitrobenzene	0.0500	U	0.000367	0.0500	0.100
Pyridine	0.0500	U	0.00137	0.0500	0.100
3&4-Methyl Phenol	0.0500	U	0.0333	0.0500	0.100
2-Methylphenol	0.0500	U	0.00312	0.0500	0.100
Pentachlorophenol	0.0500	U	0.00313	0.0500	0.100
2,4,5-Trichlorophenol	0.0500	U	0.0333	0.0500	0.100
2,4,6-Trichlorophenol	0.0500	U	0.0333	0.0500	0.100
(S) 2-Fluorophenol	*40.0*				*19.0-119*
(S) Phenol-d5	*25.1*				*10.0-120*
(S) Nitrobenzene-d5	*62.8*				*44.0-120*
(S) 2-Fluorobiphenyl	*68.8*				*44.0-119*
(S) 2,4,6-Tribromophenol	*47.8*				*43.0-140*
(S) p-Terphenyl-d14	*79.3*				*50.0-134*

Laboratory Control Sample (LCS)

(LCS) R4324624-1 01/13/26 20:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,4-Dichlorobenzene	0.500	0.298	59.6	29.0-112	
2,4-Dinitrotoluene	0.500	0.373	74.6	57.0-128	
Hexachlorobenzene	0.500	0.352	70.4	53.0-125	
Hexachloro-1,3-butadiene	0.500	0.219	43.8	22.0-124	
Hexachloroethane	0.500	0.270	54.0	21.0-115	
Nitrobenzene	0.500	0.275	55.0	45.0-121	
Pyridine	0.500	0.0523	10.5	10.0-120	J
3&4-Methyl Phenol	0.500	0.251	50.2	29.0-110	
2-Methylphenol	0.500	0.232	46.4	30.0-117	
Pentachlorophenol	0.500	0.272	54.4	35.0-138	
2,4,5-Trichlorophenol	0.500	0.366	73.2	53.0-123	
2,4,6-Trichlorophenol	0.500	0.340	68.0	50.0-125	
(S) 2-Fluorophenol			*38.4*	*19.0-119*	
(S) Phenol-d5			*26.9*	*10.0-120*	
(S) Nitrobenzene-d5			*61.8*	*44.0-120*	

Laboratory Control Sample (LCS)

(LCS) R4324624-1 01/13/26 20:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) 2-Fluorobiphenyl			*68.8*	*44.0-119*	
(S) 2,4,6-Tribromophenol			*61.0*	*43.0-140*	
(S) p-Terphenyl-d14			*78.5*	*50.0-134*	

L1933550-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933550-02 01/14/26 04:20 • (MS) R4324624-3 01/14/26 04:41 • (MSD) R4324624-4 01/14/26 05:03

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,4-Dichlorobenzene	0.500	ND	0.301	0.244	60.2	48.8	1	29.0-112			20.9	30
2,4-Dinitrotoluene	0.500	ND	0.421	0.423	84.2	84.6	1	57.0-128			0.474	30
Hexachlorobenzene	0.500	ND	0.360	0.379	72.0	75.8	1	53.0-125			5.14	30
Hexachloro-1,3-butadiene	0.500	ND	0.210	0.182	42.0	36.4	1	22.0-124			14.3	30
Hexachloroethane	0.500	ND	0.270	0.231	54.0	46.2	1	21.0-115			15.6	30
Nitrobenzene	0.500	ND	0.276	0.240	55.2	48.0	1	45.0-121			14.0	30
Pyridine	0.500	ND	0.173	0.115	34.6	23.0	1	13.5-58.9		J3	40.3	30
3&4-Methyl Phenol	0.500	ND	0.259	0.247	51.8	49.4	1	29.0-110			4.74	30
2-Methylphenol	0.500	ND	0.240	0.215	48.0	43.0	1	30.0-117			11.0	30
Pentachlorophenol	0.500	ND	0.283	0.298	56.6	59.6	1	35.0-138			5.16	30
2,4,5-Trichlorophenol	0.500	ND	0.363	0.399	72.6	79.8	1	53.0-123			9.45	30
2,4,6-Trichlorophenol	0.500	ND	0.332	0.357	66.4	71.4	1	50.0-125			7.26	30
(S) 2-Fluorophenol					*33.0*	*30.4*		*19.0-119*				
(S) Phenol-d5					*27.9*	*23.7*		*10.0-120*				
(S) Nitrobenzene-d5					*57.1*	*50.3*		*44.0-120*				
(S) 2-Fluorobiphenyl					*65.3*	*64.4*		*44.0-119*				
(S) 2,4,6-Tribromophenol					*63.0*	*71.0*		*43.0-140*				
(S) p-Terphenyl-d14					*85.4*	*81.4*		*50.0-134*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
DL	Detection Limit.
DL (dry)	Detection Limit.
LOD (dry)	Limit of Detection.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
ND	Not detected at the Reporting Limit (or DL where applicable).
LOQ (dry)	Limit of Quantitation.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C7	The initial calibration verification standard (SSCV) associated with this data responded high.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.

GLOSSARY OF TERMS

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
U	Below Detectable Limits: Indicates that the analyte was not detected.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Terracon - Wilmington, NC
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Billing Information:
Accounts Payable
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Report to: **Danielle Foster**

Email To: **danielle.foster@terracon.com;nick.lin**

Project Description: Marin Corps Base Camp Lejeune

City/State Collected: Jacksonville, NC

Please Circle: PT MT CT (ET)

Phone: **910-229-8597**

Client Project # K625P194

Lab Project # **TERRACWNC-LEJEUNE**

Collected by (print): Danielle Foster

Site/Facility ID # MCAS CL

P.O. # —

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day X 10 Day (Rad Only)
___ Three Day

Quote # —

Date Results Needed

Pres Chk: 2

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	DOD 6010 TAL Metals	DOD RCI	DOD8270TCL	DODDRO	DODPaint Filter	DODGRO	DODV8260BTEX	DODV8260TCL	DOD PFAS 1633	DOD Full TCLP+TCLP PCB	Remarks	Sample # (lab only)
CL-P1634-SPT-02	C	S	1-6	1/6/25	1430	4				X		X			X	X		-01/-02
CL-P1634-SPT-05	C	S	1-6	↓	1400					X		X			X	X		-03/-04
NR-P2803-SPT-07	G	GW	—		1050	13	X		X	X		X		X	X			-05
CL-P1634-SPT-10	G	GW	—	↓	1330	13	X		X	X		X		X	X			-06
						1/10	SLF	1/8/26										

Chain of Custody Page ___ of ___

Pace — PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1933598

T **K124**

Acctnum: **TERRACWNC**
Template: **T286013**
Prelogin: **P1200317**
PM: **Heather Wagner**
PB:

Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS X FedEx __ Courier __ _____

Tracking # 7920 9198 6656

Sample Receipt Checklist
COC Seal Present/Intact: X NP __ Y __ N
COC Signed/Accurate: X Y __ N
Bottles arrive intact: X Y __ N
Correct bottles used: X Y __ N
Sufficient volume sent: X Y __ N
If Applicable
VOA Zero Headspace: X Y __ N
Preservation Correct/Checked: X Y __ N
RAD Screen <0.5 mR/hr: X Y __ N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/6/25	1700	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			[signature]

Trip Blank Received: (Yes) / No
1 (HCL) / MeoH TBR

Temp: °C Bottles Received: 34
TLA9 2.3+0.0 = 2.3°C

Date: 1/8/26 Time: 9:00am

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

IDW Analytical Testing

A representative composite sample was collected for every five (5) IDW drums for solid and liquid. The composite samples were placed in clean, laboratory supplied containers, packed in ice, and shipped to the contracted laboratory under chain-of-custody for the following analytical testing:

- TCLP (Metals, VOCS, SVOCS, PCBs, Pesticides, and Herbicides)
- TPH-DRO & GRO
- Paint Filter
- Ignitability
- Corrosivity
- Reactivity
- PFAS

The test results are provided in the following summary table and reports.

IDW Summary - Solid

IDW Solid Analytical Results
Marine Corps Base Camp Lejeune - Jacksonville, North Carolina
Terracon Project No. K625P194

Sample ID *:	CL-SB-IDW	EPA Maximum Concentration for Toxicity Characteristic	NC DEQ PSRG Industrial/Commercial Health Based PSRG	NC DEQ PSRG Protection of Groundwater PSRG
Sample Delivery Group No.:	L1933613/L1933615			
Sample Date:	1/7/26			
Collection Depth (ft bls):	55-gal drum			
PFAS via EPA Method 1633 (mg/kg)				
	ND			
Total Petroleum Hydrocarbons via EPA Method 8015 DRO/GRO (mg/Kg)				
TPH-DRO	4.68	-	400.00	400.00
TPH-GRO	ND	-	700000.00	700000.00
RCRA 8 Metals Method Detection Limit via EPA Method 6000/7000 series (mg/Kg)				
ARSENIC	ND	5.00	3.00	5.80
BARIUM	0.194	100.00	47000.00	580.00
CADMIUM	ND	1.00	20.00	3.00
CHROMIUM	ND	NP	NP	NP
MERCURY	ND	0.20	6.40	1.00
LEAD	ND	5.00	800.00	270.00
SELENIUM	ND	1.00	1200.00	2.10
SILVER	ND	5.00	1200.00	3.40
Reactivity, Ignitability, Corrosivity, Paint Filter (mg/kg)				
REACTIVE CYANIDE	ND	NP	NP	NP
REACTIVE SULFIDE	ND			
FLASHPOINT	DNI AT 170			
Paint Filter	ND			
pH (SU)	11.3			
BTEX - Volatile Organic Compounds via EPA 8260 (mg/Kg)				
BENZENE	ND	500	5.40	0.001
TOLUENE	ND	NP	9700.00	8.30
ETHYLBENZENE	ND	NP	27.00	13.00
XYLENES	ND	NP	530.00	9.90
TCLP (VOCs, SOCs, Pesticides, Herbicides, PCBs) (mg/kg)				
	ND	NP	NP	NP

* See attached for corresponding borings sampled per set of drums

ft bls: feet below land surface

ND = Analyte Not Detected Above Laboratory's Method Detection Limit

NA = Not Analyzed NP = Not Published

ANALYTICAL REPORT

January 23, 2026

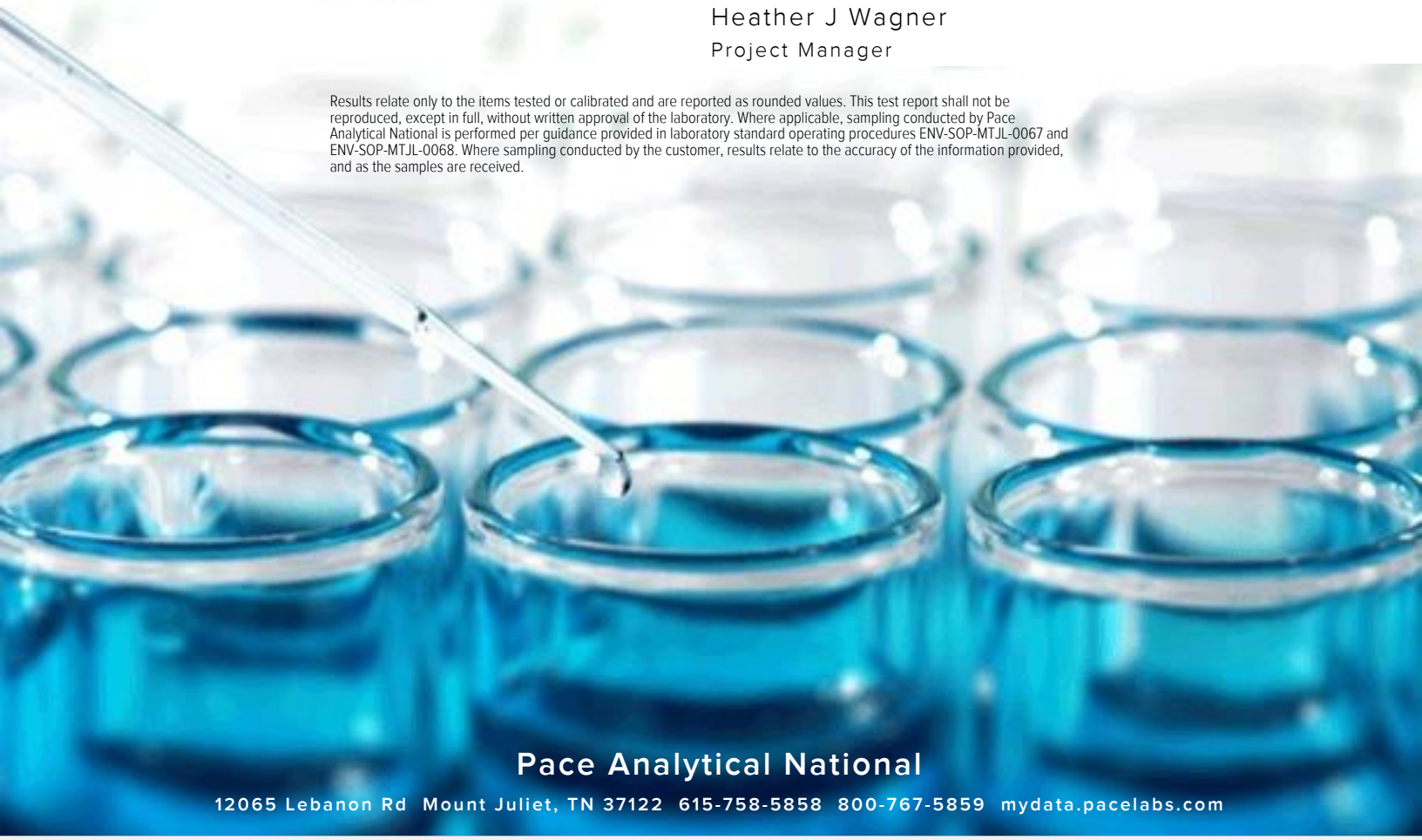
Terracon - Wilmington, NC

Sample Delivery Group:	L1933613
Samples Received:	01/08/2026
Project Number:	K625P194
Description:	Marine Corps Base Camp Lejeune
Site:	MCAS CL
Report To:	Danielle Foster 2108 Capital Drive Suite 103 Wilmington, NC 28405

Entire Report Reviewed By:

Heather J Wagner
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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CL-SB-IDW L1933613-08

Collected by	Collected date/time	Received date/time
Danielle Foster	01/07/26 11:45	01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2671785	1	01/09/26 09:21	01/09/26 09:29	CMB	Mt. Juliet, TN
Wet Chemistry by Method 9012 B	WG2671816	1	01/09/26 07:53	01/09/26 16:11	FNR	Mt. Juliet, TN
Wet Chemistry by Method 9034-9030B	WG2673393	1	01/09/26 15:07	01/12/26 13:02	JAS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2672546	1	01/10/26 10:00	01/10/26 13:30	AL	Mt. Juliet, TN
Wet Chemistry by Method 9095B	WG2674570	1	01/15/26 14:00	01/15/26 14:00	PAN	Mt. Juliet, TN
Wet Chemistry by Method D93/1010A	WG2673052	1	01/12/26 12:00	01/12/26 12:00	PAN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015C	WG2674239	25	01/07/26 11:45	01/13/26 20:57	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2674687	1	01/07/26 11:45	01/14/26 12:40	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015C	WG2672075	1	01/09/26 15:01	01/10/26 04:52	GTW	Mt. Juliet, TN

CL-SB-IDW L1933613-09

Collected by	Collected date/time	Received date/time
Danielle Foster	01/07/26 11:45	01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG2671436	1	01/09/26 10:31	01/09/26 10:31	JWS	Mt. Juliet, TN
Preparation by Method 1311	WG2672558	1	01/10/26 09:05	01/10/26 09:05	PNK	Mt. Juliet, TN
Mercury by Method 7470A	WG2672625	1	01/10/26 11:46	01/11/26 18:55	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2672696	1	01/12/26 09:23	01/13/26 03:18	MAP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2672941	1	01/13/26 13:37	01/13/26 13:37	DWR	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG2673610	1	01/13/26 06:27	01/14/26 15:43	HCS	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG2672899	1	01/12/26 07:45	01/13/26 18:18	LJD	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG2672899	1	01/12/26 07:45	01/13/26 18:18	LJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG2672900	1	01/13/26 07:58	01/14/26 02:30	KB	Mt. Juliet, TN

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Heather J Wagner
Project Manager

Project Comments

All Reactive Cyanide results reported in the attached report were determined as totals using method 9012 B.

All Reactive Sulfide results reported in the attached report were determined as totals using method 9034-9030B.

Method 8260: Sample L1933613-07 is reporting from a batch with low recovery of acetone in the opening CCV. This is a method defined poor performer.

Method 8270TCLP; WG2672900 This sample will be reporting with a low failure in the opening CCV at 62.1% for Pentachlorophenol because this exceedance is within the DOD defined gross exceedance criteria for opening CCVs (50-150% recovery).

Sample Delivery Group (SDG) Narrative

The following samples were prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.

Batch	Method	Lab Sample ID
WG2672546	9045D	L1933613-08

Wet Chemistry by Method 9012 B

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2671816	(MS) R4323237-5	Reactive Cyanide

Wet Chemistry by Method 9034-9030B

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2673393	(MSD) R4323809-4	Reactive Sulfide

Metals (ICP) by Method 6010D

The same analyte is found in the associated blank.

Batch	Analyte	Lab Sample ID
WG2671420	Iron	L1933613-07

Volatile Organic Compounds (GC/MS) by Method 8260D

The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.

Batch	Lab Sample ID	Analytes
WG2673419	L1933613-07	Acetone

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2672942	(LCSD) R4324177-2, L1933613-02, 04, 06	2-Butanone (MEK) and Chloroform

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2671917	(MS) R4323802-4, (MSD) R4323802-5	1,1,1-Trichloroethane, 1,1-Dichloroethene, Benzene, Carbon tetrachloride, Chloroethane, Chloroform, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene and Trichloroethene

The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Batch	Lab Sample ID	Analytes
WG2671917	(MSD) R4323802-5	1,1,2,2-Tetrachloroethane and 1,2-Dichlorobenzene
WG2672941	(MS) R4324578-6	Benzene, Chlorobenzene, Tetrachloroethene and Trichloroethene
WG2672942	(MS) R4324177-4	1,2-Dichloroethane and Benzene

Semi-Volatile Organic Compounds (GC) by Method 8015C

Surrogate recovery cannot be used for control limit evaluation due to dilution.

Batch	Analyte	Lab Sample ID
WG2672075	o-Terphenyl	L1933613-05

The same analyte is found in the associated blank.

Batch	Analyte	Lab Sample ID
WG2672075	TPH (GC/FID) High Fraction	L1933613-01, 08

The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Batch	Lab Sample ID	Analytes
WG2672075	(MSD) R4323679-2, L1933613-03	TPH (GC/FID) High Fraction

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2672075	(MSD) R4323679-2, L1933613-03	TPH (GC/FID) High Fraction

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.

Batch	Lab Sample ID	Analytes
WG2671743	L1933613-07	2,4-Dimethylphenol, Benzaldehyde and Pentachlorophenol
WG2672900	L1933613-02	Pentachlorophenol
WG2672900	L1933613-04	Pentachlorophenol
WG2672900	L1933613-06	Pentachlorophenol
WG2672900	L1933613-09	Pentachlorophenol

The initial calibration verification standard (SSCV) associated with this data responded high.

Batch	Lab Sample ID	Analytes
WG2671743	L1933613-07	Benzaldehyde

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Surrogate recovery limits have been exceeded; values are outside lower control limits.

Batch	Analyte	Lab Sample ID
WG2671743	2,4,6-Tribromophenol	(BLANK) R4324041-2
WG2671743	2-Fluorobiphenyl	(LCS) R4324041-1, L1933613-07
WG2671743	Nitrobenzene-d5	(LCS) R4324041-1
WG2672900	2,4,6-Tribromophenol	L1933613-02, 04

The associated batch QC was below the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG2671743	(LCS) R4324041-1, L1933613-07	19 analytes

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2672900	(MSD) R4324624-4	Pyridine

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	51.7		1	01/09/2026 09:29	WG2671785

Wet Chemistry by Method 9012 B

Analyte	Result mg/kg	Qualifier	LOQ mg/kg	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND		0.250	1	01/09/2026 16:11	WG2671816

Wet Chemistry by Method 9034-9030B

Analyte	Result mg/kg	Qualifier	LOQ mg/kg	Dilution	Analysis date / time	Batch
Reactive Sulfide	ND		75.0	1	01/12/2026 13:02	WG2673393

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	11.3	T8	1	01/10/2026 13:30	WG2672546

Sample Narrative:

L1933613-08 WG2672546: 11.3 at 19.8C

Wet Chemistry by Method 9095B

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Paint Filter Test	See Footnote		1	01/15/2026 14:00	WG2674570

Sample Narrative:

L1933613-08 WG2674570: Contains No Free Liquid

Wet Chemistry by Method D93/1010A

Analyte	Result Deg. F	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	DNI at 170		1	01/12/2026 12:00	WG2673052

Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result (dry) mg/kg	Qualifier	DL (dry) mg/kg	LOD (dry) mg/kg	LOQ (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	8006-61-9	9.86	U	5.83	9.86	10.9	25	01/13/2026 20:57	WG2674239
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*94.5*				*59.0-128*		*01/13/2026 20:57*	WG2674239

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	CAS #	Result (dry) mg/kg	Qualifier	DL (dry) mg/kg	LOD (dry) mg/kg	LOQ (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	71-43-2	0.00263	U	0.00207	0.00263	0.00292	1	01/14/2026 12:40	WG2674687
Ethylbenzene	100-41-4	0.00365	U	0.00288	0.00365	0.00729	1	01/14/2026 12:40	WG2674687
Toluene	108-88-3	0.0131	U	0.00843	0.0131	0.0146	1	01/14/2026 12:40	WG2674687
Xylenes, Total	1330-20-7	0.00948	U	0.00817	0.00948	0.0190	1	01/14/2026 12:40	WG2674687
(S) Toluene-d8	*2037-26-5*	*94.3*				*85.0-116*		*01/14/2026 12:40*	WG2674687
(S) 4-Bromofluorobenzene	*460-00-4*	*98.7*				*79.0-119*		*01/14/2026 12:40*	WG2674687
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*83.9*				*71.0-136*		*01/14/2026 12:40*	WG2674687

Semi-Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result (dry) mg/kg	Qualifier	DL (dry) mg/kg	LOD (dry) mg/kg	LOQ (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	68334-30-5	4.68	B J	1.49	3.87	7.74	1	01/10/2026 04:52	WG2672075
(S) o-Terphenyl	*84-15-1*	*50.8*				*18.0-148*		*01/10/2026 04:52*	WG2672075

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		1/9/2026 10:31:38 AM	WG2671436
TCLP ZHE Extraction	-		1/10/2026 9:05:25 AM	WG2672558
Initial pH	10.27		1/9/2026 10:31:38 AM	WG2671436
Final pH	5.52		1/9/2026 10:31:38 AM	WG2671436

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	01/11/2026 18:55	WG2672625

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	01/13/2026 03:18	WG2672696
Barium	0.194		0.100	100	1	01/13/2026 03:18	WG2672696
Cadmium	ND		0.100	1	1	01/13/2026 03:18	WG2672696
Chromium	ND		0.100	5	1	01/13/2026 03:18	WG2672696
Lead	ND		0.100	5	1	01/13/2026 03:18	WG2672696
Selenium	ND		0.100	1	1	01/13/2026 03:18	WG2672696
Silver	ND		0.100	5	1	01/13/2026 03:18	WG2672696

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.0500	0.50	1	01/13/2026 13:37	WG2672941
Carbon tetrachloride	ND		0.0500	0.50	1	01/13/2026 13:37	WG2672941
Chlorobenzene	ND		0.0500	100	1	01/13/2026 13:37	WG2672941
Chloroform	ND		0.250	6	1	01/13/2026 13:37	WG2672941
1,2-Dichloroethane	ND		0.0500	0.50	1	01/13/2026 13:37	WG2672941
1,1-Dichloroethene	ND		0.0500	0.70	1	01/13/2026 13:37	WG2672941
2-Butanone (MEK)	ND		0.500	200	1	01/13/2026 13:37	WG2672941
Tetrachloroethene	ND		0.0500	0.70	1	01/13/2026 13:37	WG2672941
Trichloroethene	ND		0.0500	0.50	1	01/13/2026 13:37	WG2672941
Vinyl chloride	ND		0.0500	0.20	1	01/13/2026 13:37	WG2672941
(S) Toluene-d8	*103*		*89.0-112*			*01/13/2026 13:37*	WG2672941
(S) 4-Bromofluorobenzene	*99.1*		*85.0-114*			*01/13/2026 13:37*	WG2672941
(S) 1,2-Dichloroethane-d4	*94.8*		*81.0-118*			*01/13/2026 13:37*	WG2672941

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
2,4,5-TP (Silvex)	ND		0.00200	1	1	01/14/2026 15:43	WG2673610
2,4-D	ND		0.00200	10	1	01/14/2026 15:43	WG2673610
(S) 2,4-Dichlorophenyl Acetic Acid	*85.4*		*32.0-138*			*01/14/2026 15:43*	WG2673610

Pesticides (GC) by Method 8081

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Chlordane	ND		0.00500	0.03	1	01/13/2026 18:18	WG2672899
Endrin	ND		0.00500	0.02	1	01/13/2026 18:18	WG2672899
Heptachlor	ND		0.00500	0.0080	1	01/13/2026 18:18	WG2672899
Lindane	ND		0.00500	0.40	1	01/13/2026 18:18	WG2672899
Methoxychlor	ND		0.00500	10	1	01/13/2026 18:18	WG2672899

Pesticides (GC) by Method 8081

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Toxaphene	ND		0.0100	0.50	1	01/13/2026 18:18	WG2672899
(S) Decachlorobiphenyl	*94.3*		*10.0-145*			*01/13/2026 18:18*	WG2672899
(S) Tetrachloro-m-xylene	*79.5*		*44.0-124*			*01/13/2026 18:18*	WG2672899

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.000500	50	1	01/13/2026 18:18	WG2672899
PCB 1221	ND		0.000500	50	1	01/13/2026 18:18	WG2672899
PCB 1232	ND		0.000500	50	1	01/13/2026 18:18	WG2672899
PCB 1242	ND		0.000500	50	1	01/13/2026 18:18	WG2672899
PCB 1248	ND		0.000500	50	1	01/13/2026 18:18	WG2672899
PCB 1254	ND		0.000500	50	1	01/13/2026 18:18	WG2672899
PCB 1260	ND		0.000500	50	1	01/13/2026 18:18	WG2672899
(S) Decachlorobiphenyl	*89.8*		*10.0-145*			*01/13/2026 18:18*	WG2672899
(S) Tetrachloro-m-xylene	*75.8*		*44.0-124*			*01/13/2026 18:18*	WG2672899

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
1,4-Dichlorobenzene	ND		0.100	7.50	1	01/14/2026 02:30	WG2672900
2,4-Dinitrotoluene	ND		0.100	0.13	1	01/14/2026 02:30	WG2672900
Hexachlorobenzene	ND		0.100	0.13	1	01/14/2026 02:30	WG2672900
Hexachloro-1,3-butadiene	ND		0.100	0.50	1	01/14/2026 02:30	WG2672900
Hexachloroethane	ND		0.100	3	1	01/14/2026 02:30	WG2672900
Nitrobenzene	ND		0.100	2	1	01/14/2026 02:30	WG2672900
Pyridine	ND		0.100	5	1	01/14/2026 02:30	WG2672900
3&4-Methyl Phenol	ND		0.100	400	1	01/14/2026 02:30	WG2672900
2-Methylphenol	ND		0.100	200	1	01/14/2026 02:30	WG2672900
Pentachlorophenol	ND	C3	0.100	100	1	01/14/2026 02:30	WG2672900
2,4,5-Trichlorophenol	ND		0.100	400	1	01/14/2026 02:30	WG2672900
2,4,6-Trichlorophenol	ND		0.100	2	1	01/14/2026 02:30	WG2672900
(S) 2-Fluorophenol	*47.8*		*19.0-119*			*01/14/2026 02:30*	WG2672900
(S) Phenol-d5	*30.3*		*10.0-120*			*01/14/2026 02:30*	WG2672900
(S) Nitrobenzene-d5	*74.4*		*44.0-120*			*01/14/2026 02:30*	WG2672900
(S) 2-Fluorobiphenyl	*76.5*		*44.0-119*			*01/14/2026 02:30*	WG2672900
(S) 2,4,6-Tribromophenol	*51.5*		*43.0-140*			*01/14/2026 02:30*	WG2672900
(S) p-Terphenyl-d14	*86.3*		*50.0-134*			*01/14/2026 02:30*	WG2672900

QUALITY CONTROL SUMMARY

L1933613-01

Method Blank (MB)

(MB) R4323161-1 01/09/26 09:37

Analyte	MB Result %	MB Qualifier	MB DL %	MB LOD %	MB LOQ %
Total Solids	0.000			0.200	

L1933599-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1933599-17 01/09/26 09:37 • (DUP) R4323161-3 01/09/26 09:37

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	87.6	91.7	1	4.55		10

Laboratory Control Sample (LCS)

(LCS) R4323161-2 01/09/26 09:37

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	90.0-110	

Method Blank (MB)

(MB) R4323160-1 01/09/26 09:29

Analyte	MB Result %	MB Qualifier	MB DL %	MB LOD %	MB LOQ %
Total Solids	0.00200			0.200	

L1933623-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1933623-01 01/09/26 09:29 • (DUP) R4323160-3 01/09/26 09:29

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	81.6	82.5	1	1.18		10

Laboratory Control Sample (LCS)

(LCS) R4323160-2 01/09/26 09:29

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	90.0-110	

QUALITY CONTROL SUMMARY

L1933613-08

Method Blank (MB)

(MB) R4323237-1 01/09/26 16:02

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
Reactive Cyanide	0.125	U	0.0665	0.125	0.250

L1933775-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1933775-06 01/09/26 16:15 • (DUP) R4323237-6 01/09/26 16:16

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Reactive Cyanide	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4323237-2 01/09/26 16:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Reactive Cyanide	1.67	1.60	95.9	76.0-120	

L1933770-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1933770-01 01/09/26 16:12 • (MS) R4323237-5 01/09/26 16:13

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Reactive Cyanide	1.67	ND	0.744	44.7	1	76.0-120	J6

Method Blank (MB)

(MB) R4323809-1 01/12/26 13:02

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
Reactive Sulfide	37.5	U	28.1	37.5	75.0

Laboratory Control Sample (LCS)

(LCS) R4323809-2 01/12/26 13:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Reactive Sulfide	100	87.5	87.5	53.8-124	

L1933246-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933246-01 01/12/26 13:02 • (MS) R4323809-3 01/12/26 13:02 • (MSD) R4323809-4 01/12/26 13:02

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Reactive Sulfide	100	ND	ND	ND	42.7	55.6	1	10.0-136		J3	26.1	20

L1933613-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1933613-08 01/10/26 13:30 • (DUP) R4323383-2 01/10/26 13:30

Analyte	Original Result su	DUP Result su	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
pH	11.3	11.3	1	0.0885		1

Sample Narrative:

OS: 11.3 at 19.8C

DUP: 11.31 at 19.7C

L1933768-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1933768-01 01/10/26 13:30 • (DUP) R4323383-3 01/10/26 13:30

Analyte	Original Result su	DUP Result su	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
pH	8.63	8.69	1	0.693		1

Sample Narrative:

OS: 8.63 at 19.6C

DUP: 8.69 at 19.5C

Laboratory Control Sample (LCS)

(LCS) R4323383-1 01/10/26 13:30

Analyte	Spike Amount su	LCS Result su	LCS Rec. %	Rec. Limits %	LCS Qualifier
pH	10.0	9.97	99.7	99.0-101	

Sample Narrative:

LCS: 9.97 at 19.4C

L1933754-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1933754-01 01/15/26 14:00 • (DUP) R4325247-1 01/15/26 14:00

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Paint Filter Test	See Footnote	See Footnote	1	0.000		20

Sample Narrative:

OS: Contains No Free Liquid

DUP: Contains No Free Liquid

L1933775-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1933775-06 01/12/26 12:00 • (DUP) R4323826-3 01/12/26 12:00

Analyte	Original Result Deg. F	DUP Result Deg. F	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ignitability	DNI at 170	DNI at 170	1	0.000		10

L1933976-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1933976-06 01/12/26 12:00 • (DUP) R4323826-4 01/12/26 12:00

Analyte	Original Result Deg. F	DUP Result Deg. F	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ignitability	150	155	1	3.27		10

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4323826-1 01/12/26 12:00 • (LCSD) R4323826-2 01/12/26 12:00

Analyte	Spike Amount Deg. F	LCS Result Deg. F	LCSD Result Deg. F	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ignitability	126	126	126	100	100	96.0-104			0.000	10

QUALITY CONTROL SUMMARY

L1933613-07

Method Blank (MB)

(MB) R4323540-1 01/11/26 12:47

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Mercury	0.100	U	0.0700	0.100	0.200

Laboratory Control Sample (LCS)

(LCS) R4323540-2 01/11/26 12:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	3.00	3.15	105	82.0-119	

L1933573-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933573-01 01/11/26 12:53 • (MS) R4323540-4 01/11/26 12:58 • (MSD) R4323540-5 01/11/26 13:01

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	3.00	0.100	2.78	3.08	92.7	103	1	82.0-119			10.1	20

QUALITY CONTROL SUMMARY

L1933613-02,04,06,09

Method Blank (MB)

(MB) R4323587-1 01/11/26 17:41

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Mercury	0.00500	U	0.00333	0.00500	0.0100

Laboratory Control Sample (LCS)

(LCS) R4323587-6 01/11/26 19:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.0300	0.0275	91.7	82.0-119	

L1933543-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933543-01 01/11/26 17:47 • (MS) R4323587-4 01/11/26 17:58 • (MSD) R4323587-5 01/11/26 18:01

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.0300	ND	0.0304	0.0308	101	103	1	82.0-119			1.23	20

Method Blank (MB)

(MB) R4324896-1 01/14/26 17:34

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Aluminum	100	U	69.2	100	200
Antimony	6.00	U	5.06	6.00	10.0
Arsenic	8.00	U	7.83	8.00	10.0
Barium	0.778	J	0.773	2.50	5.00
Beryllium	1.00	U	0.501	1.00	2.00
Cadmium	1.00	U	0.538	1.00	2.00
Calcium	500	U	153	500	1000
Chromium	5.00	U	1.51	5.00	10.0
Cobalt	5.00	U	1.41	5.00	10.0
Copper	5.00	U	2.26	5.00	10.0
Iron	23.9	J	20.5	50.0	100
Lead	3.00	U	2.43	3.00	6.00
Magnesium	500	U	101	500	1000
Manganese	5.00	U	1.01	5.00	10.0
Nickel	5.00	U	1.96	5.00	10.0
Potassium	1000	U	624	1000	2000
Selenium	7.00	U	6.16	7.00	10.0
Silver	3.00	U	2.89	3.00	5.00
Sodium	1500	U	444	1500	3000
Thallium	7.00	U	6.63	7.00	10.0
Vanadium	10.0	U	5.64	10.0	20.0
Zinc	25.0	U	4.67	25.0	50.0

Laboratory Control Sample (LCS)

(LCS) R4324896-2 01/14/26 17:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum	10000	9720	97.2	86.0-115	
Antimony	1000	959	95.9	88.0-113	
Arsenic	1000	972	97.2	87.0-113	
Barium	1000	1010	101	88.0-113	
Beryllium	1000	994	99.4	89.0-112	
Cadmium	1000	973	97.3	88.0-113	
Calcium	10000	9870	98.7	87.0-113	
Chromium	1000	988	98.8	90.0-113	
Cobalt	1000	957	95.7	89.0-114	
Copper	1000	974	97.4	86.0-114	
Iron	10000	9970	99.7	87.0-115	

Laboratory Control Sample (LCS)

(LCS) R4324896-2 01/14/26 17:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Lead	1000	971	97.1	86.0-113	
Magnesium	10000	9910	99.1	85.0-113	
Manganese	1000	991	99.1	90.0-114	
Nickel	1000	953	95.3	88.0-113	
Potassium	10000	9660	96.6	86.0-114	
Selenium	1000	952	95.2	83.0-114	
Silver	200	197	98.3	84.0-115	
Sodium	10000	9600	96.0	87.0-115	
Thallium	1000	994	99.4	85.0-114	
Vanadium	1000	960	96.0	90.0-111	
Zinc	1000	991	99.1	87.0-115	

L1933628-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933628-07 01/14/26 17:39 • (MS) R4324896-4 01/14/26 17:44 • (MSD) R4324896-5 01/14/26 17:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum	10000	100	9610	10300	96.1	103	1	86.0-115			6.98	20
Antimony	1000	6.00	944	964	94.4	96.4	1	88.0-113			2.11	20
Arsenic	1000	8.00	970	980	97.0	98.0	1	87.0-113			0.931	20
Barium	1000	165	1160	1160	99.2	99.4	1	88.0-113			0.130	20
Beryllium	1000	1.00	979	1000	97.9	100	1	89.0-112			2.32	20
Cadmium	1000	1.00	964	972	96.4	97.2	1	88.0-113			0.840	20
Calcium	10000	23700	33200	34000	95.0	103	1	87.0-113			2.27	20
Chromium	1000	5.00	1020	1000	102	100	1	90.0-113			1.01	20
Cobalt	1000	5.00	943	953	94.3	95.3	1	89.0-114			1.03	20
Copper	1000	5.00	1010	997	101	99.7	1	86.0-114			1.16	20
Iron	10000	193	9950	10200	97.5	99.7	1	87.0-115			2.11	20
Lead	1000	3.00	957	967	95.7	96.7	1	86.0-113			1.05	20
Magnesium	10000	18400	27900	28600	95.1	102	1	85.0-113			2.37	20
Manganese	1000	726	1730	1700	100	97.6	1	90.0-114			1.53	20
Nickel	1000	5.00	941	950	94.1	95.0	1	88.0-113			0.959	20
Potassium	10000	1530	11100	11300	95.6	98.0	1	86.0-114			2.07	20
Selenium	1000	7.00	954	959	95.4	95.9	1	83.0-114			0.491	20
Silver	200	3.00	202	199	101	99.4	1	84.0-115			1.49	20
Sodium	10000	12100	21400	21900	92.8	97.6	1	87.0-115			2.24	20
Thallium	1000	7.00	983	989	98.3	98.9	1	85.0-114			0.643	20
Vanadium	1000	10.0	949	970	94.9	97.0	1	90.0-111			2.20	20
Zinc	1000	25.0	980	985	98.0	98.5	1	87.0-115			0.503	20

QUALITY CONTROL SUMMARY

L1933613-02,04,06,09

Method Blank (MB)

(MB) R4324065-5 01/13/26 07:18

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Arsenic	0.0500	U	0.0333	0.0500	0.100
Barium	0.0500	U	0.0333	0.0500	0.100
Cadmium	0.0500	U	0.0333	0.0500	0.100
Chromium	0.0500	U	0.0333	0.0500	0.100
Lead	0.0500	U	0.0333	0.0500	0.100
Selenium	0.0500	U	0.0333	0.0500	0.100
Silver	0.0500	U	0.0333	0.0500	0.100

Laboratory Control Sample (LCS)

(LCS) R4324065-1 01/13/26 02:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	10.0	9.82	98.2	87.0-113	
Barium	10.0	10.2	102	88.0-113	
Cadmium	10.0	9.95	99.5	88.0-113	
Chromium	10.0	9.74	97.4	90.0-113	
Lead	10.0	9.78	97.8	86.0-113	
Selenium	10.0	9.67	96.7	83.0-114	
Silver	2.00	1.98	98.9	84.0-115	

L1933543-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933543-01 01/13/26 02:18 • (MS) R4324065-3 01/13/26 02:23 • (MSD) R4324065-4 01/13/26 02:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	10.0	ND	10.7	10.1	107	101	1	87.0-113			5.33	20
Barium	10.0	ND	11.1	10.4	111	104	1	88.0-113			6.03	20
Cadmium	10.0	ND	10.8	10.2	108	102	1	88.0-113			5.43	20
Chromium	10.0	ND	10.6	9.79	106	97.9	1	90.0-113			8.35	20
Lead	10.0	ND	10.6	10.0	106	100	1	86.0-113			5.98	20
Selenium	10.0	ND	10.5	9.86	104	98.0	1	83.0-114			6.16	20
Silver	2.00	ND	2.15	1.99	107	99.6	1	84.0-115			7.44	20

Method Blank (MB)

(MB) R4324319-2 01/09/26 03:54

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
TPH (GC/FID) Low Fraction	75.0	U	59.4	75.0	150
(S) a,a,a-Trifluorotoluene(FID)	*100*				*62.0-128*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4324319-1 01/09/26 00:53 • (LCSD) R4324319-3 01/09/26 08:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5000	4820	4900	96.4	98.0	78.0-122			1.65	30
(S) a,a,a-Trifluorotoluene(FID)				*105*	*105*	*62.0-128*				

Method Blank (MB)

(MB) R4324380-3 01/10/26 03:09

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
TPH (GC/FID) Low Fraction	3.38	U	2.00	3.38	3.75
(S) a,a,a-Trifluorotoluene(FID)	*92.1*				*59.0-128*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4324380-1 01/10/26 01:15 • (LCSD) R4324380-2 01/10/26 01:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.00	4.43	4.58	88.6	91.6	79.0-122			3.33	30
(S) a,a,a-Trifluorotoluene(FID)				*104*	*104*	*59.0-128*				

Method Blank (MB)

(MB) R4324748-2 01/13/26 12:29

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
TPH (GC/FID) Low Fraction	3.38	U	2.00	3.38	3.75
(S) a,a,a-Trifluorotoluene(FID)	*93.3*				*59.0-128*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4324748-1 01/13/26 11:23 • (LCSD) R4324748-3 01/13/26 19:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.00	4.47	5.03	89.4	101	79.0-122			11.8	30
(S) a,a,a-Trifluorotoluene(FID)				*105*	*95.7*	*59.0-128*				

Method Blank (MB)

(MB) R4323802-3 01/09/26 09:53

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Benzene	0.500	U	0.320	0.500	1.00
Bromochloromethane	0.500	U	0.437	0.500	1.00
Bromodichloromethane	0.500	U	0.371	0.500	1.00
Bromoform	0.900	U	0.548	0.900	1.00
Bromomethane	4.90	U	4.85	4.90	5.00
Carbon tetrachloride	0.500	U	0.360	0.500	1.00
Chlorobenzene	0.500	U	0.266	0.500	1.00
Chlorodibromomethane	0.500	U	0.398	0.500	1.00
Chloroethane	4.50	U	2.79	4.50	5.00
Chloroform	2.50	U	1.28	2.50	5.00
Chloromethane	2.00	U	1.70	2.00	5.00
Cyclohexane	0.900	U	0.693	0.900	1.00
1,2-Dibromoethane	0.500	U	0.341	0.500	1.00
1,2-Dibromo-3-Chloropropane	2.50	U	1.25	2.50	5.00
1,2-Dichlorobenzene	0.500	U	0.304	0.500	1.00
1,3-Dichlorobenzene	0.500	U	0.282	0.500	1.00
1,4-Dichlorobenzene	0.500	U	0.277	0.500	1.00
Dichlorodifluoromethane	2.50	U	2.41	2.50	5.00
1,1-Dichloroethane	0.500	U	0.389	0.500	1.00
1,2-Dichloroethane	0.500	U	0.395	0.500	1.00
1,1-Dichloroethene	0.500	U	0.422	0.500	1.00
cis-1,2-Dichloroethene	0.500	U	0.323	0.500	1.00
trans-1,2-Dichloroethene	0.500	U	0.348	0.500	1.00
1,2-Dichloropropane	0.500	U	0.427	0.500	1.00
cis-1,3-Dichloropropene	0.500	U	0.348	0.500	1.00
trans-1,3-Dichloropropene	0.500	U	0.313	0.500	1.00
Ethylbenzene	0.500	U	0.234	0.500	1.00
Isopropylbenzene	0.500	U	0.105	0.500	1.00
2-Butanone (MEK)	18.0	U	9.00	18.0	20.0
2-Hexanone	18.0	U	5.80	18.0	20.0
Methylene Chloride	2.50	U	1.48	2.50	5.00
4-Methyl-2-pentanone (MIBK)	9.00	U	7.52	9.00	20.0
Methyl Acetate	18.0	U	17.5	18.0	20.0
Methyl Cyclohexane	5.00	U	0.701	5.00	10.0
Methyl tert-butyl ether	0.500	U	0.357	0.500	1.00
Styrene	0.500	U	0.342	0.500	1.00
1,1,2,2-Tetrachloroethane	0.500	U	0.354	0.500	1.00
Tetrachloroethene	0.600	U	0.358	0.600	1.00
Toluene	0.600	U	0.274	0.600	1.00
1,2,3-Trichlorobenzene	0.940	U	0.935	0.940	1.00

Method Blank (MB)

(MB) R4323802-3 01/09/26 09:53

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
1,2,4-Trichlorobenzene	1.00	U	0.691	1.00	2.00
1,1,1-Trichloroethane	0.500	U	0.336	0.500	1.00
1,1,2-Trichloroethane	0.500	U	0.375	0.500	1.00
Trichloroethene	0.500	U	0.383	0.500	1.00
Trichlorofluoromethane	4.50	U	3.04	4.50	5.00
1,1,2-Trichlorotrifluoroethane	0.900	U	0.643	0.900	1.00
Vinyl chloride	0.500	U	0.458	0.500	1.00
m&p-Xylene	1.00	U	0.549	1.00	2.00
o-Xylene	0.500	U	0.319	0.500	1.00
Xylenes, Total	1.50	U	0.319	1.50	3.00
(S) Toluene-d8	*111*				*89.0-112*
(S) 4-Bromofluorobenzene	*94.6*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*99.2*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4323802-1 01/09/26 08:52 • (LCSD) R4323802-2 01/09/26 09:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	10.0	9.25	9.46	92.5	94.6	79.0-120			2.24	20
Bromochloromethane	10.0	9.25	9.55	92.5	95.5	78.0-123			3.19	20
Bromodichloromethane	10.0	8.62	8.85	86.2	88.5	79.0-125			2.63	20
Bromoform	10.0	8.88	9.14	88.8	91.4	66.0-130			2.89	20
Bromomethane	10.0	10.4	10.9	104	109	53.0-141			4.69	20
Carbon tetrachloride	10.0	9.13	9.35	91.3	93.5	72.0-136			2.38	20
Chlorobenzene	10.0	10.6	10.8	106	108	82.0-118			1.87	20
Chlorodibromomethane	10.0	9.23	9.44	92.3	94.4	74.0-126			2.25	20
Chloroethane	10.0	11.3	11.4	113	114	60.0-138			0.881	20
Chloroform	10.0	9.08	9.43	90.8	94.3	79.0-124			3.78	20
Chloromethane	10.0	11.2	11.5	112	115	50.0-139			2.64	20
Cyclohexane	10.0	9.76	10.1	97.6	101	71.0-130			3.42	20
1,2-Dibromoethane	10.0	10.2	10.5	102	105	77.0-121			2.90	20
1,2-Dibromo-3-Chloropropane	10.0	9.59	9.82	95.9	98.2	62.0-128			2.37	20
1,2-Dichlorobenzene	10.0	11.3	11.7	113	117	80.0-119			3.48	20
1,3-Dichlorobenzene	10.0	11.4	11.6	114	116	80.0-119			1.74	20
1,4-Dichlorobenzene	10.0	11.6	11.8	116	118	79.0-118			1.71	20
Dichlorodifluoromethane	10.0	12.1	12.1	121	121	32.0-152			0.000	20
1,1-Dichloroethane	10.0	9.46	9.82	94.6	98.2	77.0-125			3.73	20
1,2-Dichloroethane	10.0	9.35	9.75	93.5	97.5	73.0-128			4.19	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4323802-1 01/09/26 08:52 • (LCSD) R4323802-2 01/09/26 09:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	10.0	9.49	9.63	94.9	96.3	71.0-131			1.46	20
cis-1,2-Dichloroethene	10.0	9.12	9.55	91.2	95.5	78.0-123			4.61	20
trans-1,2-Dichloroethene	10.0	9.33	9.59	93.3	95.9	75.0-124			2.75	20
1,2-Dichloropropane	10.0	9.21	9.47	92.1	94.7	78.0-122			2.78	20
cis-1,3-Dichloropropene	10.0	8.71	9.04	87.1	90.4	75.0-124			3.72	20
trans-1,3-Dichloropropene	10.0	10.3	10.7	103	107	73.0-127			3.81	20
Ethylbenzene	10.0	10.3	10.5	103	105	79.0-121			1.92	20
Isopropylbenzene	10.0	10.5	10.6	105	106	72.0-131			0.948	20
2-Butanone (MEK)	50.0	42.6	44.2	85.2	88.4	56.0-143			3.69	20
2-Hexanone	50.0	53.8	55.9	108	112	57.0-139			3.83	20
Methylene Chloride	10.0	9.36	9.54	93.6	95.4	74.0-124			1.90	20
4-Methyl-2-pentanone (MIBK)	50.0	52.3	54.7	105	109	67.0-130			4.49	20
Methyl Acetate	50.0	49.1	51.3	98.2	103	56.0-136			4.38	20
Methyl Cyclohexane	10.0	9.79	10.0	97.9	100	72.0-132	J		2.12	20
Methyl tert-butyl ether	10.0	9.02	9.38	90.2	93.8	71.0-124			3.91	20
Styrene	10.0	9.35	9.46	93.5	94.6	78.0-123			1.17	20
1,1,2,2-Tetrachloroethane	10.0	11.4	11.8	114	118	71.0-121			3.45	20
Tetrachloroethene	10.0	10.7	10.9	107	109	74.0-129			1.85	20
Toluene	10.0	10.6	10.9	106	109	80.0-121			2.79	20
1,2,3-Trichlorobenzene	10.0	11.2	12.0	112	120	69.0-129			6.90	20
1,2,4-Trichlorobenzene	10.0	10.5	10.9	105	109	69.0-130			3.74	20
1,1,1-Trichloroethane	10.0	9.51	9.64	95.1	96.4	74.0-131			1.36	20
1,1,2-Trichloroethane	10.0	10.5	11.0	105	110	80.0-119			4.65	20
Trichloroethene	10.0	9.10	9.31	91.0	93.1	79.0-123			2.28	20
Trichlorofluoromethane	10.0	10.4	10.7	104	107	65.0-141			2.84	20
1,1,2-Trichlorotrifluoroethane	10.0	10.2	10.1	102	101	70.0-136			0.985	20
Vinyl chloride	10.0	11.0	11.3	110	113	58.0-137			2.69	20
m&p-Xylene	20.0	20.9	21.4	105	107	80.0-121			2.36	20
o-Xylene	10.0	10.1	10.4	101	104	78.0-122			2.93	20
Xylenes, Total	30.0	31.0	31.8	103	106	79.0-121			2.55	20
(S) Toluene-d8				*107*	*108*	*89.0-112*				
(S) 4-Bromofluorobenzene				*93.1*	*95.1*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*100*	*102*	*81.0-118*				

L1933628-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933628-07 01/09/26 18:13 • (MS) R4323802-4 01/09/26 19:34 • (MSD) R4323802-5 01/09/26 19:54

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	10.0	0.500	7.48	7.69	74.8	76.9	1	79.0-120	J6	J6	2.77	20
Bromochloromethane	10.0	0.500	8.31	8.78	83.1	87.8	1	78.0-123			5.50	20
Bromodichloromethane	10.0	0.500	7.90	8.11	79.0	81.1	1	79.0-125			2.62	20
Bromoform	10.0	0.900	9.11	9.49	91.1	94.9	1	66.0-130			4.09	20
Bromomethane	10.0	4.90	6.68	7.29	66.8	72.9	1	53.0-141			8.73	20
Carbon tetrachloride	10.0	0.500	6.79	7.03	67.9	70.3	1	72.0-136	J6	J6	3.47	20
Chlorobenzene	10.0	0.810	9.87	10.3	90.6	94.9	1	82.0-118			4.26	20
Chlorodibromomethane	10.0	0.500	8.93	9.23	89.3	92.3	1	74.0-126			3.30	20
Chloroethane	10.0	4.50	4.36	4.99	43.6	49.9	1	60.0-138	J J6	J J6	13.5	20
Chloroform	10.0	2.50	7.78	8.16	77.8	81.6	1	79.0-124	J6		4.77	20
Chloromethane	10.0	2.00	8.76	9.11	87.6	91.1	1	50.0-139			3.92	20
Cyclohexane	10.0	0.900	7.13	7.22	71.3	72.2	1	71.0-130			1.25	20
1,2-Dibromoethane	10.0	0.500	10.1	10.5	101	105	1	77.0-121			3.88	20
1,2-Dibromo-3-Chloropropane	10.0	2.50	10.1	10.3	101	103	1	62.0-128			1.96	20
1,2-Dichlorobenzene	10.0	7.53	19.2	19.8	117	123	1	80.0-119		J5	3.08	20
1,3-Dichlorobenzene	10.0	1.48	11.9	12.5	104	110	1	80.0-119			4.92	20
1,4-Dichlorobenzene	10.0	3.67	14.8	15.2	111	115	1	79.0-118			2.67	20
Dichlorodifluoromethane	10.0	2.50	9.95	10.0	99.5	100	1	32.0-152			0.501	20
1,1-Dichloroethane	10.0	0.500	7.74	7.99	77.4	79.9	1	77.0-125			3.18	20
1,2-Dichloroethane	10.0	0.500	8.84	9.29	88.4	92.9	1	73.0-128			4.96	20
1,1-Dichloroethene	10.0	0.500	6.98	7.09	69.8	70.9	1	71.0-131	J6	J6	1.56	20
cis-1,2-Dichloroethene	10.0	6.98	13.2	13.6	62.2	66.2	1	78.0-123	J6	J6	2.99	20
trans-1,2-Dichloroethene	10.0	0.706	7.71	8.01	70.0	73.0	1	75.0-124	J6	J6	3.82	20
1,2-Dichloropropane	10.0	0.500	8.19	8.62	81.9	86.2	1	78.0-122			5.12	20
cis-1,3-Dichloropropene	10.0	0.500	7.88	8.16	78.8	81.6	1	75.0-124			3.49	20
trans-1,3-Dichloropropene	10.0	0.500	9.82	10.2	98.2	102	1	73.0-127			3.80	20
Ethylbenzene	10.0	0.500	8.48	8.75	84.8	87.5	1	79.0-121			3.13	20
Isopropylbenzene	10.0	0.500	8.59	8.75	85.9	87.5	1	72.0-131			1.85	20
2-Butanone (MEK)	50.0	18.0	43.2	43.9	86.4	87.8	1	56.0-143			1.61	20
2-Hexanone	50.0	18.0	59.4	59.6	119	119	1	57.0-139			0.336	20
Methylene Chloride	10.0	2.50	8.18	8.51	81.8	85.1	1	74.0-124			3.95	20
4-Methyl-2-pentanone (MIBK)	50.0	9.00	58.0	58.7	116	117	1	67.0-130			1.20	20
Methyl Acetate	50.0	18.0	53.1	53.1	106	106	1	56.0-136			0.000	20
Methyl Cyclohexane	10.0	5.00	7.33	7.35	73.3	73.5	1	72.0-132	J	J	0.272	20
Methyl tert-butyl ether	10.0	0.500	9.33	9.64	93.3	96.4	1	71.0-124			3.27	20
Styrene	10.0	0.500	8.39	8.68	83.9	86.8	1	78.0-123			3.40	20
1,1,2,2-Tetrachloroethane	10.0	0.500	11.9	12.5	119	125	1	71.0-121		J5	4.92	20
Tetrachloroethene	10.0	0.600	8.19	8.42	81.9	84.2	1	74.0-129			2.77	20
Toluene	10.0	0.600	8.69	8.98	86.9	89.8	1	80.0-121			3.28	20
1,2,3-Trichlorobenzene	10.0	0.940	11.2	11.7	112	117	1	69.0-129			4.37	20

L1933628-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933628-07 01/09/26 18:13 • (MS) R4323802-4 01/09/26 19:34 • (MSD) R4323802-5 01/09/26 19:54

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2,4-Trichlorobenzene	10.0	1.00	10.3	10.9	103	109	1	69.0-130			5.66	20
1,1,1-Trichloroethane	10.0	0.500	7.27	7.37	72.7	73.7	1	74.0-131	J6	J6	1.37	20
1,1,2-Trichloroethane	10.0	0.500	10.5	10.9	105	109	1	80.0-119			3.74	20
Trichloroethene	10.0	1.66	8.58	8.79	69.2	71.3	1	79.0-123	J6	J6	2.42	20
Trichlorofluoromethane	10.0	4.50	7.93	7.73	79.3	77.3	1	65.0-141			2.55	20
1,1,2-Trichlorotrifluoroethane	10.0	0.900	7.51	7.58	75.1	75.8	1	70.0-136			0.928	20
Vinyl chloride	10.0	0.756	8.74	8.76	79.8	80.0	1	58.0-137			0.229	20
m&p-Xylene	20.0	1.00	17.1	17.9	85.5	89.5	1	80.0-121			4.57	20
o-Xylene	10.0	0.500	8.63	9.05	86.3	90.5	1	78.0-122			4.75	20
Xylenes, Total	30.0	1.50	25.7	27.0	85.7	90.0	1	79.0-121			4.93	20
(S) Toluene-d8					*107*	*108*		*89.0-112*				
(S) 4-Bromofluorobenzene					*96.1*	*94.6*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*99.6*	*100*		*81.0-118*				

Method Blank (MB)

(MB) R4325097-3 01/13/26 10:59

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Acetone	47.0	U	46.9	47.0	50.0
Carbon disulfide	0.900	U	0.510	0.900	1.00
(S) Toluene-d8	*101*				*89.0-112*
(S) 4-Bromofluorobenzene	*93.3*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*100*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4325097-1 01/13/26 09:14 • (LCSD) R4325097-2 01/13/26 09:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	50.0	36.7	36.9	73.4	73.8	39.0-160	J	J	0.543	20
Carbon disulfide	10.0	9.15	7.57	91.5	75.7	64.0-133			18.9	20
(S) Toluene-d8				*100*	*98.7*	*89.0-112*				
(S) 4-Bromofluorobenzene				*96.5*	*95.5*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*102*	*99.1*	*81.0-118*				

L1933588-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933588-02 01/13/26 12:25 • (MS) R4325097-4 01/13/26 18:43 • (MSD) R4325097-5 01/13/26 19:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	50.0	47.0	47.0	47.0	71.4	68.0	1	39.0-160	U	U	4.88	20
Carbon disulfide	10.0	0.900	10.5	10.1	105	101	1	64.0-133			3.88	20
(S) Toluene-d8					*95.8*	*97.9*		*89.0-112*				
(S) 4-Bromofluorobenzene					*94.1*	*95.1*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*105*	*105*		*81.0-118*				

Method Blank (MB)

(MB) R4324578-3 01/13/26 11:17

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Benzene	0.0250	U	0.0167	0.0250	0.0500
Carbon tetrachloride	0.0250	U	0.0167	0.0250	0.0500
Chlorobenzene	0.0250	U	0.0167	0.0250	0.0500
Chloroform	0.125	U	0.0833	0.125	0.250
1,2-Dichloroethane	0.0250	U	0.0167	0.0250	0.0500
1,1-Dichloroethene	0.0250	U	0.0167	0.0250	0.0500
2-Butanone (MEK)	0.250	U	0.167	0.250	0.500
Tetrachloroethene	0.0250	U	0.0167	0.0250	0.0500
Trichloroethene	0.0250	U	0.0167	0.0250	0.0500
Vinyl chloride	0.0250	U	0.0167	0.0250	0.0500
(S) Toluene-d8	*101*				*89.0-112*
(S) 4-Bromofluorobenzene	*97.2*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*94.9*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4324578-1 01/13/26 09:25 • (LCSD) R4324578-2 01/13/26 09:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	0.526	0.532	105	106	79.0-120			1.13	20
Carbon tetrachloride	0.500	0.503	0.511	101	102	72.0-136			1.58	20
Chlorobenzene	0.500	0.542	0.548	108	110	82.0-118			1.10	20
Chloroform	0.500	0.513	0.520	103	104	79.0-124			1.36	20
1,2-Dichloroethane	0.500	0.483	0.498	96.6	99.6	73.0-128			3.06	20
1,1-Dichloroethene	0.500	0.519	0.532	104	106	71.0-131			2.47	20
2-Butanone (MEK)	2.50	2.00	2.10	80.0	84.0	56.0-143			4.88	20
Tetrachloroethene	0.500	0.572	0.573	114	115	74.0-129			0.175	20
Trichloroethene	0.500	0.541	0.552	108	110	79.0-123			2.01	20
Vinyl chloride	0.500	0.526	0.544	105	109	58.0-137			3.36	20
(S) Toluene-d8				*101*	*99.9*	*89.0-112*				
(S) 4-Bromofluorobenzene				*96.3*	*99.9*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*95.4*	*97.4*	*81.0-118*				

L1932244-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1932244-04 01/13/26 12:57 • (MS) R4324578-4 01/13/26 15:58 • (MSD) R4324578-5 01/13/26 16:18

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	ND	0.463	0.484	92.6	96.8	1	79.0-120			4.44	20
Carbon tetrachloride	0.500	ND	0.450	0.469	90.0	93.8	1	72.0-136			4.13	20
Chlorobenzene	0.500	ND	0.485	0.500	97.0	100	1	82.0-118			3.05	20
Chloroform	0.500	ND	0.469	0.472	93.8	94.4	1	79.0-124			0.638	20
1,2-Dichloroethane	0.500	ND	0.461	0.460	92.2	92.0	1	73.0-128			0.217	20
1,1-Dichloroethene	0.500	ND	0.442	0.457	88.4	91.4	1	71.0-131			3.34	20
2-Butanone (MEK)	2.50	ND	1.98	1.97	79.2	78.8	1	56.0-143			0.506	20
Tetrachloroethene	0.500	ND	0.488	0.505	97.6	101	1	74.0-129			3.42	20
Trichloroethene	0.500	ND	0.467	0.488	93.4	97.6	1	79.0-123			4.40	20
Vinyl chloride	0.500	ND	0.450	0.478	90.0	95.6	1	58.0-137			6.03	20
(S) Toluene-d8					*100*	*100*		*89.0-112*				
(S) 4-Bromofluorobenzene					*95.9*	*98.6*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*95.8*	*95.8*		*81.0-118*				

L1932244-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1932244-02 01/13/26 12:37 • (MS) R4324578-6 01/13/26 16:38

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Benzene	0.500	ND	0.623	125	1	79.0-120	J5
Carbon tetrachloride	0.500	ND	0.649	130	1	72.0-136	
Chlorobenzene	0.500	ND	0.626	125	1	82.0-118	J5
Chloroform	0.500	ND	0.604	121	1	79.0-124	
1,2-Dichloroethane	0.500	ND	0.556	111	1	73.0-128	
1,1-Dichloroethene	0.500	ND	0.651	130	1	71.0-131	
2-Butanone (MEK)	2.50	ND	2.36	94.4	1	56.0-143	
Tetrachloroethene	0.500	ND	0.680	136	1	74.0-129	J5
Trichloroethene	0.500	ND	0.645	129	1	79.0-123	J5
Vinyl chloride	0.500	ND	0.667	133	1	58.0-137	
(S) Toluene-d8				*102*		*89.0-112*	
(S) 4-Bromofluorobenzene				*97.1*		*85.0-114*	
(S) 1,2-Dichloroethane-d4				*94.8*		*81.0-118*	

Method Blank (MB)

(MB) R4324177-3 01/11/26 10:26

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Benzene	0.0250	U	0.0167	0.0250	0.0500
Carbon tetrachloride	0.0250	U	0.0167	0.0250	0.0500
Chlorobenzene	0.0250	U	0.0167	0.0250	0.0500
Chloroform	0.125	U	0.0833	0.125	0.250
1,2-Dichloroethane	0.0250	U	0.0167	0.0250	0.0500
1,1-Dichloroethene	0.0250	U	0.0167	0.0250	0.0500
2-Butanone (MEK)	0.250	U	0.167	0.250	0.500
Tetrachloroethene	0.0250	U	0.0167	0.0250	0.0500
Trichloroethene	0.0250	U	0.0167	0.0250	0.0500
Vinyl chloride	0.0250	U	0.0167	0.0250	0.0500
(S) Toluene-d8	*98.9*				*89.0-112*
(S) 4-Bromofluorobenzene	*102*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*96.2*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4324177-1 01/11/26 09:07 • (LCSD) R4324177-2 01/11/26 09:27

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	0.483	0.576	96.6	115	79.0-120			17.6	20
Carbon tetrachloride	0.500	0.511	0.602	102	120	72.0-136			16.4	20
Chlorobenzene	0.500	0.478	0.561	95.6	112	82.0-118			16.0	20
Chloroform	0.500	0.441	0.540	88.2	108	79.0-124		J3	20.2	20
1,2-Dichloroethane	0.500	0.448	0.537	89.6	107	73.0-128			18.1	20
1,1-Dichloroethene	0.500	0.514	0.588	103	118	71.0-131			13.4	20
2-Butanone (MEK)	2.50	2.17	2.66	86.8	106	56.0-143		J3	20.3	20
Tetrachloroethene	0.500	0.517	0.591	103	118	74.0-129			13.4	20
Trichloroethene	0.500	0.492	0.598	98.4	120	79.0-123			19.4	20
Vinyl chloride	0.500	0.406	0.460	81.2	92.0	58.0-137			12.5	20
(S) Toluene-d8				*101*	*99.4*	*89.0-112*				
(S) 4-Bromofluorobenzene				*102*	*104*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*98.4*	*95.0*	*81.0-118*				

L1933318-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933318-01 01/11/26 11:06 • (MS) R4324177-4 01/11/26 17:46 • (MSD) R4324177-5 01/11/26 18:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	ND	0.604	0.587	121	117	1	79.0-120	J5		2.85	20
Carbon tetrachloride	0.500	ND	0.677	0.651	135	130	1	72.0-136			3.92	20
Chlorobenzene	0.500	ND	0.583	0.556	117	111	1	82.0-118			4.74	20
Chloroform	0.500	ND	0.595	0.580	119	116	1	79.0-124			2.55	20
1,2-Dichloroethane	0.500	ND	0.648	0.631	130	126	1	73.0-128	J5		2.66	20
1,1-Dichloroethene	0.500	ND	0.594	0.571	119	114	1	71.0-131			3.95	20
2-Butanone (MEK)	2.50	ND	2.37	2.32	94.8	92.8	1	56.0-143			2.13	20
Tetrachloroethene	0.500	ND	0.617	0.580	123	116	1	74.0-129			6.18	20
Trichloroethene	0.500	ND	0.617	0.602	123	120	1	79.0-123			2.46	20
Vinyl chloride	0.500	ND	0.443	0.427	88.6	85.4	1	58.0-137			3.68	20
(S) Toluene-d8					*98.9*	*94.3*		*89.0-112*				
(S) 4-Bromofluorobenzene					*103*	*101*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*116*	*109*		*81.0-118*				

Method Blank (MB)

(MB) R4325111-3 01/14/26 11:23

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
Benzene	0.000900	U	0.000711	0.000900	0.00100
Ethylbenzene	0.00125	U	0.000987	0.00125	0.00250
Toluene	0.00450	U	0.00289	0.00450	0.00500
Xylenes, Total	0.00325	U	0.00280	0.00325	0.00650
(S) Toluene-d8	*95.9*				*85.0-116*
(S) 4-Bromofluorobenzene	*97.4*				*79.0-119*
(S) 1,2-Dichloroethane-d4	*83.0*				*71.0-136*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4325111-1 01/14/26 09:04 • (LCSD) R4325111-2 01/14/26 09:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.250	0.260	0.257	104	103	77.0-121			1.16	20
Ethylbenzene	0.250	0.230	0.231	92.0	92.4	76.0-122			0.434	20
Toluene	0.250	0.241	0.237	96.4	94.8	77.0-121			1.67	20
Xylenes, Total	0.750	0.714	0.634	95.2	84.5	78.0-124			11.9	20
(S) Toluene-d8				*93.6*	*93.7*	*85.0-116*				
(S) 4-Bromofluorobenzene				*96.4*	*96.3*	*79.0-119*				
(S) 1,2-Dichloroethane-d4				*88.1*	*88.8*	*71.0-136*				

QUALITY CONTROL SUMMARY

L1933613-07

Method Blank (MB)

(MB) R4323885-1 01/12/26 11:43

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
TPH (GC/FID) High Fraction	90.0	U	60.5	90.0	100
(S) o-Terphenyl	*92.5*				*56.0-125*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4323885-2 01/12/26 12:05 • (LCSD) R4323885-3 01/12/26 12:28

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1500	1260	1320	84.0	88.0	36.0-132			4.65	30
(S) o-Terphenyl				*103*	*102*	*56.0-125*				

Method Blank (MB)

(MB) R4323351-1 01/10/26 03:11

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
TPH (GC/FID) High Fraction	0.987	J	0.769	2.00	4.00
(S) o-Terphenyl	*84.2*				*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R4323351-2 01/10/26 03:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	37.8	75.6	50.0-150	
(S) o-Terphenyl			*86.2*	*18.0-148*	

L1933613-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933613-03 01/10/26 13:03 • (MS) R4323679-1 01/10/26 13:16 • (MSD) R4323679-2 01/10/26 13:30

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	56.8	48.8	107	168	103	211	2	50.0-150		J3 J5	44.2	20
(S) o-Terphenyl					*143*	*99.5*		*18.0-148*				

Sample Narrative:

OS: Dilution due to matrix impact during extract concentration procedure.

QUALITY CONTROL SUMMARY

L1933613-02,04,06,09

Method Blank (MB)

(MB) R4325011-1 01/14/26 13:41

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
2,4,5-TP (Silvex)	0.00100	U	0.000667	0.00100	0.00200
2,4-D	0.00100	U	0.000667	0.00100	0.00200
(S) 2,4-Dichlorophenyl Acetic Acid	*80.6*				*32.0-138*

Laboratory Control Sample (LCS)

(LCS) R4325011-2 01/14/26 13:52

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2,4,5-TP (Silvex)	0.0250	0.0236	94.4	51.0-134	
2,4-D	0.0250	0.0233	93.2	45.0-152	
(S) 2,4-Dichlorophenyl Acetic Acid			*85.8*	*32.0-138*	

L1933598-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933598-04 01/14/26 14:37 • (MS) R4325011-3 01/14/26 14:48 • (MSD) R4325011-4 01/14/26 14:59

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,4,5-TP (Silvex)	0.0250	ND	0.0233	0.0232	93.2	92.8	1	51.0-134			0.430	30
2,4-D	0.0250	ND	0.0231	0.0233	92.4	93.2	1	45.0-152			0.862	30
(S) 2,4-Dichlorophenyl Acetic Acid					*82.6*	*80.2*		*32.0-138*				

Method Blank (MB)

(MB) R4325197-1 01/14/26 23:59

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Chlordane	0.00250	U	0.00167	0.00250	0.00500
Endrin	0.00250	U	0.00167	0.00250	0.00500
Heptachlor	0.00250	U	0.00133	0.00250	0.00500
Lindane	0.00250	U	0.00167	0.00250	0.00500
Methoxychlor	0.00250	U	0.00167	0.00250	0.00500
Toxaphene	0.00500	U	0.00333	0.00500	0.0100
(S) Decachlorobiphenyl	*97.0*				*10.0-145*
(S) Tetrachloro-m-xylene	*68.6*				*44.0-124*

Laboratory Control Sample (LCS)

(LCS) R4325197-2 01/15/26 00:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endrin	0.0100	0.0110	110	60.0-138	
Heptachlor	0.0100	0.0101	101	54.0-130	
Lindane	0.0100	0.0105	105	59.0-134	
Methoxychlor	0.0100	0.0120	120	54.0-145	
(S) Decachlorobiphenyl			*98.1*	*10.0-145*	
(S) Tetrachloro-m-xylene			*74.7*	*44.0-124*	

L1933577-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933577-06 01/15/26 01:08 • (MS) R4325197-3 01/15/26 01:18 • (MSD) R4325197-4 01/15/26 01:28

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Endrin	0.0100	ND	0.0123	0.0115	123	115	1	60.0-138			6.72	30
Heptachlor	0.0100	ND	0.0115	0.0106	115	106	1	54.0-130			8.14	30
Lindane	0.0100	ND	0.0115	0.0111	115	111	1	59.0-134			3.54	30
Methoxychlor	0.0100	ND	0.0138	0.0126	138	126	1	54.0-145			9.09	30
(S) Decachlorobiphenyl					*108*	*105*		*10.0-145*				
(S) Tetrachloro-m-xylene					*83.9*	*74.9*		*44.0-124*				

Method Blank (MB)

(MB) R4324424-1 01/13/26 16:46

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
PCB 1016	0.000250	U	0.000167	0.000250	0.000500
PCB 1221	0.000250	U	0.000167	0.000250	0.000500
PCB 1232	0.000250	U	0.000167	0.000250	0.000500
PCB 1242	0.000250	U	0.000167	0.000250	0.000500
PCB 1248	0.000250	U	0.000167	0.000250	0.000500
PCB 1254	0.000250	U	0.000167	0.000250	0.000500
PCB 1260	0.000250	U	0.000167	0.000250	0.000500
(S) Decachlorobiphenyl	*96.8*				*10.0-145*
(S) Tetrachloro-m-xylene	*86.4*				*44.0-124*

Laboratory Control Sample (LCS)

(LCS) R4324424-2 01/13/26 16:57

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1016	0.0250	0.0245	98.0	46.0-129	
PCB 1260	0.0250	0.0222	88.8	45.0-134	
(S) Decachlorobiphenyl			*100*	*10.0-145*	
(S) Tetrachloro-m-xylene			*83.8*	*44.0-124*	

L1933565-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933565-02 01/13/26 17:07 • (MS) R4324424-3 01/13/26 17:37 • (MSD) R4324424-4 01/13/26 17:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
PCB 1016	0.0250	ND	0.0265	0.0239	106	95.6	1	46.0-129			10.3	30
PCB 1260	0.0250	ND	0.0214	0.0206	85.6	82.4	1	45.0-134			3.81	30
(S) Decachlorobiphenyl					*90.7*	*87.9*		*10.0-145*				
(S) Tetrachloro-m-xylene					*88.3*	*82.0*		*44.0-124*				

Method Blank (MB)

(MB) R4325197-1 01/14/26 23:59

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
PCB 1016	0.000250	U	0.000167	0.000250	0.000500
PCB 1221	0.000250	U	0.000167	0.000250	0.000500
PCB 1232	0.000250	U	0.000167	0.000250	0.000500
PCB 1242	0.000250	U	0.000167	0.000250	0.000500
PCB 1248	0.000250	U	0.000167	0.000250	0.000500
PCB 1254	0.000250	U	0.000167	0.000250	0.000500
PCB 1260	0.000250	U	0.000167	0.000250	0.000500
(S) Decachlorobiphenyl	*90.4*				*10.0-145*
(S) Tetrachloro-m-xylene	*68.3*				*44.0-124*

Laboratory Control Sample (LCS)

(LCS) R4325197-5 01/15/26 00:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1016	0.0250	0.0194	77.6	46.0-129	
PCB 1260	0.0250	0.0232	92.8	45.0-134	
(S) Decachlorobiphenyl			*93.2*	*10.0-145*	
(S) Tetrachloro-m-xylene			*72.8*	*44.0-124*	

L1933577-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933577-08 01/15/26 01:38 • (MS) R4325197-6 01/15/26 01:47 • (MSD) R4325197-7 01/15/26 01:57

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
PCB 1016	0.0250	ND	0.0202	0.0217	80.8	86.8	1	46.0-129			7.16	30
PCB 1260	0.0250	ND	0.0231	0.0237	92.4	94.8	1	45.0-134			2.56	30
(S) Decachlorobiphenyl					*98.4*	*100*		*10.0-145*				
(S) Tetrachloro-m-xylene					*84.1*	*82.3*		*44.0-124*				

Method Blank (MB)

(MB) R4324041-2 01/09/26 20:29

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Acenaphthene	0.500	U	0.246	0.500	1.00
Acenaphthylene	0.500	U	0.265	0.500	1.00
Acetophenone	5.00	U	2.05	5.00	10.0
Anthracene	0.500	U	0.196	0.500	1.00
Atrazine	5.00	U	2.44	5.00	10.0
Benzaldehyde	9.00	U	8.66	9.00	10.0
Benzo(a)anthracene	0.500	U	0.208	0.500	1.00
Benzo(b)fluoranthene	0.500	U	0.280	0.500	1.00
Benzo(k)fluoranthene	0.500	U	0.247	0.500	1.00
Benzo(g,h,i)perylene	0.500	U	0.254	0.500	1.00
Benzo(a)pyrene	0.500	U	0.128	0.500	1.00
Biphenyl	5.00	U	2.74	5.00	10.0
Bis(2-chlorethoxy)methane	5.00	U	1.88	5.00	10.0
Bis(2-chloroethyl)ether	5.00	U	2.05	5.00	10.0
2,2-Oxybis(1-Chloropropane)	5.00	U	1.91	5.00	10.0
4-Bromophenyl-phenylether	5.00	U	2.67	5.00	10.0
2-Chloronaphthalene	0.500	U	0.259	0.500	1.00
4-Chlorophenyl-phenylether	5.00	U	2.22	5.00	10.0
Caprolactam	5.00	U	0.736	5.00	10.0
Carbazole	5.00	U	2.11	5.00	10.0
Chrysene	0.500	U	0.279	0.500	1.00
Dibenz(a,h)anthracene	0.500	U	0.148	0.500	1.00
Dibenzofuran	5.00	U	2.51	5.00	10.0
3,3-Dichlorobenzidine	9.00	U	7.58	9.00	10.0
2,4-Dinitrotoluene	5.00	U	1.87	5.00	10.0
2,6-Dinitrotoluene	5.00	U	1.86	5.00	10.0
Fluoranthene	0.500	U	0.229	0.500	1.00
Fluorene	0.500	U	0.277	0.500	1.00
Hexachlorobenzene	0.500	U	0.259	0.500	1.00
Hexachloro-1,3-butadiene	5.00	U	2.27	5.00	10.0
Hexachlorocyclopentadiene	5.00	U	2.81	5.00	10.0
Hexachloroethane	5.00	U	2.15	5.00	10.0
Indeno(1,2,3-cd)pyrene	0.500	U	0.285	0.500	1.00
Isophorone	5.00	U	1.72	5.00	10.0
Naphthalene	0.900	U	0.678	0.900	1.00
2-Methylnaphthalene	0.500	U	0.276	0.500	1.00
2-Methylphenol	5.00	U	1.70	5.00	10.0
3&4-Methyl Phenol	5.00	U	1.54	5.00	10.0
Nitrobenzene	5.00	U	1.97	5.00	10.0
n-Nitrosodiphenylamine	5.00	U	2.02	5.00	10.0

Method Blank (MB)

(MB) R4324041-2 01/09/26 20:29

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
n-Nitrosodi-n-propylamine	5.00	U	2.02	5.00	10.0
Phenanthrene	0.500	U	0.219	0.500	1.00
Benzylbutyl phthalate	1.50	U	1.13	1.50	3.00
Bis(2-Ethylhexyl)phthalate	2.70	U	1.65	2.70	3.00
Di-n-butyl phthalate	1.50	U	0.794	1.50	3.00
Diethyl phthalate	1.50	U	0.861	1.50	3.00
Dimethyl phthalate	1.50	U	0.772	1.50	3.00
Di-n-octyl phthalate	1.50	U	1.33	1.50	3.00
Pyrene	0.500	U	0.259	0.500	1.00
4-Chloro-3-methylphenol	5.00	U	2.28	5.00	10.0
2-Chlorophenol	5.00	U	2.11	5.00	10.0
2,4-Dichlorophenol	5.00	U	2.41	5.00	10.0
2,4-Dimethylphenol	5.00	U	4.33	5.00	10.0
4,6-Dinitro-2-methylphenol	5.00	U	3.49	5.00	10.0
2,4-Dinitrophenol	9.00	U	5.71	9.00	10.0
2-Nitrophenol	5.00	U	2.60	5.00	10.0
2-Nitroaniline	5.00	U	2.36	5.00	10.0
3-Nitroaniline	5.00	U	1.20	5.00	10.0
4-Chloroaniline	9.00	U	5.06	9.00	10.0
4-Nitroaniline	5.00	U	2.11	5.00	10.0
4-Nitrophenol	9.00	U	7.55	9.00	10.0
Pentachlorophenol	5.00	U	0.708	5.00	10.0
Phenol	5.00	U	0.757	5.00	10.0
2,4,6-Trichlorophenol	5.00	U	2.38	5.00	10.0
2,4,5-Trichlorophenol	5.00	U	2.70	5.00	10.0
1,2,4,5-Tetrachlorobenzene	5.00	U	2.43	5.00	10.0
(S) 2-Fluorophenol	*35.3*				*19.0-119*
(S) Phenol-d5	*22.6*				*10.0-120*
(S) Nitrobenzene-d5	*51.9*				*44.0-120*
(S) 2-Fluorobiphenyl	*52.6*				*44.0-119*
(S) 2,4,6-Tribromophenol	*33.5*	J2			*43.0-140*
(S) p-Terphenyl-d14	*75.2*				*50.0-134*

Laboratory Control Sample (LCS)

(LCS) R4324041-1 01/09/26 20:08

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	50.0	19.9	39.8	47.0-122	J4
Acenaphthylene	50.0	22.2	44.4	41.0-130	
Acetophenone	50.0	20.3	40.6	46.0-118	J4
Anthracene	50.0	33.4	66.8	57.0-123	
Atrazine	50.0	35.4	70.8	44.0-142	
Benzaldehyde	50.0	36.9	73.8	10.0-160	
Benzo(a)anthracene	50.0	35.8	71.6	58.0-125	
Benzo(b)fluoranthene	50.0	35.1	70.2	53.0-131	
Benzo(k)fluoranthene	50.0	38.2	76.4	57.0-129	
Benzo(g,h,i)perylene	50.0	34.2	68.4	50.0-134	
Benzo(a)pyrene	50.0	31.3	62.6	54.0-128	
Biphenyl	50.0	20.1	40.2	49.0-115	J4
Bis(2-chlorethoxy)methane	50.0	18.2	36.4	48.0-120	J4
Bis(2-chloroethyl)ether	50.0	19.1	38.2	43.0-118	J4
2,2-Oxybis(1-Chloropropane)	50.0	19.4	38.8	28.0-120	
4-Bromophenyl-phenylether	50.0	26.6	53.2	55.0-124	J4
2-Chloronaphthalene	50.0	19.1	38.2	40.0-116	J4
4-Chlorophenyl-phenylether	50.0	22.9	45.8	53.0-121	J4
Caprolactam	50.0	14.3	28.6	10.0-120	
Carbazole	50.0	39.3	78.6	60.0-122	
Chrysene	50.0	35.4	70.8	59.0-123	
Dibenz(a,h)anthracene	50.0	33.5	67.0	51.0-134	
Dibenzofuran	50.0	21.2	42.4	53.0-118	J4
3,3-Dichlorobenzidine	100	64.8	64.8	27.0-129	
2,4-Dinitrotoluene	50.0	30.9	61.8	57.0-128	
2,6-Dinitrotoluene	50.0	26.4	52.8	57.0-124	J4
Fluoranthene	50.0	36.6	73.2	57.0-128	
Fluorene	50.0	23.5	47.0	52.0-124	J4
Hexachlorobenzene	50.0	27.2	54.4	53.0-125	
Hexachloro-1,3-butadiene	50.0	13.5	27.0	22.0-124	
Hexachlorocyclopentadiene	50.0	9.41	18.8	15.0-120	J
Hexachloroethane	50.0	18.2	36.4	21.0-115	
Indeno(1,2,3-cd)pyrene	50.0	32.5	65.0	52.0-134	
Isophorone	50.0	19.3	38.6	42.0-124	J4
Naphthalene	50.0	16.6	33.2	40.0-121	J4
2-Methylnaphthalene	50.0	18.8	37.6	40.0-121	J4
2-Methylphenol	50.0	19.8	39.6	30.0-117	
3&4-Methyl Phenol	50.0	22.8	45.6	29.0-110	
Nitrobenzene	50.0	16.2	32.4	45.0-121	J4
n-Nitrosodiphenylamine	50.0	27.7	55.4	51.0-123	

Laboratory Control Sample (LCS)

(LCS) R4324041-1 01/09/26 20:08

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
n-Nitrosodi-n-propylamine	50.0	21.3	42.6	49.0-119	J4
Phenanthrene	50.0	32.0	64.0	59.0-120	
Benzylbutyl phthalate	50.0	36.7	73.4	53.0-134	
Bis(2-Ethylhexyl)phthalate	50.0	36.7	73.4	55.0-135	
Di-n-butyl phthalate	50.0	39.8	79.6	59.0-127	
Diethyl phthalate	50.0	36.6	73.2	56.0-125	
Dimethyl phthalate	50.0	33.2	66.4	45.0-127	
Di-n-octyl phthalate	50.0	35.2	70.4	51.0-140	
Pyrene	50.0	35.1	70.2	57.0-126	
4-Chloro-3-methylphenol	50.0	30.2	60.4	52.0-119	
2-Chlorophenol	50.0	19.4	38.8	38.0-117	
2,4-Dichlorophenol	50.0	20.6	41.2	47.0-121	J4
2,4-Dimethylphenol	50.0	23.3	46.6	31.0-124	
4,6-Dinitro-2-methylphenol	50.0	31.4	62.8	44.0-137	
2,4-Dinitrophenol	50.0	28.2	56.4	23.0-143	
2-Nitrophenol	50.0	20.1	40.2	47.0-123	J4
2-Nitroaniline	50.0	29.1	58.2	55.0-127	
3-Nitroaniline	50.0	37.7	75.4	41.0-128	
4-Chloroaniline	50.0	22.3	44.6	33.0-117	
4-Nitroaniline	50.0	39.1	78.2	18.0-160	
4-Nitrophenol	50.0	15.4	30.8	10.0-120	
Pentachlorophenol	50.0	19.9	39.8	35.0-138	
Phenol	50.0	10.6	21.2	10.0-120	
2,4,6-Trichlorophenol	50.0	23.1	46.2	50.0-125	J4
2,4,5-Trichlorophenol	50.0	27.7	55.4	53.0-123	
1,2,4,5-Tetrachlorobenzene	50.0	18.0	36.0	35.0-121	
(S) 2-Fluorophenol			*28.7*	*19.0-119*	
(S) Phenol-d5			*21.7*	*10.0-120*	
(S) Nitrobenzene-d5			*35.0*	*44.0-120*	J2
(S) 2-Fluorobiphenyl			*39.0*	*44.0-119*	J2
(S) 2,4,6-Tribromophenol			*55.5*	*43.0-140*	
(S) p-Terphenyl-d14			*70.3*	*50.0-134*	

Method Blank (MB)

(MB) R4324624-2 01/13/26 21:04

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
1,4-Dichlorobenzene	0.0500	U	0.000401	0.0500	0.100
2,4-Dinitrotoluene	0.0500	U	0.00165	0.0500	0.100
Hexachlorobenzene	0.0500	U	0.000341	0.0500	0.100
Hexachloro-1,3-butadiene	0.0500	U	0.000329	0.0500	0.100
Hexachloroethane	0.0500	U	0.000365	0.0500	0.100
Nitrobenzene	0.0500	U	0.000367	0.0500	0.100
Pyridine	0.0500	U	0.00137	0.0500	0.100
3&4-Methyl Phenol	0.0500	U	0.0333	0.0500	0.100
2-Methylphenol	0.0500	U	0.00312	0.0500	0.100
Pentachlorophenol	0.0500	U	0.00313	0.0500	0.100
2,4,5-Trichlorophenol	0.0500	U	0.0333	0.0500	0.100
2,4,6-Trichlorophenol	0.0500	U	0.0333	0.0500	0.100
(S) 2-Fluorophenol	*40.0*				*19.0-119*
(S) Phenol-d5	*25.1*				*10.0-120*
(S) Nitrobenzene-d5	*62.8*				*44.0-120*
(S) 2-Fluorobiphenyl	*68.8*				*44.0-119*
(S) 2,4,6-Tribromophenol	*47.8*				*43.0-140*
(S) p-Terphenyl-d14	*79.3*				*50.0-134*

Laboratory Control Sample (LCS)

(LCS) R4324624-1 01/13/26 20:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,4-Dichlorobenzene	0.500	0.298	59.6	29.0-112	
2,4-Dinitrotoluene	0.500	0.373	74.6	57.0-128	
Hexachlorobenzene	0.500	0.352	70.4	53.0-125	
Hexachloro-1,3-butadiene	0.500	0.219	43.8	22.0-124	
Hexachloroethane	0.500	0.270	54.0	21.0-115	
Nitrobenzene	0.500	0.275	55.0	45.0-121	
Pyridine	0.500	0.0523	10.5	10.0-120	J
3&4-Methyl Phenol	0.500	0.251	50.2	29.0-110	
2-Methylphenol	0.500	0.232	46.4	30.0-117	
Pentachlorophenol	0.500	0.272	54.4	35.0-138	
2,4,5-Trichlorophenol	0.500	0.366	73.2	53.0-123	
2,4,6-Trichlorophenol	0.500	0.340	68.0	50.0-125	
(S) 2-Fluorophenol			*38.4*	*19.0-119*	
(S) Phenol-d5			*26.9*	*10.0-120*	
(S) Nitrobenzene-d5			*61.8*	*44.0-120*	

Laboratory Control Sample (LCS)

(LCS) R4324624-1 01/13/26 20:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) 2-Fluorobiphenyl			*68.8*	*44.0-119*	
(S) 2,4,6-Tribromophenol			*61.0*	*43.0-140*	
(S) p-Terphenyl-d14			*78.5*	*50.0-134*	

L1933550-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1933550-02 01/14/26 04:20 • (MS) R4324624-3 01/14/26 04:41 • (MSD) R4324624-4 01/14/26 05:03

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,4-Dichlorobenzene	0.500	ND	0.301	0.244	60.2	48.8	1	29.0-112			20.9	30
2,4-Dinitrotoluene	0.500	ND	0.421	0.423	84.2	84.6	1	57.0-128			0.474	30
Hexachlorobenzene	0.500	ND	0.360	0.379	72.0	75.8	1	53.0-125			5.14	30
Hexachloro-1,3-butadiene	0.500	ND	0.210	0.182	42.0	36.4	1	22.0-124			14.3	30
Hexachloroethane	0.500	ND	0.270	0.231	54.0	46.2	1	21.0-115			15.6	30
Nitrobenzene	0.500	ND	0.276	0.240	55.2	48.0	1	45.0-121			14.0	30
Pyridine	0.500	ND	0.173	0.115	34.6	23.0	1	13.5-58.9		J3	40.3	30
3&4-Methyl Phenol	0.500	ND	0.259	0.247	51.8	49.4	1	29.0-110			4.74	30
2-Methylphenol	0.500	ND	0.240	0.215	48.0	43.0	1	30.0-117			11.0	30
Pentachlorophenol	0.500	ND	0.283	0.298	56.6	59.6	1	35.0-138			5.16	30
2,4,5-Trichlorophenol	0.500	ND	0.363	0.399	72.6	79.8	1	53.0-123			9.45	30
2,4,6-Trichlorophenol	0.500	ND	0.332	0.357	66.4	71.4	1	50.0-125			7.26	30
(S) 2-Fluorophenol					*33.0*	*30.4*		*19.0-119*				
(S) Phenol-d5					*27.9*	*23.7*		*10.0-120*				
(S) Nitrobenzene-d5					*57.1*	*50.3*		*44.0-120*				
(S) 2-Fluorobiphenyl					*65.3*	*64.4*		*44.0-119*				
(S) 2,4,6-Tribromophenol					*63.0*	*71.0*		*43.0-140*				
(S) p-Terphenyl-d14					*85.4*	*81.4*		*50.0-134*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
DL	Detection Limit.
DL (dry)	Detection Limit.
LOD (dry)	Limit of Detection.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
ND	Not detected at the Reporting Limit (or DL where applicable).
LOQ (dry)	Limit of Quantitation.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C7	The initial calibration verification standard (SSCV) associated with this data responded high.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.

GLOSSARY OF TERMS

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
T8	Sample(s) received past/too close to holding time expiration.
U	Below Detectable Limits: Indicates that the analyte was not detected.

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Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Terracon - Wilmington, NC
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Billing Information:
Accounts Payable
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Pres Chk

Report to: **Danielle Foster**

Email To: **danielle.foster@terracon.com;nick.lin**

Project Description: Marin Corps Base Camp Lejeune

City/State Collected: Jacksonville, NC

Please Circle: PT MT CT (ET)

Phone: **910-229-8597**

Client Project # K625P194

Lab Project # **TERRACWNC-LEJEUNE**

Collected by (print): Danielle Foster

Site/Facility ID # MCAS CL

P.O. # —

Collected by (signature): D F

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day X 10 Day (Rad Only)
___ Three Day

Date Results Needed

Quote # —

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Phone: 615-758-5858 Alt: 800-767-5859

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1933613

T: **G045**

Acctnum: **TERRACWNC**

Template: **T286013**

Prelogin: **P1200317**

PM: **Heather Wagner**

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	DOD 6010 TAL Metals	DOD RCI	DOD8270TCL	DODDRO	DODPaint Filter	DODGRO	DODV8260BTEX	DODV8260TCL	DOD PFAS 1633	DOD Full TCLP+TCLP PCB	Remarks	Sample # (lab only)
CL-P1636-HPSI-SPT-05	C	S	1-6	1/7/26	0950	4				X		X			X	X		-01,02
CL-P1636-HPSI-SPT-02	↓	↓	↓	↓	1215	4				X		X			X	X		-03,04
CL-P1636-HPSI-SPT-01	↓	↓	↓	↓	1115	4				X		X			X	X		-05,06
CL-P1636-HPSI-SPT-05	G	GW	-	↓	1030	13	X		X	X		X		X	X			-07
CL-SB-IDW	C	S	-	↓	1145	5		X		X	X	X	X		X	X		-08,09

* Matrix:
S - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 7920 9198 6336

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: ✓Y __N
Preservation Correct/Checked: ✓Y __N
RAD Screen <0.5 mR/hr: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR	
Danielle Foster	1/7/26	1549	J. Dixon / Pace		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: TLA90.6+0=0.6 30	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/8/26 Time: 9:00	Hold: Condition: NCF / OK
			Sabrina L		

ANALYTICAL REPORT

January 19, 2026

Terracon - Wilmington, NC

Sample Delivery Group:	L1933615
Samples Received:	01/08/2026
Project Number:	K625P194
Description:	Marine Corps Base Camp Lejeune
Site:	MCAS CL
Report To:	Danielle Foster 2108 Capital Drive Suite 103 Wilmington, NC 28405

Entire Report Reviewed By:

Heather J Wagner
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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Ss: Sample Summary	3
Cn: Case Narrative	4
Gl: Glossary of Terms	5
Al: Accreditations & Locations	6
Sc: Sample Chain of Custody	7

1 Cp
2 Tc
3 Ss
4 Cn
5 Gl
6 Al
7 Sc

CL-SB-IDW L1933615-05

Collected by	Collected date/time	Received date/time
Danielle Foster	01/07/26 11:45	01/08/26 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Subcontracted Analyses	WG2671472	1	01/16/26 00:00	01/16/26 00:00	SSD	West Columbia, SC 29172

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Heather J Wagner
Project Manager

Project Narrative

L1933615 -01, -02, -03, -04, -05 contains subout data that is included after the chain of custody.

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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J (Radiochemistry)	Result < MDA; Result + Error > MDA.
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Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

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Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Terracon - Wilmington, NC
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Billing Information:
Accounts Payable
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Pres Chk

Report to: Danielle Foster

Email To: danielle.foster@terracon.com;nick.lin

Project Description: Marin Corps Base Camp Lejeune

City/State Collected: Jacksonville, NC

Please Circle: PT MT CT ET

Phone: 910-229-8597

Client Project # K625P194

Lab Project # TERRACWNC-LEJEUNE

Collected by (print): Danielle Foster

Site/Facility ID # MCAS CL

P.O. # —

Collected by (signature): D F

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day X 10 Day (Rad Only)
___ Three Day

Quote # —

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L933605

T: G045

Acctnum: TERRACWNC

Template: T286013

Prelogin: P1200317

PM: Heather Wagner

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	DOD 6010 TAL Metals	DOD RCI	DOD8270TCL	DODDRO	DODPaint Filter	DODGRO	DODV8260BTEX	DODV8260TCL	DOD PFAS 1633	DOD Full TCLP+TCLP PCB	Remarks	Sample # (lab only)
CL-P1636-HPSI-SPT-05	C	S	1-6	1/7/26	0950	4				X		X			X	X		-01
CL-P1636-HPSI-SPT-02	↓	↓	↓	↓	1215	4				X		X			X	X		-02
CL-P1636-HPSI-SPT-01	↓	↓	↓	↓	1115	4				X		X			X	X		-03
CL-P1636-HPSI-SPT-05	G	GW	-	↓	1030	13	X		X	X		X		X	X			-04
CL-SB-IDW	C	S	-	↓	1145	5		X		X	X	X	X		X	X		-05

* Matrix:
S - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 7920 9198 6336

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeOH TBR
Danielle Foster	1/7/26	1549	J. Dixon / Pace	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
				TLA90.6+0=0.6 30
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
			Sabrina Ld	1/8/26 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Report of Analysis

Pace Analytical LLC
12065 Lebanon Rd.
Mt. Juliet, TN 37122
Attention: Jimmy Huckaba

Project Name: L1933615

Project Number: WG2671472

Lot Number:**BA09010**

Date Completed:01/16/2026

01/16/2026 12:21 PM
Approved and released by:
Project Manager II: **Edward Barnett**

The electronic signature above is the equivalent of a handwritten signature.
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Pace Analytical Services, LLC (*formerly Shealy Environmental Services, Inc.*)
106 Vantage Point Drive West Columbia, SC 29172
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Case Narrative
Pace Analytical LLC
Lot Number: BA09010

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report. Where sampling is conducted by the client, results relate to the accuracy of the information provided, and as the samples are received.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Additionally, the DoD QSM version 6.0 has been followed for these samples. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs, the DoD QSM, or policies are qualified on the results page or discussed below.

Pace - West Columbia is a DOD/DOE accredited laboratory; however, the following subcontract laboratories do not hold DOD/DOE certification: Schnabel Engineering, Bunnell Lammons Engineering (BLE), and Pace - Sheridan Terra (WY). The use of these subcontract laboratories is approved by the customer prior to sample shipment.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope accreditation: 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS), 2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA), 3-Perfluoroheptyl propanoic acid (7:3FTCA), 3-Perfluoropropyl propanoic acid (3:3FTCA), 4,8-Dioxa-3H-perfluorononanoic acid (ADONA), 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS), Hexafluoropropylene oxide dimer acid (HFPO-DA), N-ethyl perfluorooctanesulfonamide (NEtFOSA), N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE), N-methyl perfluorooctanesulfonamide (NMeFOSA), N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE), Nonafluoro-3,6-dioxaheptanoic acid (NFDHA), Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA), Perfluoro-3-methoxypropanoic acid (PFMPA), Perfluoro-4-methoxybutanoic acid (PFMBA), Perfluorododecanesulfonic acid (PFDoS), Perfluoropropanoic acid (PFPrA), 2H-perfluoro-2-octenoic acid (FHUEA), 2H-perfluoro-2-decenoic acid (FOUEA), Lithium Bis(trifluoromethane)sulfonimide (HQ-115) by EPA Method 8327. Perfluoropropanoic acid (PFPrA) and Bis (trifluoromethylsulfonyl)amine (TFSI) by EPA Method 1633.

Manual integration summaries are provided at the end of this report when applicable.

Where applicable, all soil sample results (including LOQ and DL if requested) are corrected for dry weight unless flagged with a "W" qualifier.

PFAS

The following sample was diluted due to the nature of the sample matrix: BA09010-004, BA09010-004MS, BA09010-004MSD. The LOQ has been elevated to reflect the dilution.

BA09010-004 (CL-P1636-HP51-SPT-05) (Run 1) (Analysis Batch 29252) (Prep Batch 29216) PFAS

1633LV Method List (DOD QSM 6.0) (Refrigerated)

The continuing calibration verification (CCV) associated with samples BA09010-001, BA09010-002, BA09010-003, BA09010-005 for NMeFOSAA recovered above the upper control limit. The samples associated with this CCV were non-detect for the affected analyte; therefore, the data has been reported.

BA09010-001 (CL-P1636-HP51-SPT-05) (Run 1) (Analysis Batch 29251) (Prep Batch 29225) PFAS 1633LV Method List (DOD QSM 6.0)
BA09010-002 (CL-P1636-HP51-SPT-02) (Run 1) (Analysis Batch 29251) (Prep Batch 29225) PFAS 1633LV Method List (DOD QSM 6.0)
BA09010-003 (CL-P1636-HP51-SPT-01) (Run 1) (Analysis Batch 29251) (Prep Batch 29225) PFAS 1633LV Method List (DOD QSM 6.0)
BA09010-005 (CL-SB-IDW) (Run 1) (Analysis Batch 29251) (Prep Batch 29225) PFAS 1633LV Method List (DOD QSM 6.0)

The CCB associated with analytical batch 29251 contained EIS: PFOS and PFTeDA greater than method criteria. The following samples were affected: BA09010-001, BA09010-002, BA09010-003, BA09010-005. The data has been reported. The EIS failed high but the associated target analytes were ND.

BA09010-001 (CL-P1636-HP51-SPT-05) (Run 1) (Analysis Batch 29251) (Prep Batch 29225) PFAS 1633LV Method List (DOD QSM 6.0)
BA09010-002 (CL-P1636-HP51-SPT-02) (Run 1) (Analysis Batch 29251) (Prep Batch 29225) PFAS 1633LV Method List (DOD QSM 6.0)
BA09010-003 (CL-P1636-HP51-SPT-01) (Run 1) (Analysis Batch 29251) (Prep Batch 29225) PFAS 1633LV Method List (DOD QSM 6.0)
BA09010-005 (CL-SB-IDW) (Run 1) (Analysis Batch 29251) (Prep Batch 29225) PFAS 1633LV Method List (DOD QSM 6.0)

The opening continuing calibration verification (CCV) associated with sample BA09010-004 for NMeFOSAA recovered above the upper control limit. The sample associated with this CCV were non-detect for the affected analyte; therefore, the data has been reported.

BA09010-004 (CL-P1636-HP51-SPT-05) (Run 1) (Analysis Batch 29252) (Prep Batch 29216) PFAS 1633LV Method List (DOD QSM 6.0) (Refrigerated)

The CCB associated with analytical batch 29252 contained EIS: PFOS and PFteDA greater than method criteria. The following sample was affected: BA09010-004. The data has been reported. The EIS failed high but the associated target analytes were ND.

BA09010-004 (CL-P1636-HP51-SPT-05) (Run 1) (Analysis Batch 29252) (Prep Batch 29216) PFAS 1633LV Method List (DOD QSM 6.0) (Refrigerated)

Sample Summary
Pace Analytical LLC
Lot Number: BA09010

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
005	CL-SB-IDW	Solid	01/07/2026 1145	01/09/2026

(5 samples)

PFAS by LC/MS/MS

Client: **Pace Analytical LLC** | Laboratory ID: **BA09010-005**
Description: **CL-SB-IDW** | Matrix: **Solid**
Date Sampled: **01/07/2026 1145** | % Solids: **55.2** **01/09/2026 1838**
Date Received: **01/09/2026**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	01/13/2026 2124	BWS	01/12/2026 1419	29225

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Bis(trifluoromethylsulfonyl)amine (TFSI)	82113-65-3	1633	0.20	U	0.39	0.20	0.075	ng/g	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3...)	763051-92-9	1633	0.38	U	0.79	0.38	0.21	ng/g	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	1633	0.37	U	0.79	0.37	0.21	ng/g	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	1633	0.38	U	0.79	0.38	0.18	ng/g	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	1633	0.38	U	0.79	0.38	0.24	ng/g	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	1633	0.37	U	0.79	0.37	0.29	ng/g	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1633	0.56	U	0.79	0.56	0.51	ng/g	1
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1633	2.5	U	4.9	2.5	1.6	ng/g	1
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6	1633	0.40	U	0.79	0.40	0.21	ng/g	1
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	4151-50-2	1633	0.10	U	0.20	0.10	0.078	ng/g	1
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	1633	0.10	U	0.20	0.10	0.088	ng/g	1
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1633	1.0	U	2.0	1.0	0.66	ng/g	1
N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1633	0.10	U	0.20	0.10	0.059	ng/g	1
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	1633	0.15	U	0.20	0.15	0.15	ng/g	1
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1633	1.0	U	2.0	1.0	0.63	ng/g	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	1633	0.20	U	0.39	0.20	0.15	ng/g	1
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	1633	0.18	U	0.39	0.18	0.077	ng/g	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1633	0.20	U	0.39	0.20	0.13	ng/g	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	1633	0.20	U	0.39	0.20	0.13	ng/g	1
Perfluorobutanesulfonic acid (PFBS)	375-73-5	1633	0.089	U	0.20	0.089	0.078	ng/g	1
Perfluorobutanoic acid (PFBA)	375-22-4	1633	0.40	U	0.79	0.40	0.25	ng/g	1
Perfluorodecanesulfonic acid (PFDS)	335-77-3	1633	0.10	U	0.20	0.10	0.039	ng/g	1
Perfluorodecanoic acid (PFDA)	335-76-2	1633	0.15	U	0.20	0.15	0.11	ng/g	1
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5	1633	0.10	U	0.20	0.10	0.067	ng/g	1
Perfluorododecanoic acid (PFDoA)	307-55-1	1633	0.10	U	0.20	0.10	0.096	ng/g	1
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	1633	0.10	U	0.20	0.10	0.081	ng/g	1
Perfluoroheptanoic acid (PFHpA)	375-85-9	1633	0.10	U	0.20	0.10	0.064	ng/g	1
3-Perfluoroheptyl propanoic acid (7:3FTCA)	812-70-4	1633	2.5	U	4.9	2.5	1.8	ng/g	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1633	0.091	UM-03	0.20	0.091	0.064	ng/g	1
Perfluorohexanoic acid (PFHxA)	307-24-4	1633	0.10	U	0.20	0.10	0.037	ng/g	1
Perfluorononanesulfonic acid (PFNS)	68259-12-1	1633	0.10	U	0.20	0.10	0.083	ng/g	1
Perfluorononanoic acid (PFNA)	375-95-1	1633	0.10	U	0.20	0.10	0.095	ng/g	1
Perfluorooctanesulfonamide (PFOSA)	754-91-6	1633	0.10	U	0.20	0.10	0.077	ng/g	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1633	0.14	U	0.20	0.14	0.11	ng/g	1
Perfluorooctanoic acid (PFOA)	335-67-1	1633	0.15	U	0.20	0.15	0.11	ng/g	1
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	1633	0.094	U	0.20	0.094	0.050	ng/g	1
Perfluoropentanoic acid (PFPeA)	2706-90-3	1633	0.20	U	0.39	0.20	0.15	ng/g	1
Perfluoropropanoic acid (PFPrA)	422-64-0	1633	0.71	U	0.79	0.71	0.66	ng/g	1
3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	1633	0.74	U	0.98	0.74	0.53	ng/g	1
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1633	0.10	U	0.20	0.10	0.097	ng/g	1
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	1633	0.10	U	0.20	0.10	0.057	ng/g	1
Perfluoroundecanoic acid (PFUnA)	2058-94-8	1633	0.098	U	0.20	0.098	0.098	ng/g	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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PFAS by LC/MS/MS

Client:	**Pace Analytical LLC**	Laboratory ID:	**BA09010-005**
Description:	**CL-SB-IDW**	Matrix:	**Solid**
Date Sampled:	**01/07/2026 1145**	% Solids:	**55.2 01/09/2026 1838**
Date Received:	**01/09/2026**		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	01/13/2026 2124	BWS	01/12/2026 1419	29225

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C2-4:2FTS		99	40-165
13C2-6:2FTS		124	40-215
13C2-8:2FTS		90	40-275
13C8-PFOSA		80	40-130
D5-NEtFOSA		56	10-130
D3-NMeFOSA		68	10-130
D5-NEtFOSAA	M-03	92	40-150
D3-NMeFOSAA		95	40-135
13C4-PFBA		101	8-130
13C5-PFPeA	M-03	96	35-130
13C5-PFHxA		89	40-130
13C4-PFHpA		100	40-130
13C8-PFOA		91	40-130
13C9-PFNA		102	40-130
13C6-PFDA		95	40-130
13C3-PFBS		91	40-135
13C3-PFHxS		107	40-130
13C8-PFOS		114	40-130
13C7-PFUnA		88	40-130
13C2-PFDoA		70	40-130
13C2-PFTeDA		57	20-130
13C3-HFPO-DA		99	40-130
D7-NMeFOSE		74	20-130
D9-NEtFOSE		69	15-130
13C3-PFPrA		83	8-130

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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QC Summary

PFAS by LC/MS/MS - MB

Sample ID: BQ29216-001
Batch: 29216
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
TFSI	1.6	U	1	3.2	1.6	0.51	ng/L	01/13/2026 2204
11Cl-PF3OUdS	3.0	U	1	6.4	3.0	0.95	ng/L	01/13/2026 2204
9Cl-PF3ONS	3.0	U	1	6.4	3.0	1.1	ng/L	01/13/2026 2204
ADONA	3.0	U	1	6.4	3.0	1.0	ng/L	01/13/2026 2204
8:2FTS	3.1	U	1	6.4	3.1	2.5	ng/L	01/13/2026 2204
4:2FTS	3.0	UM-03	1	6.4	3.0	1.7	ng/L	01/13/2026 2204
6:2FTS	3.0	U	1	6.4	3.0	2.1	ng/L	01/13/2026 2204
5:3FTCA	20	U	1	40	20	6.6	ng/L	01/13/2026 2204
HFPO-DA	3.2	U	1	6.4	3.2	1.1	ng/L	01/13/2026 2204
NEtFOSA	0.80	U	1	1.6	0.80	0.44	ng/L	01/13/2026 2204
NEtFOSAA	1.2	U	1	1.6	1.2	0.93	ng/L	01/13/2026 2204
NEtFOSE	8.0	U	1	16	8.0	3.0	ng/L	01/13/2026 2204
NMeFOSA	0.80	U	1	1.6	0.80	0.30	ng/L	01/13/2026 2204
NMeFOSAA	0.80	U	1	1.6	0.80	0.30	ng/L	01/13/2026 2204
NMeFOSE	8.0	U	1	16	8.0	3.3	ng/L	01/13/2026 2204
NFDHA	1.6	U	1	3.2	1.6	0.79	ng/L	01/13/2026 2204
PFEESA	1.4	U	1	3.2	1.4	0.30	ng/L	01/13/2026 2204
PFMPA	1.6	U	1	3.2	1.6	0.72	ng/L	01/13/2026 2204
PFMBA	1.6	U	1	3.2	1.6	0.53	ng/L	01/13/2026 2204
PFBS	1.4	U	1	1.6	1.4	1.2	ng/L	01/13/2026 2204
PFBA	3.2	U	1	6.4	3.2	0.95	ng/L	01/13/2026 2204
PFDS	0.77	U	1	1.6	0.77	0.41	ng/L	01/13/2026 2204
PFDA	0.80	U	1	1.6	0.80	0.49	ng/L	01/13/2026 2204
PFDoS	0.77	U	1	1.6	0.77	0.36	ng/L	01/13/2026 2204
PFDoA	0.80	U	1	1.6	0.80	0.19	ng/L	01/13/2026 2204
PFHpS	0.76	U	1	1.6	0.76	0.58	ng/L	01/13/2026 2204
PFHpA	0.80	U	1	1.6	0.80	0.32	ng/L	01/13/2026 2204
7:3FTCA	20	U	1	40	20	8.1	ng/L	01/13/2026 2204
PFHxS	0.73	U	1	1.6	0.73	0.71	ng/L	01/13/2026 2204
PFHxA	0.80	U	1	1.6	0.80	0.24	ng/L	01/13/2026 2204
PFNS	0.77	U	1	1.6	0.77	0.47	ng/L	01/13/2026 2204
PFNA	0.80	U	1	1.6	0.80	0.61	ng/L	01/13/2026 2204
PFOSA	0.80	U	1	1.6	0.80	0.29	ng/L	01/13/2026 2204
PFOS	0.74	UM-03	1	1.6	0.74	0.55	ng/L	01/13/2026 2204
PFOA	0.80	U	1	1.6	0.80	0.73	ng/L	01/13/2026 2204
PFPeS	0.75	U	1	1.6	0.75	0.44	ng/L	01/13/2026 2204
PFPeA	1.6	U	1	3.2	1.6	0.44	ng/L	01/13/2026 2204
PFPrA	3.2	U	1	6.4	3.2	2.5	ng/L	01/13/2026 2204
3:3FTCA	4.0	U	1	8.0	4.0	1.5	ng/L	01/13/2026 2204
PFTeDA	0.80	U	1	1.6	0.80	0.43	ng/L	01/13/2026 2204
PFTrDA	0.80	U	1	1.6	0.80	0.61	ng/L	01/13/2026 2204
PFUnA	1.2	U	1	1.6	1.2	0.82	ng/L	01/13/2026 2204

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29216-001
Batch: 29216
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		107	40-200
13C2-6:2FTS		117	40-200
13C2-8:2FTS		103	40-300
13C8-PFOSA		95	40-130
D5-NEtFOSA		64	10-130
D3-NMeFOSA		66	10-130
D5-NEtFOSAA		92	25-135
D3-NMeFOSAA		95	40-170
13C4-PFBA		100	5-130
13C5-PFPeA	M-03	104	40-130
13C5-PFHxA		102	40-130
13C4-PFHpA		105	40-130
13C8-PFOA		97	40-130
13C9-PFNA		100	40-130
13C6-PFDA		102	40-130
13C3-PFBS		104	40-135
13C3-PFHxS		119	40-130
13C8-PFOS		96	40-130
13C7-PFUnA		84	30-130
13C2-PFDoA		85	10-130
13C2-PFTeDA		85	10-130
13C3-HFPO-DA		105	40-130
D7-NMeFOSE		89	10-130
D9-NEtFOSE		86	10-130
13C3-PFPrA		102	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29216-002
Batch: 29216
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Parameter	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	78	77		1	98	70-140	01/14/2026 1721
11Cl-PF3OUdS	150	130		1	84	55-160	01/14/2026 1721
9Cl-PF3ONS	150	150		1	99	70-155	01/14/2026 1721
ADONA	150	150		1	101	65-145	01/14/2026 1721
8:2FTS	150	150		1	99	60-150	01/14/2026 1721
4:2FTS	150	150		1	99	70-145	01/14/2026 1721
6:2FTS	150	150		1	102	65-155	01/14/2026 1721
5:3FTCA	1000	1000		1	102	70-135	01/14/2026 1721
HFPO-DA	160	170		1	103	70-140	01/14/2026 1721
NEtFOSA	40	41	M-03	1	103	65-145	01/14/2026 1721
NEtFOSAA	40	34	M-03	1	85	70-145	01/14/2026 1721
NEtFOSE	400	400	M-03	1	99	70-135	01/14/2026 1721
NMeFOSA	40	40	M-03	1	101	60-150	01/14/2026 1721
NMeFOSAA	40	36	M-03	1	91	50-140	01/14/2026 1721
NMeFOSE	400	400	M-03	1	101	70-145	01/14/2026 1721
NFDHA	80	82		1	102	50-150	01/14/2026 1721
PFEESA	71	70		1	98	70-140	01/14/2026 1721
PFMPA	80	78	M-03	1	98	55-140	01/14/2026 1721
PFMBA	80	81	M-03	1	101	60-150	01/14/2026 1721
PFBS	36	35		1	97	60-145	01/14/2026 1721
PFBA	160	160	M-03	1	99	70-140	01/14/2026 1721
PFDS	39	34		1	87	60-145	01/14/2026 1721
PFDA	40	46		1	114	70-140	01/14/2026 1721
PFDoS	39	32		1	84	50-145	01/14/2026 1721
PFDoA	40	41	M-03	1	102	70-140	01/14/2026 1721
PFHpS	38	38		1	99	70-150	01/14/2026 1721
PFHpA	40	38		1	96	70-150	01/14/2026 1721
7:3FTCA	1000	960		1	96	50-145	01/14/2026 1721
PFHxS	36	34		1	93	65-145	01/14/2026 1721
PFHxA	40	40		1	100	70-145	01/14/2026 1721
PFNS	38	35	M-03	1	91	65-145	01/14/2026 1721
PFNA	40	35	M-03	1	87	70-150	01/14/2026 1721
PFOSA	40	39	M-03	1	97	70-145	01/14/2026 1721
PFOS	37	32	M-03	1	87	55-150	01/14/2026 1721
PFOA	40	38		1	95	70-150	01/14/2026 1721
PFPeS	38	37		1	98	65-140	01/14/2026 1721
PFPeA	80	78	M-03	1	98	65-135	01/14/2026 1721
PFPrA	160	150		1	94	70-140	01/14/2026 1721
3:3FTCA	200	190	M-03	1	97	65-130	01/14/2026 1721
PFTeDA	40	37		1	93	60-140	01/14/2026 1721
PFTrDA	40	42		1	104	65-140	01/14/2026 1721
PFUnA	40	38	M-03	1	95	70-145	01/14/2026 1721

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29216-002
Batch: 29216
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		104	40-200
13C2-6:2FTS		100	40-200
13C2-8:2FTS		99	40-300
13C8-PFOSA		94	40-130
D5-NEtFOSA		56	10-130
D3-NMeFOSA		61	10-130
D5-NEtFOSAA		99	25-135
D3-NMeFOSAA		96	40-170
13C4-PFBA	M-03	101	5-130
13C5-PFPeA		102	40-130
13C5-PFHxA		103	40-130
13C4-PFHpA		101	40-130
13C8-PFOA		97	40-130
13C9-PFNA		103	40-130
13C6-PFDA		85	40-130
13C3-PFBS	M-03	97	40-135
13C3-PFHxS		104	40-130
13C8-PFOS		103	40-130
13C7-PFUnA	M-03	96	30-130
13C2-PFDoA		82	10-130
13C2-PFTeDA		88	10-130
13C3-HFPO-DA		102	40-130
D7-NMeFOSE		86	10-130
D9-NEtFOSE	M-03	88	10-130
13C3-PFPrA		104	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29216-102
Batch: 29216
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Parameter	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	6.3	5.6	M-03	1	89	70-140	01/14/2026 1730
11Cl-PF3OUdS	12	12		1	100	55-160	01/14/2026 1730
9Cl-PF3ONS	12	14		1	115	70-155	01/14/2026 1730
ADONA	12	15		1	126	65-145	01/14/2026 1730
8:2FTS	12	15		1	122	60-150	01/14/2026 1730
4:2FTS	12	14	M-03	1	119	70-145	01/14/2026 1730
6:2FTS	12	14		1	115	65-155	01/14/2026 1730
5:3FTCA	80	100		1	128	70-135	01/14/2026 1730
HFPO-DA	13	15		1	119	70-140	01/14/2026 1730
NEtFOSA	3.2	3.7	M-03	1	114	65-145	01/14/2026 1730
NEtFOSAA	3.2	4.3	M-03	1	136	70-145	01/14/2026 1730
NEtFOSE	32	39	M-03	1	122	70-135	01/14/2026 1730
NMeFOSA	3.2	3.4	M-03	1	105	60-150	01/14/2026 1730
NMeFOSAA	3.2	4.2	M-03	1	132	50-140	01/14/2026 1730
NMeFOSE	32	40	M-03	1	124	70-145	01/14/2026 1730
NFDHA	6.4	7.8		1	121	50-150	01/14/2026 1730
PFEESA	5.7	6.7		1	117	70-140	01/14/2026 1730
PFMPA	6.4	7.2	M-03	1	113	55-140	01/14/2026 1730
PFMBA	6.4	7.4	M-03	1	116	60-150	01/14/2026 1730
PFBS	2.8	3.7		1	129	60-145	01/14/2026 1730
PFBA	13	16	M-03	1	123	70-140	01/14/2026 1730
PFDS	3.1	2.9		1	94	60-145	01/14/2026 1730
PFDA	3.2	3.7	M-03	1	115	70-140	01/14/2026 1730
PFDoS	3.1	3.2	M-03	1	103	50-145	01/14/2026 1730
PFDoA	3.2	3.6	M-03	1	113	70-140	01/14/2026 1730
PFHpS	3.0	3.4		1	113	70-150	01/14/2026 1730
PFHpA	3.2	3.6	M-03	1	113	70-150	01/14/2026 1730
7:3FTCA	80	110		1	138	50-145	01/14/2026 1730
PFHxS	2.9	3.4	M-03	1	116	65-145	01/14/2026 1730
PFHxA	3.2	3.8	M-03	1	119	70-145	01/14/2026 1730
PFNS	3.1	3.2	M-03	1	105	65-145	01/14/2026 1730
PFNA	3.2	3.8	M-03	1	120	70-150	01/14/2026 1730
PFOSA	3.2	3.9	M-03	1	121	70-145	01/14/2026 1730
PFOS	3.0	3.4	M-03	1	116	55-150	01/14/2026 1730
PFOA	3.2	3.5	M-03	1	110	70-150	01/14/2026 1730
PFPeS	3.0	3.5	M-03	1	118	65-140	01/14/2026 1730
PFPeA	6.4	7.4	M-03	1	115	65-135	01/14/2026 1730
PFPrA	13	15	M-03	1	117	70-140	01/14/2026 1730
3:3FTCA	16	17		1	105	65-130	01/14/2026 1730
PFTeDA	3.2	4.0		1	126	60-140	01/14/2026 1730
PFTrDA	3.2	3.8	M-03	1	120	65-140	01/14/2026 1730
PFUnA	3.2	4.0	M-03	1	125	70-145	01/14/2026 1730

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

PFAS by LC/MS/MS - LCS

Sample ID: BQ29216-102
Batch: 29216
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		96	40-200
13C2-6:2FTS		100	40-200
13C2-8:2FTS		102	40-300
13C8-PFOSA		90	40-130
D5-NEtFOSA		60	10-130
D3-NMeFOSA		62	10-130
D5-NEtFOSAA		95	25-135
D3-NMeFOSAA		93	40-170
13C4-PFBA	M-03	100	5-130
13C5-PFPeA		96	40-130
13C5-PFHxA		98	40-130
13C4-PFHpA	M-03	94	40-130
13C8-PFOA		98	40-130
13C9-PFNA		93	40-130
13C6-PFDA		92	40-130
13C3-PFBS		94	40-135
13C3-PFHxS		103	40-130
13C8-PFOS	M-03	102	40-130
13C7-PFUnA		83	30-130
13C2-PFDoA	M-03	84	10-130
13C2-PFTeDA	M-03	88	10-130
13C3-HFPO-DA		96	40-130
D7-NMeFOSE		80	10-130
D9-NEtFOSE	M-03	82	10-130
13C3-PFPrA		103	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MS

Sample ID: BA09010-004MS
Batch: 29216
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Parameter	Sample Amount (ng/L)	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	ND	780	730		1	93	70-140	01/13/2026 2244
11Cl-PF3OUdS	ND	1500	1300		1	86	55-160	01/13/2026 2244
9Cl-PF3ONS	ND	1500	1500		1	98	70-155	01/13/2026 2244
ADONA	ND	1500	1500		1	100	65-145	01/13/2026 2244
8:2FTS	ND	1500	1600		1	107	60-150	01/13/2026 2244
4:2FTS	ND	1500	1300		1	88	70-145	01/13/2026 2244
6:2FTS	ND	1500	1600		1	105	65-155	01/13/2026 2244
5:3FTCA	ND	10000	9400		1	94	70-135	01/13/2026 2244
HFPO-DA	ND	1600	1700		1	104	70-140	01/13/2026 2244
NEtFOSA	ND	400	400	M-03	1	99	65-145	01/13/2026 2244
NEtFOSAA	ND	400	400		1	99	70-145	01/13/2026 2244
NEtFOSE	ND	4000	4000	M-03	1	100	70-135	01/13/2026 2244
NMeFOSA	ND	400	390	M-03	1	98	60-150	01/13/2026 2244
NMeFOSAA	ND	400	380		1	96	50-140	01/13/2026 2244
NMeFOSE	ND	4000	3900	M-03	1	97	70-145	01/13/2026 2244
NFDHA	ND	800	840		1	105	50-150	01/13/2026 2244
PFEESA	ND	710	730		1	103	70-140	01/13/2026 2244
PFMPA	ND	800	800	M-03	1	101	55-140	01/13/2026 2244
PFMBA	ND	800	800	M-03	1	100	60-150	01/13/2026 2244
PFBS	ND	360	370		1	102	60-145	01/13/2026 2244
PFBA	ND	1600	1600	M-03	1	102	70-140	01/13/2026 2244
PFDS	ND	390	320		1	82	60-145	01/13/2026 2244
PFDA	ND	400	390		1	97	70-140	01/13/2026 2244
PFDoS	ND	390	340		1	89	50-145	01/13/2026 2244
PFDoA	ND	400	380		1	95	70-140	01/13/2026 2244
PFHpS	ND	380	420		1	109	70-150	01/13/2026 2244
PFHpA	ND	400	380		1	96	70-150	01/13/2026 2244
7:3FTCA	ND	10000	8400		1	84	50-145	01/13/2026 2244
PFHxS	ND	360	340		1	92	65-145	01/13/2026 2244
PFHxA	ND	400	380		1	95	70-145	01/13/2026 2244
PFNS	ND	380	350		1	91	65-145	01/13/2026 2244
PFNA	ND	400	410	M-03	1	102	70-150	01/13/2026 2244
PFOSA	ND	400	370	M-03	1	92	70-145	01/13/2026 2244
PFOS	25	370	370	M-03	1	93	55-150	01/13/2026 2244
PFOA	ND	400	390		1	96	70-150	01/13/2026 2244
PFPeS	ND	380	350		1	94	65-140	01/13/2026 2244
PFPeA	ND	800	800	M-03	1	100	65-135	01/13/2026 2244
PFPrA	ND	1600	1500		1	94	70-140	01/13/2026 2244
3:3FTCA	ND	2000	1800	M-03	1	88	65-130	01/13/2026 2244
PFTeDA	ND	400	360		1	90	60-140	01/13/2026 2244
PFTrDA	ND	400	400		1	99	65-140	01/13/2026 2244
PFUnA	ND	400	360		1	91	70-145	01/13/2026 2244

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MS

Sample ID: BA09010-004MS
Batch: 29216
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		100	40-200
13C2-6:2FTS		92	40-200
13C2-8:2FTS		83	40-300
13C8-PFOSA		89	40-130
D5-NEtFOSA		67	10-130
D3-NMeFOSA		69	10-130
D5-NEtFOSAA		82	25-135
D3-NMeFOSAA		85	40-170
13C4-PFBA		99	5-130
13C5-PFPeA	M-03	99	40-130
13C5-PFHxA		95	40-130
13C4-PFHpA		100	40-130
13C8-PFOA		102	40-130
13C9-PFNA		93	40-130
13C6-PFDA		86	40-130
13C3-PFBS		98	40-135
13C3-PFHxS		105	40-130
13C8-PFOS		90	40-130
13C7-PFUnA		81	30-130
13C2-PFDoA		77	10-130
13C2-PFTeDA		89	10-130
13C3-HFPO-DA		100	40-130
D7-NMeFOSE		87	10-130
D9-NEtFOSE		84	10-130
13C3-PFPrA		95	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MSD

Sample ID: BA09010-004MD
Batch: 29216
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Parameter	Sample Amount (ng/L)	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
TFSI	ND	780	790		1	100	8.1	70-140	30	01/13/2026 2254
11Cl-PF3OUdS	ND	1500	1100		1	76	13	55-160	30	01/13/2026 2254
9Cl-PF3ONS	ND	1500	1300		1	90	8.5	70-155	30	01/13/2026 2254
ADONA	ND	1500	1600		1	105	5.3	65-145	30	01/13/2026 2254
8:2FTS	ND	1500	1500		1	95	11	60-150	30	01/13/2026 2254
4:2FTS	ND	1500	1300		1	88	0.46	70-145	30	01/13/2026 2254
6:2FTS	ND	1500	1400		1	94	11	65-155	30	01/13/2026 2254
5:3FTCA	ND	10000	9200		1	92	2.5	70-135	30	01/13/2026 2254
HFPO-DA	ND	1600	1700		1	105	0.55	70-140	30	01/13/2026 2254
NEtFOSA	ND	400	400	M-03	1	100	0.82	65-145	30	01/13/2026 2254
NEtFOSAA	ND	400	400		1	101	1.7	70-145	30	01/13/2026 2254
NEtFOSE	ND	4000	4000	M-03	1	100	0.48	70-135	30	01/13/2026 2254
NMeFOSA	ND	400	400	M-03	1	99	0.43	60-150	30	01/13/2026 2254
NMeFOSAA	ND	400	400	M-03	1	100	4.4	50-140	30	01/13/2026 2254
NMeFOSE	ND	4000	3900	M-03	1	98	0.34	70-145	30	01/13/2026 2254
NFDHA	ND	800	810		1	102	3.2	50-150	30	01/13/2026 2254
PFEESA	ND	710	730		1	102	0.55	70-140	30	01/13/2026 2254
PFMPA	ND	800	800	M-03	1	100	0.31	55-140	30	01/13/2026 2254
PFMBA	ND	800	830	M-03	1	104	3.7	60-150	30	01/13/2026 2254
PFBS	ND	360	340		1	94	8.0	60-145	30	01/13/2026 2254
PFBA	ND	1600	1600	M-03	1	102	0.54	70-140	30	01/13/2026 2254
PFDS	ND	390	280		1	74	11	60-145	30	01/13/2026 2254
PFDA	ND	400	380		1	96	1.2	70-140	30	01/13/2026 2254
PFDoS	ND	390	310		1	80	9.7	50-145	30	01/13/2026 2254
PFDoA	ND	400	380		1	94	1.4	70-140	30	01/13/2026 2254
PFHpS	ND	380	370		1	98	11	70-150	30	01/13/2026 2254
PFHpA	ND	400	390		1	96	0.70	70-150	30	01/13/2026 2254
7:3FTCA	ND	10000	8100		1	81	4.0	50-145	30	01/13/2026 2254
PFHxS	ND	360	330		1	89	2.8	65-145	30	01/13/2026 2254
PFHxA	ND	400	370		1	93	1.8	70-145	30	01/13/2026 2254
PFNS	ND	380	310		1	81	12	65-145	30	01/13/2026 2254
PFNA	ND	400	370	M-03	1	93	10	70-150	30	01/13/2026 2254
PFOSA	ND	400	380	M-03	1	94	2.3	70-145	30	01/13/2026 2254
PFOS	25	370	350	M-03	1	88	5.2	55-150	30	01/13/2026 2254
PFOA	ND	400	420		1	104	7.3	70-150	30	01/13/2026 2254
PFPeS	ND	380	350		1	94	0.56	65-140	30	01/13/2026 2254
PFPeA	ND	800	810	M-03	1	102	1.3	65-135	30	01/13/2026 2254
PFPrA	ND	1600	1500		1	94	0.42	70-140	30	01/13/2026 2254
3:3FTCA	ND	2000	2000	M-03	1	99	12	65-130	30	01/13/2026 2254
PFTeDA	ND	400	380		1	95	5.6	60-140	30	01/13/2026 2254
PFTrDA	ND	400	390		1	98	1.4	65-140	30	01/13/2026 2254
PFUnA	ND	400	360		1	91	0.37	70-145	30	01/13/2026 2254

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MSD

Sample ID: BA09010-004MD
Batch: 29216
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/12/2026 0952

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		111	40-200
13C2-6:2FTS		113	40-200
13C2-8:2FTS		100	40-300
13C8-PFOSA		96	40-130
D5-NEtFOSA		73	10-130
D3-NMeFOSA		74	10-130
D5-NEtFOSAA		86	25-135
D3-NMeFOSAA		88	40-170
13C4-PFBA		104	5-130
13C5-PFPeA		99	40-130
13C5-PFHxA		103	40-130
13C4-PFHpA		102	40-130
13C8-PFOA		100	40-130
13C9-PFNA		106	40-130
13C6-PFDA		91	40-130
13C3-PFBS		109	40-135
13C3-PFHxS		113	40-130
13C8-PFOS		109	40-130
13C7-PFUnA		84	30-130
13C2-PFDoA		78	10-130
13C2-PFTeDA		82	10-130
13C3-HFPO-DA		102	40-130
D7-NMeFOSE		95	10-130
D9-NEtFOSE		92	10-130
13C3-PFPrA		98	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29225-001
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
TFSI	0.20	U	1	0.40	0.20	0.076	ng/g	01/13/2026 1706
11Cl-PF3OUdS	0.38	U	1	0.80	0.38	0.21	ng/g	01/13/2026 1706
9Cl-PF3ONS	0.37	U	1	0.80	0.37	0.21	ng/g	01/13/2026 1706
ADONA	0.38	U	1	0.80	0.38	0.18	ng/g	01/13/2026 1706
8:2FTS	0.38	U	1	0.80	0.38	0.25	ng/g	01/13/2026 1706
4:2FTS	0.37	U	1	0.80	0.37	0.30	ng/g	01/13/2026 1706
6:2FTS	0.57	U	1	0.80	0.57	0.52	ng/g	01/13/2026 1706
5:3FTCA	2.5	U	1	5.0	2.5	1.7	ng/g	01/13/2026 1706
HFPO-DA	0.40	U	1	0.80	0.40	0.21	ng/g	01/13/2026 1706
NEtFOSA	0.10	U	1	0.20	0.10	0.079	ng/g	01/13/2026 1706
NEtFOSAA	0.10	U	1	0.20	0.10	0.089	ng/g	01/13/2026 1706
NEtFOSE	1.0	U	1	2.0	1.0	0.67	ng/g	01/13/2026 1706
NMeFOSA	0.10	U	1	0.20	0.10	0.060	ng/g	01/13/2026 1706
NMeFOSAA	0.15	U	1	0.20	0.15	0.15	ng/g	01/13/2026 1706
NMeFOSE	1.0	U	1	2.0	1.0	0.64	ng/g	01/13/2026 1706
NFDHA	0.20	U	1	0.40	0.20	0.16	ng/g	01/13/2026 1706
PFEESA	0.18	U	1	0.40	0.18	0.078	ng/g	01/13/2026 1706
PFMPA	0.20	U	1	0.40	0.20	0.13	ng/g	01/13/2026 1706
PFMBA	0.20	U	1	0.40	0.20	0.14	ng/g	01/13/2026 1706
PFBS	0.089	U	1	0.20	0.089	0.079	ng/g	01/13/2026 1706
PFBA	0.40	U	1	0.80	0.40	0.25	ng/g	01/13/2026 1706
PFDS	0.10	U	1	0.20	0.10	0.040	ng/g	01/13/2026 1706
PFDA	0.15	U	1	0.20	0.15	0.11	ng/g	01/13/2026 1706
PFDoS	0.10	U	1	0.20	0.10	0.068	ng/g	01/13/2026 1706
PFDoA	0.10	U	1	0.20	0.10	0.097	ng/g	01/13/2026 1706
PFHpS	0.10	U	1	0.20	0.10	0.082	ng/g	01/13/2026 1706
PFHpA	0.10	U	1	0.20	0.10	0.065	ng/g	01/13/2026 1706
7:3FTCA	2.5	U	1	5.0	2.5	1.8	ng/g	01/13/2026 1706
PFHxS	0.091	U	1	0.20	0.091	0.065	ng/g	01/13/2026 1706
PFHxA	0.10	U	1	0.20	0.10	0.038	ng/g	01/13/2026 1706
PFNS	0.10	U	1	0.20	0.10	0.084	ng/g	01/13/2026 1706
PFNA	0.10	U	1	0.20	0.10	0.096	ng/g	01/13/2026 1706
PFOSA	0.10	U	1	0.20	0.10	0.078	ng/g	01/13/2026 1706
PFOS	0.14	UM-03	1	0.20	0.14	0.12	ng/g	01/13/2026 1706
PFOA	0.15	U	1	0.20	0.15	0.11	ng/g	01/13/2026 1706
PFPeS	0.094	U	1	0.20	0.094	0.051	ng/g	01/13/2026 1706
PFPeA	0.20	U	1	0.40	0.20	0.15	ng/g	01/13/2026 1706
PFPrA	0.72	U	1	0.80	0.72	0.67	ng/g	01/13/2026 1706
3:3FTCA	0.75	U	1	1.0	0.75	0.54	ng/g	01/13/2026 1706
PFTeDA	0.10	U	1	0.20	0.10	0.099	ng/g	01/13/2026 1706
PFTrDA	0.10	U	1	0.20	0.10	0.058	ng/g	01/13/2026 1706
PFUnA	0.10	U	1	0.20	0.10	0.10	ng/g	01/13/2026 1706

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29225-001
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		106	40-165
13C2-6:2FTS		109	40-215
13C2-8:2FTS		90	40-275
13C8-PFOSA		89	40-130
D5-NEtFOSA		44	10-130
D3-NMeFOSA		57	10-130
D5-NEtFOSAA		85	40-150
D3-NMeFOSAA		88	40-135
13C4-PFBA		108	8-130
13C5-PFPeA	M-03	102	35-130
13C5-PFHxA		99	40-130
13C4-PFHpA		101	40-130
13C8-PFOA		96	40-130
13C9-PFNA		96	40-130
13C6-PFDA		87	40-130
13C3-PFBS		88	40-135
13C3-PFHxS		100	40-130
13C8-PFOS		106	40-130
13C7-PFUnA		70	40-130
13C2-PFDoA		56	40-130
13C2-PFTeDA		41	20-130
13C3-HFPO-DA		106	40-130
D7-NMeFOSE		76	20-130
D9-NEtFOSE		67	15-130
13C3-PFPrA		87	8-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29225-002
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	9.8	9.0		1	92	70-140	01/13/2026 1716
11Cl-PF3OUdS	19	13		1	67	45-160	01/13/2026 1716
9Cl-PF3ONS	19	18		1	94	70-150	01/13/2026 1716
ADONA	19	20		1	105	70-160	01/13/2026 1716
8:2FTS	19	23		1	119	70-150	01/13/2026 1716
4:2FTS	19	18		1	93	60-150	01/13/2026 1716
6:2FTS	19	19		1	99	55-200	01/13/2026 1716
5:3FTCA	130	140		1	110	60-130	01/13/2026 1716
HFPO-DA	20	21		1	106	70-145	01/13/2026 1716
NEtFOSA	5.0	5.6	M-03	1	112	70-140	01/13/2026 1716
NEtFOSAA	5.0	5.6	M-03	1	111	65-165	01/13/2026 1716
NEtFOSE	50	53	M-03	1	106	70-135	01/13/2026 1716
NMeFOSA	5.0	4.9	M-03	1	98	70-155	01/13/2026 1716
NMeFOSAA	5.0	5.2	M-03	1	104	65-155	01/13/2026 1716
NMeFOSE	50	51	M-03	1	103	70-140	01/13/2026 1716
NFDHA	10	11		1	111	60-155	01/13/2026 1716
PFEESA	8.9	11		1	118	70-140	01/13/2026 1716
PFMPA	10	10	M-03	1	101	30-140	01/13/2026 1716
PFMBA	10	11	M-03	1	107	60-150	01/13/2026 1716
PFBS	4.4	4.8		1	107	65-145	01/13/2026 1716
PFBA	20	22	M-03	1	108	70-140	01/13/2026 1716
PFDS	4.8	3.5		1	72	40-155	01/13/2026 1716
PFDA	5.0	4.8		1	95	70-155	01/13/2026 1716
PFDoS	4.8	2.1		1	44	25-160	01/13/2026 1716
PFDoA	5.0	4.8		1	97	70-150	01/13/2026 1716
PFHpS	4.8	4.6		1	97	65-155	01/13/2026 1716
PFHpA	5.0	4.8		1	97	65-145	01/13/2026 1716
7:3FTCA	130	120		1	93	60-150	01/13/2026 1716
PFHxS	4.6	4.1		1	90	60-150	01/13/2026 1716
PFHxA	5.0	5.4		1	108	65-140	01/13/2026 1716
PFNS	4.8	4.1	M-03	1	85	55-140	01/13/2026 1716
PFNA	5.0	4.5	M-03	1	90	70-155	01/13/2026 1716
PFOSA	5.0	4.8	M-03	1	97	70-140	01/13/2026 1716
PFOS	4.6	4.0	M-03	1	87	65-160	01/13/2026 1716
PFOA	5.0	5.5		1	111	70-150	01/13/2026 1716
PFPeS	4.7	4.6		1	97	55-160	01/13/2026 1716
PFPeA	10	11	M-03	1	106	60-150	01/13/2026 1716
PFPrA	20	20	M-03	1	98	70-140	01/13/2026 1716
3:3FTCA	25	25	M-03	1	99	45-130	01/13/2026 1716
PFTeDA	5.0	4.4		1	88	65-150	01/13/2026 1716
PFTrDA	5.0	3.7		1	74	65-150	01/13/2026 1716
PFUnA	5.0	4.6		1	91	70-155	01/13/2026 1716

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29225-002
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		102	40-165
13C2-6:2FTS		105	40-215
13C2-8:2FTS		89	40-275
13C8-PFOSA		98	40-130
D5-NEtFOSA		55	10-130
D3-NMeFOSA		69	10-130
D5-NEtFOSAA		93	40-150
D3-NMeFOSAA		101	40-135
13C4-PFBA		117	8-130
13C5-PFPeA	M-03	108	35-130
13C5-PFHxA		106	40-130
13C4-PFHpA		114	40-130
13C8-PFOA		107	40-130
13C9-PFNA		125	40-130
13C6-PFDA		108	40-130
13C3-PFBS		94	40-135
13C3-PFHxS		110	40-130
13C8-PFOS		119	40-130
13C7-PFUnA		92	40-130
13C2-PFDoA		76	40-130
13C2-PFTeDA		50	20-130
13C3-HFPO-DA		116	40-130
D7-NMeFOSE		89	20-130
D9-NEtFOSE		80	15-130
13C3-PFPrA		104	8-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
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* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29225-102
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	0.98	0.86	M-03	1	87	70-140	01/13/2026 1726
11Cl-PF3OUdS	1.9	1.1		1	61	45-160	01/13/2026 1726
9Cl-PF3ONS	1.9	1.7		1	94	70-150	01/13/2026 1726
ADONA	1.9	2.2		1	117	70-160	01/13/2026 1726
8:2FTS	1.9	2.0		1	102	70-150	01/13/2026 1726
4:2FTS	1.9	2.0		1	108	60-150	01/13/2026 1726
6:2FTS	1.9	2.1		1	110	55-200	01/13/2026 1726
5:3FTCA	13	15		1	122	60-130	01/13/2026 1726
HFPO-DA	2.0	2.3		1	114	70-145	01/13/2026 1726
NEtFOSA	0.50	0.64	M-03	1	127	70-140	01/13/2026 1726
NEtFOSAA	0.50	0.39		1	78	65-165	01/13/2026 1726
NEtFOSE	5.0	5.6	M-03	1	111	70-135	01/13/2026 1726
NMeFOSA	0.50	0.52	M-03	1	104	70-155	01/13/2026 1726
NMeFOSAA	0.50	0.54	M-03	1	108	65-155	01/13/2026 1726
NMeFOSE	5.0	5.3	M-03	1	105	70-140	01/13/2026 1726
NFDHA	1.0	1.2	M-03	1	116	60-155	01/13/2026 1726
PFEESA	0.89	1.0		1	117	70-140	01/13/2026 1726
PFMPA	1.0	1.1	M-03	1	108	30-140	01/13/2026 1726
PFMBA	1.0	1.1	M-03	1	114	60-150	01/13/2026 1726
PFBS	0.44	0.53		1	121	65-145	01/13/2026 1726
PFBA	2.0	2.2	M-03	1	111	70-140	01/13/2026 1726
PFDS	0.48	0.24	M-03	1	50	40-155	01/13/2026 1726
PFDA	0.50	0.46	M-03	1	91	70-155	01/13/2026 1726
PFDoS	0.48	0.18	M-03	1	38	25-160	01/13/2026 1726
PFDoA	0.50	0.56		1	111	70-150	01/13/2026 1726
PFHpS	0.47	0.48		1	103	65-155	01/13/2026 1726
PFHpA	0.50	0.49	M-03	1	98	65-145	01/13/2026 1726
7:3FTCA	13	13	M-03	1	107	60-150	01/13/2026 1726
PFHxS	0.45	0.47	M-03	1	104	60-150	01/13/2026 1726
PFHxA	0.50	0.55		1	110	65-140	01/13/2026 1726
PFNS	0.48	0.41		1	86	55-140	01/13/2026 1726
PFNA	0.50	0.49	M-03	1	97	70-155	01/13/2026 1726
PFOSA	0.50	0.52	M-03	1	103	70-140	01/13/2026 1726
PFOS	0.46	0.46	M-03	1	99	65-160	01/13/2026 1726
PFOA	0.50	0.56	M-03	1	112	70-150	01/13/2026 1726
PFPeS	0.47	0.47	M-03	1	99	55-160	01/13/2026 1726
PFPeA	1.0	1.1	M-03	1	111	60-150	01/13/2026 1726
PFPrA	2.0	2.0	M-03	1	100	70-140	01/13/2026 1726
3:3FTCA	2.5	2.3	M-03	1	90	45-130	01/13/2026 1726
PFTeDA	0.50	0.58	M-03	1	115	65-150	01/13/2026 1726
PFTrDA	0.50	0.38		1	76	65-150	01/13/2026 1726
PFUnA	0.50	0.53	M-03	1	106	70-155	01/13/2026 1726

LOQ = Limit of Quantitation
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J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29225-102
Batch: 29225
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/12/2026 1419

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		100	40-165
13C2-6:2FTS		105	40-215
13C2-8:2FTS		100	40-275
13C8-PFOSA		84	40-130
D5-NEtFOSA		42	10-130
D3-NMeFOSA		54	10-130
D5-NEtFOSAA		89	40-150
D3-NMeFOSAA		83	40-135
13C4-PFBA		106	8-130
13C5-PFPeA	M-03	96	35-130
13C5-PFHxA		90	40-130
13C4-PFHpA		95	40-130
13C8-PFOA		102	40-130
13C9-PFNA		111	40-130
13C6-PFDA		100	40-130
13C3-PFBS		93	40-135
13C3-PFHxS		109	40-130
13C8-PFOS		103	40-130
13C7-PFUnA		81	40-130
13C2-PFDoA		56	40-130
13C2-PFTeDA		35	20-130
13C3-HFPO-DA		95	40-130
D7-NMeFOSE		74	20-130
D9-NEtFOSE		65	15-130
13C3-PFPrA		88	8-130

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DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
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Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA09010

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BA09010-001	1	Perfluorodecanoic acid (PFDA)	M-03
1633	BA09010-001	1	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BA09010-001	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BA09010-001	1	Perfluorohexanoic acid (PFHxA)	M-03
1633	BA09010-001	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA09010-001	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA09010-001	1	13C5-PFPeA	M-03
1633	BA09010-002	1	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	BA09010-002	1	Perfluorohexanoic acid (PFHxA)	M-03
1633	BA09010-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA09010-002	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA09010-002	1	13C5-PFPeA	M-03
1633	BA09010-003	1	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	BA09010-003	1	Perfluorodecanoic acid (PFDA)	M-03
1633	BA09010-003	1	Perfluorohexanoic acid (PFHxA)	M-03
1633	BA09010-003	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA09010-003	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA09010-003	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BA09010-004	1	1H,1H,2H,2H-Perfluorohexane sulfonic	M-03
1633	BA09010-004	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA09010-004	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA09010-004	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BA09010-004	1	13C5-PFPeA	M-03
1633	BA09010-005	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BA09010-005	1	D5-NEtFOSAA	M-03
1633	BA09010-005	1	13C5-PFPeA	M-03
1633	BQ29225-102	1	Bis(trifluoromethylsulfonyl)amine (TFSI)	M-03
1633	BQ29225-002	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29225-102	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29225-002	1	N-ethyl	M-03
1633	BQ29225-002	1	N-ethyl	M-03
1633	BQ29225-102	1	N-ethyl	M-03
1633	BQ29225-002	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29225-102	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29225-002	1	N-methyl	M-03
1633	BQ29225-102	1	N-methyl	M-03
1633	BQ29225-002	1	N-methyl	M-03
1633	BQ29225-102	1	N-methyl	M-03
1633	BQ29225-102	1	Nonafluoro-3,6-dioxaheptanoic acid	M-03
1633	BQ29225-002	1	Perfluoro-3-methoxypropanoic acid	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA09010

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BQ29225-102	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29225-002	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29225-102	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29225-002	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29225-102	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29225-102	1	Perfluorodecanesulfonic acid (PFDS)	M-03
1633	BQ29225-102	1	Perfluorodecanoic acid (PFDA)	M-03
1633	BQ29225-102	1	Perfluorododecanesulfonic acid (PFDoS)	M-03
1633	BQ29225-102	1	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BQ29225-102	1	3-Perfluoroheptyl propanoic acid	M-03
1633	BQ29225-102	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BQ29225-002	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BQ29225-002	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29225-102	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29225-002	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29225-102	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29225-001	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29225-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29225-102	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29225-102	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BQ29225-102	1	Perfluoropentanesulfonic acid (PFPeS)	M-03
1633	BQ29225-002	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29225-102	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29225-002	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29225-102	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29225-002	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29225-102	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29225-102	1	Perfluorotetradecanoic acid (PFTeDA)	M-03
1633	BQ29225-102	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BQ29225-001	1	13C5-PFPeA	M-03
1633	BQ29225-002	1	13C5-PFPeA	M-03
1633	BQ29225-102	1	13C5-PFPeA	M-03
1633	BQ29216-102	1	Bis(trifluoromethylsulfonyl)amine (TFSI)	M-03
1633	BQ29216-001	1	1H,1H,2H,2H-Perfluorohexane sulfonic	M-03
1633	BQ29216-102	1	1H,1H,2H,2H-Perfluorohexane sulfonic	M-03
1633	BQ29216-002	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29216-102	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BA09010-004MS	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BA09010-004MD	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29216-002	1	N-ethyl	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA09010

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BQ29216-102	1	N-ethyl	M-03
1633	BQ29216-002	1	N-ethyl	M-03
1633	BQ29216-102	1	N-ethyl	M-03
1633	BA09010-004MS	1	N-ethyl	M-03
1633	BA09010-004MD	1	N-ethyl	M-03
1633	BQ29216-002	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29216-102	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BA09010-004MS	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BA09010-004MD	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29216-002	1	N-methyl	M-03
1633	BQ29216-102	1	N-methyl	M-03
1633	BA09010-004MD	1	N-methyl	M-03
1633	BQ29216-002	1	N-methyl	M-03
1633	BQ29216-102	1	N-methyl	M-03
1633	BA09010-004MS	1	N-methyl	M-03
1633	BA09010-004MD	1	N-methyl	M-03
1633	BQ29216-002	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29216-102	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BA09010-004MS	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BA09010-004MD	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29216-002	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29216-102	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BA09010-004MS	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BA09010-004MD	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29216-002	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29216-102	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BA09010-004MS	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BA09010-004MD	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29216-102	1	Perfluorodecanoic acid (PFDA)	M-03
1633	BQ29216-102	1	Perfluorododecanesulfonic acid (PFDoS)	M-03
1633	BQ29216-002	1	Perfluorododecanoic acid (PFDoA)	M-03
1633	BQ29216-102	1	Perfluorododecanoic acid (PFDoA)	M-03
1633	BQ29216-102	1	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BQ29216-102	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BQ29216-102	1	Perfluorohexanoic acid (PFHxA)	M-03
1633	BQ29216-002	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BQ29216-102	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BQ29216-002	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29216-102	1	Perfluorononanoic acid (PFNA)	M-03
1633	BA09010-004MS	1	Perfluorononanoic acid (PFNA)	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA09010

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BA09010-004MD	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29216-002	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29216-102	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BA09010-004MS	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BA09010-004MD	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29216-001	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29216-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29216-102	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA09010-004MS	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA09010-004MD	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29216-102	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BQ29216-102	1	Perfluoropentanesulfonic acid (PFPeS)	M-03
1633	BQ29216-002	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29216-102	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BA09010-004MS	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BA09010-004MD	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29216-102	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29216-002	1	3-Perfluoropropyl propanoic acid	M-03
1633	BA09010-004MS	1	3-Perfluoropropyl propanoic acid	M-03
1633	BA09010-004MD	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29216-102	1	Perfluorotridecanoic acid (PFTrDA)	M-03
1633	BQ29216-002	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BQ29216-102	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BQ29216-002	1	13C4-PFBA	M-03
1633	BQ29216-102	1	13C4-PFBA	M-03
1633	BQ29216-001	1	13C5-PFPeA	M-03
1633	BA09010-004MS	1	13C5-PFPeA	M-03
1633	BQ29216-102	1	13C4-PFHpA	M-03
1633	BQ29216-002	1	13C3-PFBS	M-03
1633	BQ29216-102	1	13C8-PFOS	M-03
1633	BQ29216-002	1	13C7-PFUnA	M-03
1633	BQ29216-102	1	13C2-PFDoA	M-03
1633	BQ29216-102	1	13C2-PFTeDA	M-03
1633	BQ29216-002	1	D9-NEtFOSE	M-03
1633	BQ29216-102	1	D9-NEtFOSE	M-03

If you have any questions regarding this report, please contact the Pace Project Manager listed on the cover page.

Chain of Custody
and
Miscellaneous Documents

Sub-Contract Chain of Custody

Batch Date/Time: 01/08/26 14:52
Sub-Contract Lab: PACEWCSC
Address: 106 Vantage Point Dr.
City/State: West Columbia, SC 29172
Contact:
Edward.Barnett@pacelabs.com
Owner Lab: PACEMTJL
Address: 12065 Lebanon Rd.
City/State: Mt. Juliet, TN 37122
Phone: (615) 773-9756
Fax: (615) 758-5859

WO: WG2571472
Email: MTJLSubcontTeam@pacelabs.com
Results Due Date: 01/29/26
ESC Purchase Order #: L1933615
Send Reports to: Skylar S DeBoer

Pace Analytical

12065 Lebanon Rd.
Mt. Juliet, TN 37122
Phone:(615) 773-9756
Fax:(615) 758-5859

Sample ID / Container ID	Matrix	State	Collect Date	Description	Sample Number Lab Use Only	Sample Comments Lab Use Only
CL-P1636-HP51-SPT-05 / PFAS-90mlPP-NoPres - 54989313	SS	NC	01/07/26 09:50	SUBPFAS1633	1. L1933615-01	DOD, QC4
CL-P1636-HP51-SPT-02 / PFAS-90mlPP-NoPres - 54989314	SS	NC	01/07/26 12:15	SUBPFAS1633	2. L1933615-02	DOD, QC4
CL-P1636-HP51-SPT-01 / PFAS-90mlPP-NoPres - 54989315	SS	NC	01/07/26 11:15	SUBPFAS1633	3. L1933615-03	DOD, QC4
CL-P1636-HP51-SPT-05 / PFAS-250HDPE-NoPres - 54989316 / PFAS-250HDPE-NoPres - 54989317	GW	NC	01/07/26 10:30	PFAS1633	4. L1933615-04	DOD, QC4
CL-SB-IDW / PFAS-90mlPP-NoPres - 54989318	SS	NC	01/07/26 11:55	SUBPFAS1633	5. L1933615-05	DOD, QC4

*– Container used for multiple Samples and/or Analyses

T=1.3°C

Relinquished by: [signature] Date 1-9-26

Received by: Date

Relinquished by: FEDEX Date 1/9/26 0912

Received by: [signature] PACE Date 1/9/26 0912

BA09010

ETB2

DC#_Title: ENV-FRM-WCOL-0286 v02_Samples Receipt Checklist (SRC)
Effective Date: 8/2/2022

Sample Receipt Checklist (SRC)

Client: Pace National Cooler Inspected by/date: MAL / 1/9/26 Lot #: BA0901O

Means of receipt: [ ] Pace [ ] Client [ ] UPS [✔] FedEx [ ] Other:

[✔] Yes	[ ] No		1. Were custody seals present on the cooler?
[✔] Yes	[ ] No	[ ] NA	2. If custody seals were present, were they intact and unbroken?

pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA

Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: 337205

1.3 / 1.3 °C NA / NA °C NA / NA °C NA / NA °C

Method: [✔] Temperature Blank [ ] Against Bottles IR Gun ID: 8 IR Gun Correction Factor: 0 °C

Method of coolant: [✔] Wet Ice [ ] Ice Packs [ ] Dry Ice [ ] None

[✔] Yes	[ ] No	[ ] NA	3. Were all coolers received at or below 6.0°C? If no, was Project Manager notified? PM was Notified by: phone / email / face-to-face (circle one).
[✔] Yes	[ ] No	[ ] NA	4. Is the commercial courier's packing slip attached to this form?
[✔] Yes	[ ] No		5. Were proper custody procedures (relinquished/received) followed?
[✔] Yes	[ ] No		6. Were sample IDs listed on the COC and all sample containers?
[✔] Yes	[ ] No		7. Was collection date & time listed on the COC and all sample containers?
[✔] Yes	[ ] No		8. Did all container label information (ID, date, time) agree with the COC?
[✔] Yes	[ ] No		9. Were tests to be performed listed on the COC?
[✔] Yes	[ ] No		10. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
[✔] Yes	[ ] No		11. Was adequate sample volume available?
[✔] Yes	[ ] No		12. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
[✔] Yes	[ ] No		13. Were all samples containers accounted for? (No missing/excess)
[ ] Yes	[ ] No	[✔] NA	14. Were VOA, 8015C and RSK-175 samples free of bubbles >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
[ ] Yes	[ ] No	[✔] NA	15. Were all DRO/metals/nutrient samples received at a pH of < 2?
[ ] Yes	[ ] No	[✔] NA	16. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
[ ] Yes	[ ] No	[✔] NA	17. Were all applicable NH_3/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
[ ] Yes	[ ] No	[✔] NA	18. Was the quote number listed on the container label? If yes, Quote #

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # NA, LI Time of preservation NA. If more than one preservative is needed, please note in the comments below.

Sample(s) NA were received with bubbles >6 mm in diameter.

Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is *no*) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Unique ID: NA.

Comments:

Qualtrax ID: 56360 Pace® Analytical Services, LLC Page 1 of 1

IDW Summary – Liquid

IDW Liquid Analytical Results
Marine Corps Base Camp Lejeune - Jacksonville, North Carolina
Terracon Project No. K625P194

Sample ID *:	CL-LIQUID-IDW-01	EPA Maximum Concentration for Toxicity Characteristic	15A NCAC 02L .0202 Groundwater Quality Standards
Sample Delivery Group No.:	L1936532/L1936535		
Sample Date:	1/13/26		
Collection Depth (ft bls):	55-gal drum		
PFAS via EPA Method 1633 (ng/L)			
Perfluorobutanesulfonic acid (PFBS)	30.0	NP	NP
Perfluorobutanoic acid (PFBA)	20.0		NP
Perfluoroheptanoic acid (PFHpA)	15.0		NP
Perfluorohexanesulfonic acid (PFHxS)	16.0		NP
Perfluorohexanoic acid (PFHxA)	37.0		NP
Perfluorooctanoic acid (PFOA)	24.0		0.001
Perfluoropentanoic Acid (PFPeA)	36.0		NP
Perfluoropropanoic acid (PFPrA)	68.0		NP
Total Petroleum Hydrocarbons via EPA Method 8015 DRO/GRO (mg/L)			
TPH-DRO	0.434	NP	0.70
TPH-GRO	ND		10.0
TCLP RCRA 8 Metals Method Detection Limit via EPA Method 6000/7000 series (mg/L)			
Arsenic	ND	5.00	10.00
Barium	0.106	100.00	700.00
Cadmium	ND	1.00	2.00
Chromium	ND	5.00	10.00
Mercury	ND	0.20	1.00
Lead	ND	5.00	15.00
Selenium	ND	1.00	20.00
Silver	ND	5.00	20.00
Reactivity, Ignitability, Corrosivity, Paint Filter (mg/L)			
REACTIVE CYANIDE	ND	NP	
REACTIVE CYANIDE	ND		
REACTIVE SULFIDE	ND		
FLASHPOINT	DNF AT 170		
Paint Filter	NA		
pH (SU)	6.84		
BTEX - Volatile Organic Compounds via EPA 8260 (ug/L)			
BENZENE	ND	500.00	1.00
TOLUENE	0.398	NP	600.00
ETHYLBENZENE	ND	NP	600.00
TOTAL XYLENES	ND	NP	500.00
TCLP (VOCs, SVOCs, Pesticides, Herbicides, PCBs) (mg/kg)			
	ND	NP	

* See attached for corresponding borings sampled per set of drums

ft bls: feet below land surface

ND = Analyte Not Detected Above Laboratory's Method Detection Limit

NA = Not Analyzed NP = Not Published

ANALYTICAL REPORT

January 30, 2026

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Terracon - Wilmington, NC

Sample Delivery Group:	L1936532
Samples Received:	01/15/2026
Project Number:	K625P194
Description:	Marine Corps Base Camp Lejeune
Report To:	Danielle Foster 2108 Capital Drive Suite 103 Wilmington, NC 28405

Entire Report Reviewed By:

Heather J Wagner
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

CL-LIQUID-IDW-01 L1936532-03

Collected by	Collected date/time	Received date/time
Baylee Kurtz	01/13/26 17:30	01/15/26 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 4500 CN E-2016	WG2678672	1	01/21/26 11:03	01/21/26 18:17	WFS	Mt. Juliet, TN
Wet Chemistry by Method 4500 S2 D-2011	WG2676921	1	01/17/26 19:33	01/17/26 19:33	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2679095	1	01/21/26 19:00	01/21/26 19:00	KRB	Mt. Juliet, TN
Wet Chemistry by Method D93/1010A	WG2676424	1	01/17/26 20:30	01/17/26 20:30	ARV	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015C	WG2676947	5	01/18/26 05:20	01/18/26 05:20	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2678955	1	01/21/26 17:04	01/21/26 17:04	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015C	WG2677022	1	01/20/26 09:13	01/23/26 16:06	TJD	Mt. Juliet, TN

CL-LIQUID-IDW-01 L1936532-04

Collected by	Collected date/time	Received date/time
Baylee Kurtz	01/13/26 17:30	01/15/26 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG2676733	1	01/18/26 01:57	01/18/26 01:57	PNK	Mt. Juliet, TN
Preparation by Method 1311	WG2676979	1	01/18/26 03:44	01/18/26 03:44	PNK	Mt. Juliet, TN
Mercury by Method 7470A	WG2677604	1	01/19/26 12:37	01/20/26 15:56	NDL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2677718	1	01/20/26 18:47	01/20/26 22:24	MAP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2677546	1	01/20/26 15:46	01/20/26 15:46	ACG	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG2677607	1	01/20/26 07:23	01/21/26 12:38	HLA	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG2677611	1	01/20/26 11:57	01/22/26 00:26	NWH	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG2677611	1	01/20/26 11:57	01/22/26 00:26	NWH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG2680416	1	01/23/26 16:08	01/27/26 18:15	MBE	Mt. Juliet, TN

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Heather J Wagner
Project Manager

Project Comments

All Reactive Cyanide results reported in the attached report were determined as totals using method 4500 CN E-2016.

All Reactive Sulfide results reported in the attached report were determined as totals using method 4500 S2 D-2011.

Paint Filter analysis could not be performed on sample CL-LIQUID-IDW-01 as requested on the COC. Paint Filter is not an applicable method for liquid sample matrix.

Sample Delivery Group (SDG) Narrative

The following samples were prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.

Batch	Method	Lab Sample ID
WG2679095	9040C	L1936532-03

Wet Chemistry by Method 4500 CN E-2016

RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Batch	Lab Sample ID	Analytes
WG2678672	(DUP) R4327418-7	Reactive Cyanide

Volatile Organic Compounds (GC/MS) by Method 8260D

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2677546	(MSD) R4327201-5	1,1-Dichloroethene, Benzene, Carbon tetrachloride, Chlorobenzene, Chloroform, Tetrachloroethene and Trichloroethene

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2677546	(MSD) R4327201-5	1,1-Dichloroethene, Benzene, Carbon tetrachloride, Chlorobenzene, Chloroform, Tetrachloroethene, Trichloroethene and Vinyl chloride

Semi-Volatile Organic Compounds (GC) by Method 8015C

Surrogate recovery cannot be used for control limit evaluation due to dilution.

Batch	Analyte	Lab Sample ID
WG2677047	o-Terphenyl	L1936532-01

Semi-Volatile Organic Compounds (GC) by Method 8015C

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2677047	(MS) R4326921-3, (MSD) R4326921-4	TPH (GC/FID) High Fraction

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

The associated batch QC was below the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG2680416	(LCS) R4329224-1, L1936532-02, 04	Pyridine

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2680416	(MS) R4329224-3, (MSD) R4329224-4	Pyridine

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 4500 CN E-2016

Analyte	Result mg/l	Qualifier	LOQ mg/l	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND		0.00500	1	01/21/2026 18:17	WG2678672

Wet Chemistry by Method 4500 S2 D-2011

Analyte	Result mg/l	Qualifier	LOQ mg/l	Dilution	Analysis date / time	Batch
Reactive Sulfide	ND		0.0500	1	01/17/2026 19:33	WG2676921

Wet Chemistry by Method 9040C

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	6.84	T8	1	01/21/2026 19:00	WG2679095

Sample Narrative:

L1936532-03 WG2679095: 6.84 at 18.4C

Wet Chemistry by Method D93/1010A

Analyte	Result deg F	Qualifier	Dilution	Analysis date / time	Batch
Flashpoint	DNF at 170		1	01/17/2026 20:30	WG2676424

Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	8006-61-9	375	U	297	375	750	5	01/18/2026 05:20	WG2676947
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*105*				*62.0-128*		*01/18/2026 05:20*	WG2676947

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Benzene	71-43-2	0.500	U	0.320	0.500	1.00	1	01/21/2026 17:04	WG2678955
Ethylbenzene	100-41-4	0.500	U	0.234	0.500	1.00	1	01/21/2026 17:04	WG2678955
Toluene	108-88-3	0.398	J	0.274	0.600	1.00	1	01/21/2026 17:04	WG2678955
Total Xylenes	1330-20-7	1.50	U	0.319	1.50	3.00	1	01/21/2026 17:04	WG2678955
(S) Toluene-d8	*2037-26-5*	*102*				*89.0-112*		*01/21/2026 17:04*	WG2678955
(S) 4-Bromofluorobenzene	*460-00-4*	*102*				*85.0-114*		*01/21/2026 17:04*	WG2678955
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*89.4*				*81.0-118*		*01/21/2026 17:04*	WG2678955

Semi-Volatile Organic Compounds (GC) by Method 8015C

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	68334-30-5	434		60.5	90.0	100	1	01/23/2026 16:06	WG2677022
(S) o-Terphenyl	*84-15-1*	*94.2*				*56.0-125*		*01/23/2026 16:06*	WG2677022

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		1/18/2026 3:44:45 AM	WG2676979
TCLP ZHE Extraction	-		1/18/2026 1:57:36 AM	WG2676733
Initial pH	N/A		1/18/2026 3:44:45 AM	WG2676979
Final pH	N/A		1/18/2026 3:44:45 AM	WG2676979

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	01/20/2026 15:56	WG2677604

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	01/20/2026 22:24	WG2677718
Barium	0.106		0.100	100	1	01/20/2026 22:24	WG2677718
Cadmium	ND		0.100	1	1	01/20/2026 22:24	WG2677718
Chromium	ND		0.100	5	1	01/20/2026 22:24	WG2677718
Lead	ND		0.100	5	1	01/20/2026 22:24	WG2677718
Selenium	ND		0.100	1	1	01/20/2026 22:24	WG2677718
Silver	ND		0.100	5	1	01/20/2026 22:24	WG2677718

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.0500	0.50	1	01/20/2026 15:46	WG2677546
Carbon tetrachloride	ND		0.0500	0.50	1	01/20/2026 15:46	WG2677546
Chlorobenzene	ND		0.0500	100	1	01/20/2026 15:46	WG2677546
Chloroform	ND		0.250	6	1	01/20/2026 15:46	WG2677546
1,2-Dichloroethane	ND		0.0500	0.50	1	01/20/2026 15:46	WG2677546
1,1-Dichloroethene	ND		0.0500	0.70	1	01/20/2026 15:46	WG2677546
2-Butanone (MEK)	ND		0.500	200	1	01/20/2026 15:46	WG2677546
Tetrachloroethene	ND		0.0500	0.70	1	01/20/2026 15:46	WG2677546
Trichloroethene	ND		0.0500	0.50	1	01/20/2026 15:46	WG2677546
Vinyl chloride	ND		0.0500	0.20	1	01/20/2026 15:46	WG2677546
(S) Toluene-d8	*101*		*89.0-112*			*01/20/2026 15:46*	WG2677546
(S) 4-Bromofluorobenzene	*99.5*		*85.0-114*			*01/20/2026 15:46*	WG2677546
(S) 1,2-Dichloroethane-d4	*106*		*81.0-118*			*01/20/2026 15:46*	WG2677546

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
2,4,5-TP (Silvex)	ND		0.00200	1	1	01/21/2026 12:38	WG2677607
2,4-D	ND		0.00200	10	1	01/21/2026 12:38	WG2677607
(S) 2,4-Dichlorophenyl Acetic Acid	*68.0*		*32.0-138*			*01/21/2026 12:38*	WG2677607

Pesticides (GC) by Method 8081

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Chlordane	ND		0.00500	0.03	1	01/22/2026 00:26	WG2677611
Endrin	ND		0.00500	0.02	1	01/22/2026 00:26	WG2677611
Heptachlor	ND		0.00500	0.0080	1	01/22/2026 00:26	WG2677611
Lindane	ND		0.00500	0.40	1	01/22/2026 00:26	WG2677611
Methoxychlor	ND		0.00500	10	1	01/22/2026 00:26	WG2677611

Pesticides (GC) by Method 8081

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Toxaphene	ND		0.0100	0.50	1	01/22/2026 00:26	WG2677611
(S) Decachlorobiphenyl	*97.0*		*10.0-145*			*01/22/2026 00:26*	WG2677611
(S) Tetrachloro-m-xylene	*88.0*		*44.0-124*			*01/22/2026 00:26*	WG2677611

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.000500	50	1	01/22/2026 00:26	WG2677611
PCB 1221	ND		0.000500	50	1	01/22/2026 00:26	WG2677611
PCB 1232	ND		0.000500	50	1	01/22/2026 00:26	WG2677611
PCB 1242	ND		0.000500	50	1	01/22/2026 00:26	WG2677611
PCB 1248	ND		0.000500	50	1	01/22/2026 00:26	WG2677611
PCB 1254	ND		0.000500	50	1	01/22/2026 00:26	WG2677611
PCB 1260	ND		0.000500	50	1	01/22/2026 00:26	WG2677611
(S) Decachlorobiphenyl	*97.3*		*10.0-145*			*01/22/2026 00:26*	WG2677611
(S) Tetrachloro-m-xylene	*80.9*		*44.0-124*			*01/22/2026 00:26*	WG2677611

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/l	Qualifier	LOQ mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
1,4-Dichlorobenzene	ND		0.100	7.50	1	01/27/2026 18:15	WG2680416
2,4-Dinitrotoluene	ND		0.100	0.13	1	01/27/2026 18:15	WG2680416
Hexachlorobenzene	ND		0.100	0.13	1	01/27/2026 18:15	WG2680416
Hexachloro-1,3-butadiene	ND		0.100	0.50	1	01/27/2026 18:15	WG2680416
Hexachloroethane	ND		0.100	3	1	01/27/2026 18:15	WG2680416
Nitrobenzene	ND		0.100	2	1	01/27/2026 18:15	WG2680416
Pyridine	ND	J4	0.100	5	1	01/27/2026 18:15	WG2680416
3&4-Methyl Phenol	ND		0.100	400	1	01/27/2026 18:15	WG2680416
2-Methylphenol	ND		0.100	200	1	01/27/2026 18:15	WG2680416
Pentachlorophenol	ND		0.100	100	1	01/27/2026 18:15	WG2680416
2,4,5-Trichlorophenol	ND		0.100	400	1	01/27/2026 18:15	WG2680416
2,4,6-Trichlorophenol	ND		0.100	2	1	01/27/2026 18:15	WG2680416
(S) 2-Fluorophenol	*31.4*		*19.0-119*			*01/27/2026 18:15*	WG2680416
(S) Phenol-d5	*22.6*		*10.0-120*			*01/27/2026 18:15*	WG2680416
(S) Nitrobenzene-d5	*63.4*		*44.0-120*			*01/27/2026 18:15*	WG2680416
(S) 2-Fluorobiphenyl	*67.0*		*44.0-119*			*01/27/2026 18:15*	WG2680416
(S) 2,4,6-Tribromophenol	*56.5*		*43.0-140*			*01/27/2026 18:15*	WG2680416
(S) p-Terphenyl-d14	*66.5*		*50.0-134*			*01/27/2026 18:15*	WG2680416

QUALITY CONTROL SUMMARY

L1936532-01

Method Blank (MB)

(MB) R4326488-1 01/19/26 13:14

Analyte	MB Result %	MB Qualifier	MB DL %	MB LOD %	MB LOQ %
Total Solids	0.00200			0.200	

L1936450-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1936450-03 01/19/26 13:14 • (DUP) R4326488-3 01/19/26 13:14

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	83.3	78.9	1	5.31		10

Laboratory Control Sample (LCS)

(LCS) R4326488-2 01/19/26 13:14

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	90.0-110	

QUALITY CONTROL SUMMARY

L1936532-03

Method Blank (MB)

(MB) R4327418-1 01/21/26 17:38

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Reactive Cyanide	0.00250	U	0.00210	0.00250	0.00500

L1936107-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1936107-02 01/21/26 17:58 • (DUP) R4327418-7 01/21/26 18:00

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Reactive Cyanide	ND	ND	1	200	P1	20

Laboratory Control Sample (LCS)

(LCS) R4327418-2 01/21/26 17:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Reactive Cyanide	0.100	0.0963	96.3	83.0-116	

L1935904-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1935904-02 01/21/26 17:45 • (MS) R4327418-3 01/21/26 17:47 • (MSD) R4327418-4 01/21/26 17:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Reactive Cyanide	0.100	ND	0.0912	0.0915	91.2	91.5	1	83.0-116			0.328	20

QUALITY CONTROL SUMMARY

L1936532-03

Method Blank (MB)

(MB) R4325932-1 01/17/26 19:29

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Reactive Sulfide	0.0300	U	0.0255	0.0300	0.0500

Laboratory Control Sample (LCS)

(LCS) R4325932-2 01/17/26 19:29

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Reactive Sulfide	0.500	0.510	102	85.0-115	

L1935913-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1935913-01 01/21/26 19:00 • (DUP) R4327503-2 01/21/26 19:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.67	7.70	1	0.390		1

Sample Narrative:

OS: 7.67 at 18.3C

DUP: 7.7 at 19.1C

L1936680-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1936680-02 01/21/26 19:00 • (DUP) R4327503-3 01/21/26 19:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.76	7.79	1	0.386		1

Sample Narrative:

OS: 7.76 at 18.1C

DUP: 7.79 at 18.4C

Laboratory Control Sample (LCS)

(LCS) R4327503-1 01/21/26 19:00

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	9.98	99.8	99.0-101	

Sample Narrative:

LCS: 9.98 at 18.4C

L1936592-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1936592-01 01/17/26 20:30 • (DUP) R4325937-3 01/17/26 20:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	deg F	deg F		%		%
Flashpoint	DNF at 170	DNF at 170	1	0.000		10

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4325937-1 01/17/26 20:30 • (LCSD) R4325937-2 01/17/26 20:30

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	deg F	deg F	deg F	%	%	%			%	%
Flashpoint	126	122	124	97.1	98.7	96.0-104			1.62	10

QUALITY CONTROL SUMMARY

L1936532-02,04

Method Blank (MB)

(MB) R4327024-1 01/20/26 15:07

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Mercury	0.00500	U	0.00333	0.00500	0.0100

Laboratory Control Sample (LCS)

(LCS) R4327024-2 01/20/26 15:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.0300	0.0267	88.9	82.0-119	

L1936400-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1936400-02 01/20/26 15:12 • (MS) R4327024-4 01/20/26 15:18 • (MSD) R4327024-5 01/20/26 15:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.0300	ND	0.0314	0.0312	105	104	1	82.0-119			0.789	20

L1936507-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1936507-02 01/20/26 15:23 • (MS) R4327024-6 01/20/26 15:26 • (MSD) R4327024-7 01/20/26 15:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.0300	ND	0.0310	0.0310	103	103	1	82.0-119			0.000871	20

QUALITY CONTROL SUMMARY

L1936532-02

Method Blank (MB)

(MB) R4326477-1 01/19/26 23:59

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Arsenic	0.0500	U	0.0333	0.0500	0.100
Barium	0.0500	U	0.0333	0.0500	0.100
Cadmium	0.0500	U	0.0333	0.0500	0.100
Chromium	0.0500	U	0.0333	0.0500	0.100
Lead	0.0500	U	0.0333	0.0500	0.100
Selenium	0.0500	U	0.0333	0.0500	0.100
Silver	0.0500	U	0.0333	0.0500	0.100

Laboratory Control Sample (LCS)

(LCS) R4326477-2 01/20/26 00:02

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	10.0	10.3	103	87.0-113	
Barium	10.0	10.5	105	88.0-113	
Cadmium	10.0	10.3	103	88.0-113	
Chromium	10.0	10.4	104	90.0-113	
Lead	10.0	10.2	102	86.0-113	
Selenium	10.0	10.2	102	83.0-114	
Silver	2.00	1.99	99.3	84.0-115	

L1936425-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1936425-01 01/20/26 00:04 • (MS) R4326477-4 01/20/26 00:09 • (MSD) R4326477-5 01/20/26 00:12

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	10.0	ND	10.5	10.6	105	106	1	87.0-113			0.302	20
Barium	10.0	1.02	11.6	11.5	106	105	1	88.0-113			0.652	20
Cadmium	10.0	ND	10.4	10.4	104	104	1	88.0-113			0.347	20
Chromium	10.0	ND	10.3	10.5	103	105	1	90.0-113			1.94	20
Lead	10.0	0.456	10.7	10.7	102	103	1	86.0-113			0.384	20
Selenium	10.0	ND	10.4	10.4	103	103	1	83.0-114			0.0821	20
Silver	2.00	ND	1.96	2.01	98.0	101	1	84.0-115			2.52	20

QUALITY CONTROL SUMMARY

L1936532-04

Method Blank (MB)

(MB) R4326996-1 01/20/26 21:54

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Arsenic	0.0500	U	0.0333	0.0500	0.100
Barium	0.0500	U	0.0333	0.0500	0.100
Cadmium	0.0500	U	0.0333	0.0500	0.100
Chromium	0.0500	U	0.0333	0.0500	0.100
Lead	0.0500	U	0.0333	0.0500	0.100
Selenium	0.0500	U	0.0333	0.0500	0.100
Silver	0.0500	U	0.0333	0.0500	0.100

Laboratory Control Sample (LCS)

(LCS) R4326996-2 01/20/26 21:57

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	10.0	9.47	94.7	87.0-113	
Barium	10.0	9.54	95.4	88.0-113	
Cadmium	10.0	9.49	94.9	88.0-113	
Chromium	10.0	9.72	97.2	90.0-113	
Lead	10.0	9.50	95.0	86.0-113	
Selenium	10.0	9.34	93.4	83.0-114	
Silver	2.00	1.88	93.9	84.0-115	

L1936536-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1936536-01 01/20/26 21:59 • (MS) R4326996-4 01/20/26 22:04 • (MSD) R4326996-5 01/20/26 22:07

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	10.0	ND	9.87	9.81	98.7	98.1	1	87.0-113			0.564	20
Barium	10.0	3.06	13.0	12.9	99.2	98.1	1	88.0-113			0.790	20
Cadmium	10.0	ND	9.85	9.74	98.5	97.4	1	88.0-113			1.07	20
Chromium	10.0	ND	10.1	9.90	101	99.0	1	90.0-113			1.71	20
Lead	10.0	ND	9.79	9.71	97.2	96.5	1	86.0-113			0.767	20
Selenium	10.0	ND	9.72	9.57	97.2	95.7	1	83.0-114			1.58	20
Silver	2.00	ND	1.96	1.91	97.8	95.7	1	84.0-115			2.10	20

L1936592-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1936592-02 01/20/26 22:09 • (MS) R4326996-6 01/20/26 22:12 • (MSD) R4326996-7 01/20/26 22:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	10.0	ND	10.1	10.2	101	102	1	87.0-113			0.623	20
Barium	10.0	0.190	10.1	10.1	99.2	99.3	1	88.0-113			0.166	20
Cadmium	10.0	ND	9.96	10.0	99.6	100	1	88.0-113			0.399	20
Chromium	10.0	ND	10.1	10.2	100	102	1	90.0-113			1.25	20
Lead	10.0	ND	9.72	9.78	97.2	97.8	1	86.0-113			0.576	20
Selenium	10.0	ND	10.4	10.4	103	103	1	83.0-114			0.219	20
Silver	2.00	ND	1.95	1.98	97.7	99.0	1	84.0-115			1.32	20

Method Blank (MB)

(MB) R4327175-3 01/18/26 01:51

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
TPH (GC/FID) Low Fraction	75.0	U	59.4	75.0	150
(S) a,a,a-Trifluorotoluene(FID)	*103*				*62.0-128*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4327175-1 01/17/26 23:57 • (LCSD) R4327175-2 01/18/26 00:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5000	4920	4140	98.4	82.8	78.0-122			17.2	30
(S) a,a,a-Trifluorotoluene(FID)				*106*	*105*	*62.0-128*				

L1936475-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1936475-01 01/18/26 06:38 • (MS) R4327175-4 01/18/26 09:53 • (MSD) R4327175-5 01/18/26 10:12

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5000	75.0	5140	5080	103	102	1	78.0-122			1.17	30
(S) a,a,a-Trifluorotoluene(FID)					*104*	*104*		*62.0-128*				

Method Blank (MB)

(MB) R4327461-3 01/21/26 11:40

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
TPH (GC/FID) Low Fraction	3.38	U	2.00	3.38	3.75
(S) a,a,a-Trifluorotoluene(FID)	*95.7*				*59.0-128*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4327461-1 01/21/26 10:22 • (LCSD) R4327461-2 01/21/26 10:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.00	5.00	5.18	100	104	79.0-122			3.54	30
(S) a,a,a-Trifluorotoluene(FID)				*109*	*109*	*59.0-128*				

Method Blank (MB)

(MB) R4327201-3 01/20/26 12:18

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Benzene	0.0250	U	0.0167	0.0250	0.0500
Carbon tetrachloride	0.0250	U	0.0167	0.0250	0.0500
Chlorobenzene	0.0250	U	0.0167	0.0250	0.0500
Chloroform	0.125	U	0.0833	0.125	0.250
1,2-Dichloroethane	0.0250	U	0.0167	0.0250	0.0500
1,1-Dichloroethene	0.0250	U	0.0167	0.0250	0.0500
2-Butanone (MEK)	0.250	U	0.167	0.250	0.500
Tetrachloroethene	0.0250	U	0.0167	0.0250	0.0500
Trichloroethene	0.0250	U	0.0167	0.0250	0.0500
Vinyl chloride	0.0250	U	0.0167	0.0250	0.0500
(S) Toluene-d8	*101*				*89.0-112*
(S) 4-Bromofluorobenzene	*98.0*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*109*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4327201-1 01/20/26 09:37 • (LCSD) R4327201-2 01/20/26 10:46

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	0.499	0.521	99.8	104	79.0-120			4.31	20
Carbon tetrachloride	0.500	0.454	0.457	90.8	91.4	72.0-136			0.659	20
Chlorobenzene	0.500	0.465	0.490	93.0	98.0	82.0-118			5.24	20
Chloroform	0.500	0.476	0.488	95.2	97.6	79.0-124			2.49	20
1,2-Dichloroethane	0.500	0.491	0.501	98.2	100	73.0-128			2.02	20
1,1-Dichloroethene	0.500	0.455	0.445	91.0	89.0	71.0-131			2.22	20
2-Butanone (MEK)	2.50	3.24	2.84	130	114	56.0-143			13.2	20
Tetrachloroethene	0.500	0.456	0.459	91.2	91.8	74.0-129			0.656	20
Trichloroethene	0.500	0.466	0.477	93.2	95.4	79.0-123			2.33	20
Vinyl chloride	0.500	0.508	0.503	102	101	58.0-137			0.989	20
(S) Toluene-d8				*101*	*99.9*	*89.0-112*				
(S) 4-Bromofluorobenzene				*102*	*103*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*106*	*100*	*81.0-118*				

L1936529-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1936529-06 01/20/26 15:00 • (MS) R4327201-4 01/20/26 20:46 • (MSD) R4327201-5 01/20/26 21:10

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	ND	0.499	0.385	99.8	77.0	1	79.0-120		J3 J6	25.8	20
Carbon tetrachloride	0.500	ND	0.493	0.340	98.6	68.0	1	72.0-136		J3 J6	36.7	20
Chlorobenzene	0.500	ND	0.461	0.367	92.2	73.4	1	82.0-118		J3 J6	22.7	20
Chloroform	0.500	ND	0.494	0.373	98.8	74.6	1	79.0-124		J3 J6	27.9	20
1,2-Dichloroethane	0.500	ND	0.483	0.410	96.6	82.0	1	73.0-128			16.3	20
1,1-Dichloroethene	0.500	ND	0.502	0.343	100	68.6	1	71.0-131		J3 J6	37.6	20
2-Butanone (MEK)	2.50	ND	2.64	2.59	106	104	1	56.0-143			1.91	20
Tetrachloroethene	0.500	ND	0.469	0.333	93.8	66.6	1	74.0-129		J3 J6	33.9	20
Trichloroethene	0.500	ND	0.451	0.336	90.2	67.2	1	79.0-123		J3 J6	29.2	20
Vinyl chloride	0.500	ND	0.511	0.360	102	72.0	1	58.0-137		J3	34.7	20
(S) Toluene-d8					*100*	*99.4*		*89.0-112*				
(S) 4-Bromofluorobenzene					*102*	*103*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*106*	*101*		*81.0-118*				

L1936532-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1936532-04 01/20/26 15:46 • (MS) R4327201-6 01/20/26 21:33

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Benzene	0.500	ND	0.461	92.2	1	79.0-120	
Carbon tetrachloride	0.500	ND	0.412	82.4	1	72.0-136	
Chlorobenzene	0.500	ND	0.418	83.6	1	82.0-118	
Chloroform	0.500	ND	0.453	90.6	1	79.0-124	
1,2-Dichloroethane	0.500	ND	0.457	91.4	1	73.0-128	
1,1-Dichloroethene	0.500	ND	0.430	86.0	1	71.0-131	
2-Butanone (MEK)	2.50	ND	2.61	104	1	56.0-143	
Tetrachloroethene	0.500	ND	0.404	80.8	1	74.0-129	
Trichloroethene	0.500	ND	0.425	85.0	1	79.0-123	
Vinyl chloride	0.500	ND	0.458	91.6	1	58.0-137	
(S) Toluene-d8				*98.3*		*89.0-112*	
(S) 4-Bromofluorobenzene				*103*		*85.0-114*	
(S) 1,2-Dichloroethane-d4				*104*		*81.0-118*	

Method Blank (MB)

(MB) R4327717-5 01/21/26 11:42

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Benzene	0.500	U	0.320	0.500	1.00
Ethylbenzene	0.500	U	0.234	0.500	1.00
Toluene	0.600	U	0.274	0.600	1.00
Total Xylenes	1.50	U	0.319	1.50	3.00
(S) Toluene-d8	*101*				*89.0-112*
(S) 4-Bromofluorobenzene	*101*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*91.6*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4327717-1 01/21/26 09:22 • (LCSD) R4327717-2 01/21/26 09:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	10.0	9.84	9.15	98.4	91.5	79.0-120			7.27	20
Ethylbenzene	10.0	9.68	8.99	96.8	89.9	79.0-121			7.39	20
Toluene	10.0	9.90	9.25	99.0	92.5	80.0-121			6.79	20
Total Xylenes	30.0	28.8	27.0	96.0	90.0	79.0-121			6.45	20
(S) Toluene-d8				*99.0*	*98.9*	*89.0-112*				
(S) 4-Bromofluorobenzene				*102*	*102*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*95.7*	*90.6*	*81.0-118*				

Method Blank (MB)

(MB) R4327982-1 01/22/26 10:13

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
TPH (GC/FID) High Fraction	90.0	U	60.5	90.0	100
(S) o-Terphenyl	*68.0*				*56.0-125*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4327982-2 01/22/26 10:34 • (LCSD) R4327982-3 01/22/26 10:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1500	1600	1600	107	107	36.0-132			0.000	30
(S) o-Terphenyl				*84.5*	*83.5*	*56.0-125*				

Method Blank (MB)

(MB) R4326921-1 01/20/26 11:04

Analyte	MB Result mg/kg	MB Qualifier	MB DL mg/kg	MB LOD mg/kg	MB LOQ mg/kg
TPH (GC/FID) High Fraction	2.00	U	0.769	2.00	4.00
(S) o-Terphenyl	*78.8*				*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R4326921-2 01/20/26 11:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	33.4	66.8	50.0-150	
(S) o-Terphenyl			*83.8*	*18.0-148*	

L1936526-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1936526-05 01/20/26 18:14 • (MS) R4326921-3 01/20/26 18:28 • (MSD) R4326921-4 01/20/26 18:41

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	56.0	11.8	22.6	23.6	40.3	42.1	5	50.0-150	J6	J6	4.58	20
(S) o-Terphenyl					*33.3*	*39.3*		*18.0-148*				

QUALITY CONTROL SUMMARY

L1936532-02,04

Method Blank (MB)

(MB) R4327322-1 01/21/26 11:21

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
2,4,5-TP (Silvex)	0.00100	U	0.000667	0.00100	0.00200
2,4-D	0.00100	U	0.000667	0.00100	0.00200
(S) 2,4-Dichlorophenyl Acetic Acid	*71.8*				*32.0-138*

Laboratory Control Sample (LCS)

(LCS) R4327322-2 01/21/26 11:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2,4,5-TP (Silvex)	0.0250	0.0214	85.6	51.0-134	
2,4-D	0.0250	0.0216	86.4	45.0-152	
(S) 2,4-Dichlorophenyl Acetic Acid			*75.0*	*32.0-138*	

L1935949-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1935949-01 01/21/26 16:08 • (MS) R4327322-3 01/21/26 16:19 • (MSD) R4327322-4 01/21/26 16:30

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,4,5-TP (Silvex)	0.0250	ND	0.0230	0.0231	92.0	92.4	1	51.0-134			0.434	30
2,4-D	0.0250	ND	0.0233	0.0232	93.2	92.8	1	45.0-152			0.430	30
(S) 2,4-Dichlorophenyl Acetic Acid					*82.0*	*81.2*		*32.0-138*				

QUALITY CONTROL SUMMARY

L1936532-02,04

Method Blank (MB)

(MB) R4327339-1 01/20/26 15:56

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Chlordane	0.00250	U	0.00167	0.00250	0.00500
Endrin	0.00250	U	0.00167	0.00250	0.00500
Heptachlor	0.00250	U	0.00133	0.00250	0.00500
Lindane	0.00250	U	0.00167	0.00250	0.00500
Methoxychlor	0.00250	U	0.00167	0.00250	0.00500
Toxaphene	0.00500	U	0.00333	0.00500	0.0100
(S) Decachlorobiphenyl	*86.6*				*10.0-145*
(S) Tetrachloro-m-xylene	*84.9*				*44.0-124*

Laboratory Control Sample (LCS)

(LCS) R4327339-2 01/20/26 16:07

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endrin	0.0100	0.0113	113	60.0-138	
Heptachlor	0.0100	0.0113	113	54.0-130	
Lindane	0.0100	0.0110	110	59.0-134	
Methoxychlor	0.0100	0.0101	101	54.0-145	
(S) Decachlorobiphenyl			*83.7*	*10.0-145*	
(S) Tetrachloro-m-xylene			*83.9*	*44.0-124*	

L1936526-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1936526-04 01/22/26 00:37 • (MS) R4327896-1 01/22/26 00:47 • (MSD) R4327896-2 01/22/26 00:58

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Endrin	0.0100	ND	0.0110	0.0113	110	113	1	60.0-138			2.69	30
Heptachlor	0.0100	ND	0.0119	0.0119	119	119	1	54.0-130			0.000	30
Lindane	0.0100	ND	0.0114	0.0113	114	113	1	59.0-134			0.881	30
Methoxychlor	0.0100	ND	0.0115	0.0116	115	116	1	54.0-145			0.866	30
(S) Decachlorobiphenyl					*96.6*	*97.4*		*10.0-145*				
(S) Tetrachloro-m-xylene					*87.0*	*84.9*		*44.0-124*				

Method Blank (MB)

(MB) R4327339-1 01/20/26 15:56

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
PCB 1016	0.000250	U	0.000167	0.000250	0.000500
PCB 1221	0.000250	U	0.000167	0.000250	0.000500
PCB 1232	0.000250	U	0.000167	0.000250	0.000500
PCB 1242	0.000250	U	0.000167	0.000250	0.000500
PCB 1248	0.000250	U	0.000167	0.000250	0.000500
PCB 1254	0.000250	U	0.000167	0.000250	0.000500
PCB 1260	0.000250	U	0.000167	0.000250	0.000500
(S) Decachlorobiphenyl	*109*				*10.0-145*
(S) Tetrachloro-m-xylene	*80.7*				*44.0-124*

Laboratory Control Sample (LCS)

(LCS) R4327339-3 01/20/26 16:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1016	0.0250	0.0231	92.4	46.0-129	
PCB 1260	0.0250	0.0250	100	45.0-134	
(S) Decachlorobiphenyl			*107*	*10.0-145*	
(S) Tetrachloro-m-xylene			*79.7*	*44.0-124*	

L1936526-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1936526-04 01/20/26 22:25 • (MS) R4327339-4 01/20/26 22:58 • (MSD) R4327339-5 01/20/26 23:09

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
PCB 1016	0.0250	ND	0.0231	0.0255	92.4	102	1	46.0-129			9.88	30
PCB 1260	0.0250	ND	0.0251	0.0264	100	106	1	45.0-134			5.05	30
(S) Decachlorobiphenyl					*108*	*115*		*10.0-145*				
(S) Tetrachloro-m-xylene					*83.5*	*84.0*		*44.0-124*				

Method Blank (MB)

(MB) R4329224-2 01/27/26 13:33

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
1,4-Dichlorobenzene	0.0500	U	0.000401	0.0500	0.100
2,4-Dinitrotoluene	0.0500	U	0.00165	0.0500	0.100
Hexachlorobenzene	0.0500	U	0.000341	0.0500	0.100
Hexachloro-1,3-butadiene	0.0500	U	0.000329	0.0500	0.100
Hexachloroethane	0.0500	U	0.000365	0.0500	0.100
Nitrobenzene	0.000521		0.000367	0.0500	0.100
Pyridine	0.0500	U	0.00137	0.0500	0.100
3&4-Methyl Phenol	0.0500	U	0.0333	0.0500	0.100
2-Methylphenol	0.0500	U	0.00312	0.0500	0.100
Pentachlorophenol	0.0500	U	0.00313	0.0500	0.100
2,4,5-Trichlorophenol	0.0500	U	0.0333	0.0500	0.100
2,4,6-Trichlorophenol	0.0500	U	0.0333	0.0500	0.100
(S) 2-Fluorophenol	*35.9*				*19.0-119*
(S) Phenol-d5	*25.3*				*10.0-120*
(S) Nitrobenzene-d5	*69.4*				*44.0-120*
(S) 2-Fluorobiphenyl	*69.7*				*44.0-119*
(S) 2,4,6-Tribromophenol	*68.5*				*43.0-140*
(S) p-Terphenyl-d14	*78.1*				*50.0-134*

Laboratory Control Sample (LCS)

(LCS) R4329224-1 01/27/26 13:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,4-Dichlorobenzene	0.500	0.308	61.6	29.0-112	
2,4-Dinitrotoluene	0.500	0.387	77.4	57.0-128	
Hexachlorobenzene	0.500	0.357	71.4	53.0-125	
Hexachloro-1,3-butadiene	0.500	0.279	55.8	22.0-124	
Hexachloroethane	0.500	0.293	58.6	21.0-115	
Nitrobenzene	0.500	0.307	61.4	45.0-121	
Pyridine	0.500	0.0496	9.92	10.0-120	J J4
3&4-Methyl Phenol	0.500	0.279	55.8	29.0-110	
2-Methylphenol	0.500	0.269	53.8	30.0-117	
Pentachlorophenol	0.500	0.306	61.2	35.0-138	
2,4,5-Trichlorophenol	0.500	0.381	76.2	53.0-123	
2,4,6-Trichlorophenol	0.500	0.403	80.6	50.0-125	
(S) 2-Fluorophenol			*36.4*	*19.0-119*	
(S) Phenol-d5			*27.0*	*10.0-120*	
(S) Nitrobenzene-d5			*67.3*	*44.0-120*	

Laboratory Control Sample (LCS)

(LCS) R4329224-1 01/27/26 13:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) 2-Fluorobiphenyl			*70.5*	*44.0-119*	
(S) 2,4,6-Tribromophenol			*72.0*	*43.0-140*	
(S) p-Terphenyl-d14			*73.7*	*50.0-134*	

L1936437-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1936437-02 01/27/26 13:54 • (MS) R4329224-3 01/27/26 14:16 • (MSD) R4329224-4 01/27/26 14:38

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,4-Dichlorobenzene	0.500	ND	0.332	0.309	66.4	61.8	1	29.0-112			7.18	30
2,4-Dinitrotoluene	0.500	ND	0.434	0.394	86.8	78.8	1	57.0-128			9.66	30
Hexachlorobenzene	0.500	ND	0.398	0.371	79.6	74.2	1	53.0-125			7.02	30
Hexachloro-1,3-butadiene	0.500	ND	0.312	0.294	62.4	58.8	1	22.0-124			5.94	30
Hexachloroethane	0.500	ND	0.323	0.298	64.6	59.6	1	21.0-115			8.05	30
Nitrobenzene	0.500	ND	0.336	0.312	67.2	62.4	1	45.0-121			7.41	30
Pyridine	0.500	ND	ND	ND	11.1	9.00	1	13.5-58.9	J6	J6	21.1	30
3&4-Methyl Phenol	0.500	ND	0.277	0.254	55.4	50.8	1	29.0-110			8.66	30
2-Methylphenol	0.500	ND	0.263	0.242	52.6	48.4	1	30.0-117			8.32	30
Pentachlorophenol	0.500	ND	0.322	0.299	64.4	59.8	1	35.0-138			7.41	30
2,4,5-Trichlorophenol	0.500	ND	0.422	0.389	84.4	77.8	1	53.0-123			8.14	30
2,4,6-Trichlorophenol	0.500	ND	0.454	0.421	90.8	84.2	1	50.0-125			7.54	30
(S) 2-Fluorophenol					*36.9*	*35.4*		*19.0-119*				
(S) Phenol-d5					*28.0*	*26.3*		*10.0-120*				
(S) Nitrobenzene-d5					*70.0*	*65.7*		*44.0-120*				
(S) 2-Fluorobiphenyl					*77.7*	*74.0*		*44.0-119*				
(S) 2,4,6-Tribromophenol					*81.5*	*72.0*		*43.0-140*				
(S) p-Terphenyl-d14					*79.6*	*71.4*		*50.0-134*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
DL	Detection Limit.
DL (dry)	Detection Limit.
LOD (dry)	Limit of Detection.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
ND	Not detected at the Reporting Limit (or DL where applicable).
LOQ (dry)	Limit of Quantitation.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

GLOSSARY OF TERMS

Qualifier	Description
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Cooler 3

Company Name/Address:
Terracon - Wilmington, NC
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Billing Information:
Accounts Payable
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Report to: **Danielle Foster**

Email To: **danielle.foster@terracon.com;nick.lin**

Project Description: Marin Corps Base Camp Lejeune

City/State Collected: Jacksonville NC

Please Circle: PT MT CT (ET)

Phone: **910-229-8597**

Client Project # K625P194

Lab Project # **TERRACWNC-LEJEUNE**

Collected by (print): Baylee Kurtz

Site/Facility ID #

P.O. # ____

Collected by (signature): Baylee

Immediately Packed on Ice N ____ Y ____

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote # ____

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas standard-terms.pdf

SDG # L1436532

C071

Acctnum: **TERRACWNC**
Template: **T286013**
Prelogin: **P1200317**
PM: **Heather Wagner**
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	DOD 6010 TAL Metals	DOD RCI	DOD8270TCL	DODDRO	DODPaint Filter	DODGRO	DODV8260BTEX	DODV8260TCL	DOD PFAS 1633	DOD Full TCLP+TCLP PCB	Remarks	Sample # (lab only)
CL-P1636-HP55/57-SPT-10	Comp	S	1-6	1-13-26	1650	4				X		X			X	X	—	01/01
~~CL-P1636-HP55/57-SP~~																		
CL-Liquid-IDW-01	G	W	—	1-13-26	1730	15	X		X	X	X	X		X	X	—		01/01

*B 01/15/2026

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow Other ____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

PH – 10BDH07251
TRC – 5325A337

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR	If preservation required by Login: Date/Time
Baylee Kurtz	1-14-26	1550	J. Dixon / Pace	1	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 19	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 01/15/2026 Time: 0830	Hold: / Condition: NCF / OK

DC#_Title: Excel Form Template
Effective Date:

Multiple Parcel Form

L# L770532

Parcel Tracking Number	Infrared Thermometer ID	Temperature Reading (°C)	Correction Factor (°C)	Corrected Temperature (°C)	Custody Seal Intact
7920 9198 6222	TLA9	2.2	+0	2.2	Yes / No / Not Present
7920 9198 6428	TLA9	1.1	+0	1.1	Yes / No / Not Present
7920 9198 6141	TLA9	1.7	+0	1.7	Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present

Ashley Barber
Name

01/15/2026
Date

ANALYTICAL REPORT

February 09, 2026

Terracon - Wilmington, NC

Sample Delivery Group:	L1936535
Samples Received:	01/15/2026
Project Number:	K625P194
Description:	Marine Corps Base Camp Lejeune
Report To:	Danielle Foster 2108 Capital Drive Suite 103 Wilmington, NC 28405

Entire Report Reviewed By:

Heather J Wagner
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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Ss: Sample Summary	3
Cn: Case Narrative	4
Gl: Glossary of Terms	5
Al: Accreditations & Locations	6
Sc: Sample Chain of Custody	7

1 Cp
2 Tc
3 Ss
4 Cn
5 Gl
6 Al
7 Sc

CL-LIQUID-IDW-01 L1936535-02

Collected by	Collected date/time	Received date/time
Baylee Kurtz	01/13/26 17:30	01/15/26 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Subcontracted Analyses	WG2677502	1	02/09/26 00:00	02/09/26 00:00	-	West Columbia, SC 29172

1 Cp
2 Tc
3 Ss
4 Cn
5 Gl
6 Al
7 Sc

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Heather J Wagner
Project Manager

Project Comments

L1936535 -01, -02 contains subout data that is included after the chain of custody.

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U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

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* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Cooler 5

Company Name/Address:
Terracon - Wilmington, NC
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Billing Information:
Accounts Payable
2108 Capital Drive
Suite 103
Wilmington, NC 28405

Report to:
Danielle Foster

Email To:
danielle.foster@terracon.com;nick.lin

Project Description:
Marin Corps Base Camp Lejeune

City/State Collected: Jacksonville NC

Please Circle: PT MT CT (ET)

Phone: **910-229-8597**

Client Project # K625P194

Lab Project # **TERRACWNC-LEJEUNE**

Collected by (print): Baylee Kurtz

Site/Facility ID #

P.O. # ____

Collected by (signature): Baylee

Quote # ____

Immediately Packed on Ice N ____ Y ____

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas standard-terms.pdf

SDG # L1336575

Table #

Acctnum: **TERRACWNC**

Template: **T286013**

Prelogin: **P1200317**

PM: **Heather Wagner**

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Pres Chk	DOD 6010 TAL Metals	DOD RCI	DOD8270TCL	DODDRO	DODPaint Filter	DODGRO	DODV8260BTEX	DODV8260TCL	DOD PFAS 1633	DOD Full TCLP+TCLP PCB	Remarks	Sample # (lab only)
CL-P1636-HP55/57-SPT-10	Comp	S	1-6	1-13-26	1650	4					X		X			X	X	—	01
~~CL-P1636-HP55/57-SP~~																			
CL-Liquid-IDW-01	G	W	←	1-13-26	1730	5		X			X	X	X	X		X	X	—	02
							AB 01/15/2026												

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

pH _____ Temp _____
Flow _____ Other _____

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Baylee Kurtz	1-14-26	1550	J. Dixon / Pace		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 19	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 01/15/2026 Time: 0830	Hold: / Condition: NCF / OK

DC#_Title: Excel Form Template
Effective Date:

Multiple Parcel Form

L# L1936575

Parcel Tracking Number	Infrared Thermometer ID	Temperature Reading (°C)	Correction Factor (°C)	Corrected Temperature (°C)	Custody Seal Intact
7920 9198 6222	TLA9	2.2	+0	2.2	Yes / No / Not Present
7920 9198 6428	TLA9	1.1	+0	1.1	Yes / No / Not Present
7920 9198 6141	TLA9	1.7	+0	1.7	Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present

Ashley Barber
Name

01/15/2026
Date

Report of Analysis

Pace Analytical LLC
12065 Lebanon Rd.
Mt. Juliet, TN 37122
Attention: Jimmy Huckaba

Project Name: L1936535

Project Number: WG2677502

Lot Number:**BA20004**

Date Completed:02/09/2026

02/09/2026 2:27 PM
Approved and released by:
Project Manager II: **Edward Barnett**

The electronic signature above is the equivalent of a handwritten signature.
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Pace Analytical Services, LLC (*formerly Shealy Environmental Services, Inc.*)
106 Vantage Point Drive West Columbia, SC 29172
Tel: 803-791-9700 Fax: 803-791-9111 www.pacelabs.com

Case Narrative
Pace Analytical LLC
Lot Number: BA20004

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report. Where sampling is conducted by the client, results relate to the accuracy of the information provided, and as the samples are received.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Additionally, the DoD QSM version 6.0 has been followed for these samples. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs, the DoD QSM, or policies are qualified on the results page or discussed below.

Pace - West Columbia is a DOD/DOE accredited laboratory; however, the following subcontract laboratories do not hold DOD/DOE certification: Schnabel Engineering, Bunnell Lammons Engineering (BLE), and Pace - Sheridan Terra (WY). The use of these subcontract laboratories is approved by the customer prior to sample shipment.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope accreditation: 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS), 2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA), 3-Perfluoroheptyl propanoic acid (7:3FTCA), 3-Perfluoropropyl propanoic acid (3:3FTCA), 4,8-Dioxa-3H-perfluorononanoic acid (ADONA), 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS), Hexafluoropropylene oxide dimer acid (HFPO-DA), N-ethyl perfluorooctanesulfonamide (NEtFOSA), N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE), N-methyl perfluorooctanesulfonamide (NMeFOSA), N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE), Nonafluoro-3,6-dioxaheptanoic acid (NFDHA), Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA), Perfluoro-3-methoxypropanoic acid (PFMPA), Perfluoro-4-methoxybutanoic acid (PFMBA), Perfluorododecanesulfonic acid (PFDoS), Perfluoropropanoic acid (PFPrA), 2H-perfluoro-2-octenoic acid (FHUEA), 2H-perfluoro-2-decenoic acid (FOUEA), Lithium Bis(trifluoromethane)sulfonimide (HQ-115) by EPA Method 8327. Perfluoropropanoic acid (PFPrA) and Bis (trifluoromethylsulfonyl)amine (TFSI) by EPA Method 1633.

Manual integration summaries are provided at the end of this report when applicable.

Where applicable, all soil sample results (including LOQ and DL if requested) are corrected for dry weight unless flagged with a "W" qualifier.

PFAS

The following sample was diluted due to the nature of the sample matrix: BA20004-002. The LOQ has been elevated to reflect the dilution.

BA20004-002 (CL-LIQUID-IDW-01) (Run 1) (Analysis Batch 29427) (Prep Batch 29356) PFAS 1633LV Method List (DOD QSM 6.0) (Refrigerated)

The following sample was diluted due to the nature of the sample matrix: BA20004-002(MS/MSD). The LOQ has been elevated to reflect the dilution.

BA20004-002 (CL-LIQUID-IDW-01) (Run 2) (Analysis Batch 29597) (Prep Batch 29557) PFAS 1633LV Method List (DOD QSM 6.0) (Refrigerated)

Sample Summary
Pace Analytical LLC
Lot Number: BA20004

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
002	CL-LIQUID-IDW-01	Aqueous	01/13/2026 1730	01/20/2026

(2 samples)

Detection Summary
Pace Analytical LLC
Lot Number: BA20004

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	CL-LIQUID-IDW-01	Aqueous	PFBS	1633	30	JM-03	ng/L	7
002	CL-LIQUID-IDW-01	Aqueous	PFBA	1633	20	JM-03	ng/L	7
002	CL-LIQUID-IDW-01	Aqueous	PFHpA	1633	15	JM-03	ng/L	7
002	CL-LIQUID-IDW-01	Aqueous	PFHxS	1633	16	JM-03	ng/L	7
002	CL-LIQUID-IDW-01	Aqueous	PFHxA	1633	37	M-03	ng/L	7
002	CL-LIQUID-IDW-01	Aqueous	PFOA	1633	24	JM-03	ng/L	7
002	CL-LIQUID-IDW-01	Aqueous	PFPeA	1633	38	JM-08	ng/L	7
002	CL-LIQUID-IDW-01	Aqueous	PFPrA	1633	68	J	ng/L	7

(9 detections)

PFAS by LC/MS/MS

Client: **Pace Analytical LLC** Laboratory ID: **BA20004-002**

Description: **CL-LIQUID-IDW-01** Matrix: **Aqueous**

Date Sampled: **01/13/2026 1730**

Date Received: **01/20/2026**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	01/22/2026 0534	JWG	01/20/2026 1906	29356
2	1633	1633	1	02/04/2026 2140	KMM2	02/03/2026 0729	29557

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Bis(trifluoromethylsulfonyl)amine (TFSI)	82113-65-3	1633	32	U	64	32	10	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3...)	763051-92-9	1633	61	U	130	61	19	ng/L	2
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	1633	61	U	130	61	21	ng/L	2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	1633	61	U	130	61	20	ng/L	2
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	1633	63	U	130	63	49	ng/L	2
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	1633	61	U	130	61	34	ng/L	2
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	1633	61	U	130	61	41	ng/L	2
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1633	400	U	800	400	130	ng/L	2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6	1633	65	U	130	65	23	ng/L	2
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	4151-50-2	1633	16	U	32	16	8.9	ng/L	2
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	1633	24	U	32	24	19	ng/L	2
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1633	160	U	320	160	60	ng/L	2
N-methyl perfluorooctanesulfonamide (NMeFOSA)	31506-32-8	1633	16	U	32	16	5.9	ng/L	2
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	1633	16	U	32	16	5.9	ng/L	2
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1633	160	U	320	160	66	ng/L	2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	1633	32	U	64	32	16	ng/L	2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	1633	28	U	64	28	6.1	ng/L	2
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1633	32	U	64	32	14	ng/L	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	1633	32	U	64	32	11	ng/L	2
Perfluorobutanesulfonic acid (PFBS)	**375-73-5**	**1633**	**30**	**JM-03**	**32**	**28**	**24**	**ng/L**	**2**
Perfluorobutanoic acid (PFBA)	**375-22-4**	**1633**	**20**	**JM-03**	**130**	**65**	**19**	**ng/L**	**1**
Perfluorodecanesulfonic acid (PFDS)	335-77-3	1633	15	U	32	15	8.3	ng/L	2
Perfluorodecanoic acid (PFDA)	335-76-2	1633	16	U	32	16	9.9	ng/L	2
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5	1633	15	U	32	15	7.1	ng/L	2
Perfluorododecanoic acid (PFDoA)	307-55-1	1633	16	U	32	16	3.8	ng/L	2
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	1633	15	U	32	15	12	ng/L	2
Perfluoroheptanoic acid (PFHpA)	**375-85-9**	**1633**	**15**	**JM-03**	**32**	**16**	**6.4**	**ng/L**	**2**
3-Perfluoroheptyl propanoic acid (7:3FTCA)	812-70-4	1633	400	U	800	400	160	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	**355-46-4**	**1633**	**16**	**JM-03**	**32**	**15**	**14**	**ng/L**	**2**
Perfluorohexanoic acid (PFHxA)	**307-24-4**	**1633**	**37**	**M-03**	**32**	**16**	**4.8**	**ng/L**	**2**
Perfluorononanesulfonic acid (PFNS)	68259-12-1	1633	15	U	32	15	9.3	ng/L	2
Perfluorononanoic acid (PFNA)	375-95-1	1633	16	U	32	16	12	ng/L	2
Perfluorooctanesulfonamide (PFOSA)	754-91-6	1633	16	UM-03	32	16	5.7	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1633	15	UM-03	32	15	11	ng/L	2
Perfluorooctanoic acid (PFOA)	**335-67-1**	**1633**	**24**	**JM-03**	**32**	**16**	**15**	**ng/L**	**2**
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	1633	15	U	32	15	8.7	ng/L	2
Perfluoropentanoic acid (PFPeA)	**2706-90-3**	**1633**	**38**	**JM-08**	**64**	**32**	**8.9**	**ng/L**	**2**
Perfluoropropanoic acid (PFPrA)	**422-64-0**	**1633**	**68**	**J**	**130**	**65**	**50**	**ng/L**	**1**
3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	1633	80	U	160	80	30	ng/L	2
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1633	16	U	32	16	8.6	ng/L	2
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	1633	16	U	32	16	12	ng/L	2
Perfluoroundecanoic acid (PFUnA)	2058-94-8	1633	24	U	32	24	16	ng/L	2

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

PFAS by LC/MS/MS

Client: **Pace Analytical LLC**
Laboratory ID: **BA20004-002**
Description: **CL-LIQUID-IDW-01**
Matrix: **Aqueous**
Date Sampled: **01/13/2026 1730**
Date Received: **01/20/2026**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	1633	1633	1	01/22/2026 0534	JWG	01/20/2026 1906	29356
2	1633	1633	1	02/04/2026 2140	KMM2	02/03/2026 0729	29557

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
13C2-4:2FTS		95	40-200		87	40-200
13C2-6:2FTS		104	40-200		85	40-200
13C2-8:2FTS		100	40-300		92	40-300
13C8-PFOSA		91	40-130		96	40-130
D5-NEtFOSA	M-03	78	10-130		64	10-130
D3-NMeFOSA		82	10-130		62	10-130
D5-NEtFOSAA		83	25-135	M-03	87	25-135
D3-NMeFOSAA	M-03	92	40-170		89	40-170
13C4-PFBA		83	5-130		84	5-130
13C5-PFPeA		89	40-130		91	40-130
13C5-PFHxA		95	40-130		95	40-130
13C4-PFHpA		93	40-130		88	40-130
13C8-PFOA		94	40-130		91	40-130
13C9-PFNA		95	40-130		86	40-130
13C6-PFDA		86	40-130		84	40-130
13C3-PFBS		102	40-135		86	40-135
13C3-PFHxS		97	40-130		90	40-130
13C8-PFOS		93	40-130		95	40-130
13C7-PFUnA		86	30-130		84	30-130
13C2-PFDoA		77	10-130	M-03	88	10-130
13C2-PFTeDA		74	10-130		79	10-130
13C3-HFPO-DA		101	40-130		95	40-130
D7-NMeFOSE		84	10-130	M-03	87	10-130
D9-NEtFOSE		81	10-130		82	10-130
13C3-PFPrA		73	5-130		85	5-130

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOD	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

QC Summary

PFAS by LC/MS/MS - MB

Sample ID: BQ29356-001
Batch: 29356
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/20/2026 1906

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
PFMPA	1.6	U	1	3.2	1.6	0.72	ng/L	01/22/2026 0416
PFBA	3.2	U	1	6.4	3.2	0.95	ng/L	01/22/2026 0416
PFPrA	3.2	U	1	6.4	3.2	2.5	ng/L	01/22/2026 0416

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS	M-03	104	40-200
13C2-6:2FTS		111	40-200
13C2-8:2FTS		104	40-300
13C8-PFOSA		101	40-130
D5-NEtFOSA	M-03	87	10-130
D3-NMeFOSA		87	10-130
D5-NEtFOSAA		88	25-135
D3-NMeFOSAA		99	40-170
13C4-PFBA		97	5-130
13C5-PFPeA		107	40-130
13C5-PFHxA		115	40-130
13C4-PFHpA		114	40-130
13C8-PFOA		116	40-130
13C9-PFNA	M-03	115	40-130
13C6-PFDA	M-03	116	40-130
13C3-PFBS		109	40-135
13C3-PFHxS		111	40-130
13C8-PFOS		106	40-130
13C7-PFUnA	M-03	110	30-130
13C2-PFDoA		100	10-130
13C2-PFTeDA		89	10-130
13C3-HFPO-DA		119	40-130
D7-NMeFOSE		94	10-130
D9-NEtFOSE		90	10-130
13C3-PFPrA		83	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29356-002
Batch: 29356
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/20/2026 1906

Parameter	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
PFMPA	80	88	M-03	1	111	55-140	01/22/2026 0425
PFBA	160	180	M-03	1	110	70-140	01/22/2026 0425
PFPrA	160	170		1	107	70-140	01/22/2026 0425

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		102	40-200
13C2-6:2FTS		105	40-200
13C2-8:2FTS		97	40-300
13C8-PFOSA		92	40-130
D5-NEtFOSA		81	10-130
D3-NMeFOSA		81	10-130
D5-NEtFOSAA		82	25-135
D3-NMeFOSAA		91	40-170
13C4-PFBA		91	5-130
13C5-PFPeA		103	40-130
13C5-PFHxA		107	40-130
13C4-PFHpA		102	40-130
13C8-PFOA		104	40-130
13C9-PFNA		110	40-130
13C6-PFDA		101	40-130
13C3-PFBS		105	40-135
13C3-PFHxS		107	40-130
13C8-PFOS	M-03	91	40-130
13C7-PFUnA		95	30-130
13C2-PFDoA		89	10-130
13C2-PFTeDA		75	10-130
13C3-HFPO-DA		108	40-130
D7-NMeFOSE		84	10-130
D9-NEtFOSE		82	10-130
13C3-PFPrA		83	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29356-102
Batch: 29356
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 01/20/2026 1906

Parameter	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
PFMPA	6.4	7.3	M-03	1	114	55-140	01/22/2026 0435
PFBA	13	15		1	114	70-140	01/22/2026 0435
PFPrA	13	15	M-03	1	116	70-140	01/22/2026 0435

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		97	40-200
13C2-6:2FTS		99	40-200
13C2-8:2FTS		97	40-300
13C8-PFOSA		90	40-130
D5-NEtFOSA		77	10-130
D3-NMeFOSA		76	10-130
D5-NEtFOSAA		87	25-135
D3-NMeFOSAA		95	40-170
13C4-PFBA		84	5-130
13C5-PFPeA		95	40-130
13C5-PFHxA		99	40-130
13C4-PFHpA		96	40-130
13C8-PFOA		103	40-130
13C9-PFNA		94	40-130
13C6-PFDA	M-03	103	40-130
13C3-PFBS		103	40-135
13C3-PFHxS		95	40-130
13C8-PFOS		94	40-130
13C7-PFUnA		92	30-130
13C2-PFDoA		86	10-130
13C2-PFTeDA		78	10-130
13C3-HFPO-DA		102	40-130
D7-NMeFOSE		87	10-130
D9-NEtFOSE		82	10-130
13C3-PFPrA		85	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29382-001
Batch: 29382
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/22/2026 1105

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
TFSI	0.20	U	1	0.40	0.20	0.076	ng/g	01/23/2026 1131
11Cl-PF3OUdS	0.38	U	1	0.80	0.38	0.21	ng/g	01/23/2026 1131
9Cl-PF3ONS	0.37	U	1	0.80	0.37	0.21	ng/g	01/23/2026 1131
ADONA	0.38	U	1	0.80	0.38	0.18	ng/g	01/23/2026 1131
8:2FTS	0.38	U	1	0.80	0.38	0.25	ng/g	01/23/2026 1131
4:2FTS	0.37	U	1	0.80	0.37	0.30	ng/g	01/23/2026 1131
6:2FTS	0.57	U	1	0.80	0.57	0.52	ng/g	01/23/2026 1131
5:3FTCA	2.5	U	1	5.0	2.5	1.7	ng/g	01/23/2026 1131
HFPO-DA	0.40	U	1	0.80	0.40	0.21	ng/g	01/23/2026 1131
NEtFOSA	0.10	U	1	0.20	0.10	0.079	ng/g	01/23/2026 1131
NEtFOSAA	0.10	U	1	0.20	0.10	0.089	ng/g	01/23/2026 1131
NEtFOSE	1.0	UM-03	1	2.0	1.0	0.67	ng/g	01/23/2026 1131
NMeFOSA	0.10	U	1	0.20	0.10	0.060	ng/g	01/23/2026 1131
NMeFOSAA	0.15	U	1	0.20	0.15	0.15	ng/g	01/23/2026 1131
NMeFOSE	1.0	U	1	2.0	1.0	0.64	ng/g	01/23/2026 1131
NFDHA	0.20	U	1	0.40	0.20	0.16	ng/g	01/23/2026 1131
PFEESA	0.18	U	1	0.40	0.18	0.078	ng/g	01/23/2026 1131
PFMPA	0.20	U	1	0.40	0.20	0.13	ng/g	01/23/2026 1131
PFMBA	0.20	U	1	0.40	0.20	0.14	ng/g	01/23/2026 1131
PFBS	0.089	U	1	0.20	0.089	0.079	ng/g	01/23/2026 1131
PFBA	0.40	U	1	0.80	0.40	0.25	ng/g	01/23/2026 1131
PFDS	0.10	U	1	0.20	0.10	0.040	ng/g	01/23/2026 1131
PFDA	0.15	U	1	0.20	0.15	0.11	ng/g	01/23/2026 1131
PFDoS	0.10	U	1	0.20	0.10	0.068	ng/g	01/23/2026 1131
PFDoA	0.10	U	1	0.20	0.10	0.097	ng/g	01/23/2026 1131
PFHpS	0.10	U	1	0.20	0.10	0.082	ng/g	01/23/2026 1131
PFHpA	0.10	U	1	0.20	0.10	0.065	ng/g	01/23/2026 1131
7:3FTCA	2.5	U	1	5.0	2.5	1.8	ng/g	01/23/2026 1131
PFHxS	0.091	U	1	0.20	0.091	0.065	ng/g	01/23/2026 1131
PFHxA	0.10	U	1	0.20	0.10	0.038	ng/g	01/23/2026 1131
PFNS	0.10	U	1	0.20	0.10	0.084	ng/g	01/23/2026 1131
PFNA	0.10	U	1	0.20	0.10	0.096	ng/g	01/23/2026 1131
PFOSA	0.10	U	1	0.20	0.10	0.078	ng/g	01/23/2026 1131
PFOS	0.14	U	1	0.20	0.14	0.12	ng/g	01/23/2026 1131
PFOA	0.15	U	1	0.20	0.15	0.11	ng/g	01/23/2026 1131
PFPeS	0.094	U	1	0.20	0.094	0.051	ng/g	01/23/2026 1131
PFPeA	0.20	U	1	0.40	0.20	0.15	ng/g	01/23/2026 1131
PFPrA	0.72	UM-03	1	0.80	0.72	0.67	ng/g	01/23/2026 1131
3:3FTCA	0.75	U	1	1.0	0.75	0.54	ng/g	01/23/2026 1131
PFTeDA	0.10	U	1	0.20	0.10	0.099	ng/g	01/23/2026 1131
PFTrDA	0.10	U	1	0.20	0.10	0.058	ng/g	01/23/2026 1131
PFUnA	0.10	U	1	0.20	0.10	0.10	ng/g	01/23/2026 1131

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29382-001
Batch: 29382
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/22/2026 1105

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS	M-03	124	40-165
13C2-6:2FTS		129	40-215
13C2-8:2FTS		120	40-275
13C8-PFOSA		105	40-130
D5-NEtFOSA		72	10-130
D3-NMeFOSA		78	10-130
D5-NEtFOSAA		102	40-150
D3-NMeFOSAA		103	40-135
13C4-PFBA	M-03	120	8-130
13C5-PFPeA		128	35-130
13C5-PFHxA		128	40-130
13C4-PFHpA		128	40-130
13C8-PFOA		129	40-130
13C9-PFNA		125	40-130
13C6-PFDA	M-03	114	40-130
13C3-PFBS	M-03	133	40-135
13C3-PFHxS		129	40-130
13C8-PFOS		112	40-130
13C7-PFUnA	M-03	100	40-130
13C2-PFDoA		80	40-130
13C2-PFTeDA		60	20-130
13C3-HFPO-DA		130	40-130
D7-NMeFOSE		93	20-130
D9-NEtFOSE	M-03	84	15-130
13C3-PFPrA	M-03	100	8-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29382-002
Batch: 29382
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/22/2026 1105

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	9.8	10		1	102	70-140	01/23/2026 1141
11Cl-PF3OUdS	19	13		1	67	45-160	01/23/2026 1141
9Cl-PF3ONS	19	18		1	94	70-150	01/23/2026 1141
ADONA	19	19		1	103	70-160	01/23/2026 1141
8:2FTS	19	21		1	107	70-150	01/23/2026 1141
4:2FTS	19	19		1	101	60-150	01/23/2026 1141
6:2FTS	19	21		1	112	55-200	01/23/2026 1141
5:3FTCA	130	130		1	100	60-130	01/23/2026 1141
HFPO-DA	20	21		1	103	70-145	01/23/2026 1141
NEtFOSA	5.0	6.2	M-03	1	123	70-140	01/23/2026 1141
NEtFOSAA	5.0	4.5	M-03	1	91	65-165	01/23/2026 1141
NEtFOSE	50	53		1	107	70-135	01/23/2026 1141
NMeFOSA	5.0	6.0	M-03	1	119	70-155	01/23/2026 1141
NMeFOSAA	5.0	4.8	M-03	1	95	65-155	01/23/2026 1141
NMeFOSE	50	54	M-03	1	107	70-140	01/23/2026 1141
NFDHA	10	9.9		1	99	60-155	01/23/2026 1141
PFEESA	8.9	9.0		1	101	70-140	01/23/2026 1141
PFMPA	10	9.7	M-03	1	97	30-140	01/23/2026 1141
PFMBA	10	9.9	M-03	1	99	60-150	01/23/2026 1141
PFBS	4.4	4.1		1	93	65-145	01/23/2026 1141
PFBA	20	20	M-03	1	99	70-140	01/23/2026 1141
PFDS	4.8	3.4		1	70	40-155	01/23/2026 1141
PFDA	5.0	5.2		1	104	70-155	01/23/2026 1141
PFDoS	4.8	1.8	M-03	1	37	25-160	01/23/2026 1141
PFDoA	5.0	5.0		1	101	70-150	01/23/2026 1141
PFHpS	4.8	4.8		1	101	65-155	01/23/2026 1141
PFHpA	5.0	5.0		1	100	65-145	01/23/2026 1141
7:3FTCA	130	130		1	101	60-150	01/23/2026 1141
PFHxS	4.6	3.9		1	86	60-150	01/23/2026 1141
PFHxA	5.0	5.0		1	100	65-140	01/23/2026 1141
PFNS	4.8	4.0	M-03	1	82	55-140	01/23/2026 1141
PFNA	5.0	5.1	M-03	1	102	70-155	01/23/2026 1141
PFOSA	5.0	5.1	M-03	1	103	70-140	01/23/2026 1141
PFOS	4.6	4.3	M-03	1	93	65-160	01/23/2026 1141
PFOA	5.0	4.7		1	94	70-150	01/23/2026 1141
PFPeS	4.7	4.4		1	94	55-160	01/23/2026 1141
PFPeA	10	9.9		1	99	60-150	01/23/2026 1141
PFPrA	20	19	M-03	1	94	70-140	01/23/2026 1141
3:3FTCA	25	25	M-03	1	100	45-130	01/23/2026 1141
PFTeDA	5.0	4.6		1	92	65-150	01/23/2026 1141
PFTrDA	5.0	3.3		1	66	65-150	01/23/2026 1141
PFUnA	5.0	4.7	M-03	1	94	70-155	01/23/2026 1141

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29382-002
Batch: 29382
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/22/2026 1105

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		116	40-165
13C2-6:2FTS		110	40-215
13C2-8:2FTS		107	40-275
13C8-PFOSA		88	40-130
D5-NEtFOSA		45	10-130
D3-NMeFOSA	M-03	53	10-130
D5-NEtFOSAA		90	40-150
D3-NMeFOSAA		96	40-135
13C4-PFBA	M-03	107	8-130
13C5-PFPeA		116	35-130
13C5-PFHxA		114	40-130
13C4-PFHpA		114	40-130
13C8-PFOA		114	40-130
13C9-PFNA		108	40-130
13C6-PFDA		99	40-130
13C3-PFBS	M-03	122	40-135
13C3-PFHxS		122	40-130
13C8-PFOS		109	40-130
13C7-PFUnA		94	40-130
13C2-PFDoA		67	40-130
13C2-PFTeDA		39	20-130
13C3-HFPO-DA		119	40-130
D7-NMeFOSE		75	20-130
D9-NEtFOSE		67	15-130
13C3-PFPrA	M-03	92	8-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29382-102
Batch: 29382
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/22/2026 1105

Parameter	Spike Amount (ng/g)	Result (ng/g)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	0.98	0.81	M-03	1	82	70-140	01/23/2026 1151
11Cl-PF3OUdS	1.9	1.1	M-03	1	59	45-160	01/23/2026 1151
9Cl-PF3ONS	1.9	1.6		1	85	70-150	01/23/2026 1151
ADONA	1.9	1.6		1	83	70-160	01/23/2026 1151
8:2FTS	1.9	1.8	M-03	1	94	70-150	01/23/2026 1151
4:2FTS	1.9	1.6		1	84	60-150	01/23/2026 1151
6:2FTS	1.9	1.7	M-03	1	87	55-200	01/23/2026 1151
5:3FTCA	13	10		1	81	60-130	01/23/2026 1151
HFPO-DA	2.0	1.7		1	84	70-145	01/23/2026 1151
NEtFOSA	0.50	0.49	M-03	1	97	70-140	01/23/2026 1151
NEtFOSAA	0.50	0.43	M-03	1	86	65-165	01/23/2026 1151
NEtFOSE	5.0	4.4	M-03	1	88	70-135	01/23/2026 1151
NMeFOSA	0.50	0.43	M-03	1	87	70-155	01/23/2026 1151
NMeFOSAA	0.50	0.39	M-03	1	78	65-155	01/23/2026 1151
NMeFOSE	5.0	4.3	M-03	1	87	70-140	01/23/2026 1151
NFDHA	1.0	0.86	M-03	1	86	60-155	01/23/2026 1151
PFEESA	0.89	0.76	M-03	1	85	70-140	01/23/2026 1151
PFMPA	1.0	0.83	M-03	1	83	30-140	01/23/2026 1151
PFMBA	1.0	0.84	M-03	1	84	60-150	01/23/2026 1151
PFBS	0.44	0.39	M-03	1	88	65-145	01/23/2026 1151
PFBA	2.0	1.7	M-03	1	85	70-140	01/23/2026 1151
PFDS	0.48	0.29		1	61	40-155	01/23/2026 1151
PFDA	0.50	0.38	M-03	1	75	70-155	01/23/2026 1151
PFDoS	0.48	0.15		1	32	25-160	01/23/2026 1151
PFDoA	0.50	0.47	M-03	1	93	70-150	01/23/2026 1151
PFHpS	0.47	0.44		1	93	65-155	01/23/2026 1151
PFHpA	0.50	0.44	M-03	1	87	65-145	01/23/2026 1151
7:3FTCA	13	11	M-03	1	84	60-150	01/23/2026 1151
PFHxS	0.45	0.35	M-03	1	79	60-150	01/23/2026 1151
PFHxA	0.50	0.41	M-03	1	81	65-140	01/23/2026 1151
PFNS	0.48	0.32	M-03	1	66	55-140	01/23/2026 1151
PFNA	0.50	0.43	M-03	1	86	70-155	01/23/2026 1151
PFOSA	0.50	0.42	M-03	1	83	70-140	01/23/2026 1151
PFOS	0.46	0.39	M-03	1	84	65-160	01/23/2026 1151
PFOA	0.50	0.46	M-03	1	92	70-150	01/23/2026 1151
PFPeS	0.47	0.40	M-03	1	86	55-160	01/23/2026 1151
PFPeA	1.0	0.90	M-03	1	90	60-150	01/23/2026 1151
PFPrA	2.0	1.7	M-03	1	87	70-140	01/23/2026 1151
3:3FTCA	2.5	2.3	M-03	1	91	45-130	01/23/2026 1151
PFTeDA	0.50	0.45	M-03	1	90	65-150	01/23/2026 1151
PFTrDA	0.50	0.33	M-03	1	65	65-150	01/23/2026 1151
PFUnA	0.50	0.46		1	91	70-155	01/23/2026 1151

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29382-102
Batch: 29382
Analytical Method: 1633

Matrix: Solid
Prep Method: 1633
Prep Date: 01/22/2026 1105

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		114	40-165
13C2-6:2FTS		118	40-215
13C2-8:2FTS		107	40-275
13C8-PFOSA		89	40-130
D5-NEtFOSA	M-03	50	10-130
D3-NMeFOSA		58	10-130
D5-NEtFOSAA		79	40-150
D3-NMeFOSAA		92	40-135
13C4-PFBA	M-03	100	8-130
13C5-PFPeA		107	35-130
13C5-PFHxA		110	40-130
13C4-PFHpA		108	40-130
13C8-PFOA		107	40-130
13C9-PFNA		98	40-130
13C6-PFDA		97	40-130
13C3-PFBS		114	40-135
13C3-PFHxS		116	40-130
13C8-PFOS		101	40-130
13C7-PFUnA		82	40-130
13C2-PFDoA		62	40-130
13C2-PFTeDA		40	20-130
13C3-HFPO-DA		110	40-130
D7-NMeFOSE		77	20-130
D9-NEtFOSE		68	15-130
13C3-PFPrA	M-03	84	8-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29557-001
Batch: 29557
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
TFSI	1.6	U	1	3.2	1.6	0.51	ng/L	02/04/2026 2110
11Cl-PF3OUdS	3.0	U	1	6.4	3.0	0.95	ng/L	02/04/2026 2110
9Cl-PF3ONS	3.0	U	1	6.4	3.0	1.1	ng/L	02/04/2026 2110
ADONA	3.0	U	1	6.4	3.0	1.0	ng/L	02/04/2026 2110
8:2FTS	3.1	U	1	6.4	3.1	2.5	ng/L	02/04/2026 2110
4:2FTS	3.0	U	1	6.4	3.0	1.7	ng/L	02/04/2026 2110
6:2FTS	3.0	U	1	6.4	3.0	2.1	ng/L	02/04/2026 2110
5:3FTCA	20	U	1	40	20	6.6	ng/L	02/04/2026 2110
HFPO-DA	3.2	U	1	6.4	3.2	1.1	ng/L	02/04/2026 2110
NEtFOSA	0.80	U	1	1.6	0.80	0.44	ng/L	02/04/2026 2110
NEtFOSAA	1.2	U	1	1.6	1.2	0.93	ng/L	02/04/2026 2110
NEtFOSE	8.0	U	1	16	8.0	3.0	ng/L	02/04/2026 2110
NMeFOSA	0.80	U	1	1.6	0.80	0.30	ng/L	02/04/2026 2110
NMeFOSAA	0.80	U	1	1.6	0.80	0.30	ng/L	02/04/2026 2110
NMeFOSE	8.0	U	1	16	8.0	3.3	ng/L	02/04/2026 2110
NFDHA	1.6	U	1	3.2	1.6	0.79	ng/L	02/04/2026 2110
PFEESA	1.4	U	1	3.2	1.4	0.30	ng/L	02/04/2026 2110
PFMBA	1.6	U	1	3.2	1.6	0.53	ng/L	02/04/2026 2110
PFBS	1.4	U	1	1.6	1.4	1.2	ng/L	02/04/2026 2110
PFDS	0.77	U	1	1.6	0.77	0.41	ng/L	02/04/2026 2110
PFDA	0.80	U	1	1.6	0.80	0.49	ng/L	02/04/2026 2110
PFDoS	0.77	U	1	1.6	0.77	0.36	ng/L	02/04/2026 2110
PFDoA	0.80	U	1	1.6	0.80	0.19	ng/L	02/04/2026 2110
PFHpS	0.76	U	1	1.6	0.76	0.58	ng/L	02/04/2026 2110
PFHpA	0.80	U	1	1.6	0.80	0.32	ng/L	02/04/2026 2110
7:3FTCA	20	U	1	40	20	8.1	ng/L	02/04/2026 2110
PFHxS	0.73	U	1	1.6	0.73	0.71	ng/L	02/04/2026 2110
PFHxA	0.80	U	1	1.6	0.80	0.24	ng/L	02/04/2026 2110
PFNS	0.77	U	1	1.6	0.77	0.47	ng/L	02/04/2026 2110
PFNA	0.80	U	1	1.6	0.80	0.61	ng/L	02/04/2026 2110
PFOSA	0.80	U	1	1.6	0.80	0.29	ng/L	02/04/2026 2110
PFOS	0.74	U	1	1.6	0.74	0.55	ng/L	02/04/2026 2110
PFOA	0.80	U	1	1.6	0.80	0.73	ng/L	02/04/2026 2110
PFPeS	0.75	U	1	1.6	0.75	0.44	ng/L	02/04/2026 2110
PFPeA	1.6	U	1	3.2	1.6	0.44	ng/L	02/04/2026 2110
3:3FTCA	4.0	U	1	8.0	4.0	1.5	ng/L	02/04/2026 2110
PFTeDA	0.80	U	1	1.6	0.80	0.43	ng/L	02/04/2026 2110
PFTrDA	0.80	U	1	1.6	0.80	0.61	ng/L	02/04/2026 2110
PFUnA	1.2	U	1	1.6	1.2	0.82	ng/L	02/04/2026 2110

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		108	40-200
13C2-6:2FTS		115	40-200
13C2-8:2FTS	M-03	110	40-300

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MB

Sample ID: BQ29557-001
Batch: 29557
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Surrogate	Q	% Rec	Acceptance Limit
13C8-PFOSA		97	40-130
D5-NEtFOSA		73	10-130
D3-NMeFOSA		74	10-130
D5-NEtFOSAA		93	25-135
D3-NMeFOSAA		96	40-170
13C4-PFBA		97	5-130
13C5-PFPeA	M-03	110	40-130
13C5-PFHxA		110	40-130
13C4-PFHpA		108	40-130
13C8-PFOA		111	40-130
13C9-PFNA	M-03	108	40-130
13C6-PFDA		107	40-130
13C3-PFBS		106	40-135
13C3-PFHxS	M-03	110	40-130
13C8-PFOS	M-03	100	40-130
13C7-PFUnA	M-03	101	30-130
13C2-PFDoA		94	10-130
13C2-PFTeDA		84	10-130
13C3-HFPO-DA		110	40-130
D7-NMeFOSE		87	10-130
D9-NEtFOSE		86	10-130
13C3-PFPrA		102	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29557-002
Batch: 29557
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Parameter	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	78	80		1	103	70-140	02/04/2026 2120
11Cl-PF3OUdS	150	170		1	114	55-160	02/04/2026 2120
9Cl-PF3ONS	150	180		1	123	70-155	02/04/2026 2120
ADONA	150	180		1	119	65-145	02/04/2026 2120
8:2FTS	150	160		1	107	60-150	02/04/2026 2120
4:2FTS	150	160		1	105	70-145	02/04/2026 2120
6:2FTS	150	180		1	118	65-155	02/04/2026 2120
5:3FTCA	1000	1100		1	108	70-135	02/04/2026 2120
HFPO-DA	160	180		1	110	70-140	02/04/2026 2120
NEtFOSA	40	42	M-03	1	106	65-145	02/04/2026 2120
NEtFOSAA	40	42	M-03	1	104	70-145	02/04/2026 2120
NEtFOSE	400	430	M-03	1	108	70-135	02/04/2026 2120
NMeFOSA	40	42	M-03	1	106	60-150	02/04/2026 2120
NMeFOSAA	40	45		1	112	50-140	02/04/2026 2120
NMeFOSE	400	420	M-03	1	104	70-145	02/04/2026 2120
NFDHA	80	83		1	104	50-150	02/04/2026 2120
PFEESA	71	80		1	112	70-140	02/04/2026 2120
PFMBA	80	86	M-03	1	108	60-150	02/04/2026 2120
PFBS	36	36		1	101	60-145	02/04/2026 2120
PFDS	39	43	M-03	1	112	60-145	02/04/2026 2120
PFDA	40	45	M-03	1	113	70-140	02/04/2026 2120
PFDoS	39	43		1	111	50-145	02/04/2026 2120
PFDoA	40	48	M-03	1	119	70-140	02/04/2026 2120
PFHpS	38	48	M-03	1	126	70-150	02/04/2026 2120
PFHpA	40	43		1	107	70-150	02/04/2026 2120
7:3FTCA	1000	1200	M-03	1	118	50-145	02/04/2026 2120
PFHxS	36	40	M-03	1	111	65-145	02/04/2026 2120
PFHxA	40	43		1	107	70-145	02/04/2026 2120
PFNS	38	43		1	112	65-145	02/04/2026 2120
PFNA	40	46	M-03	1	114	70-150	02/04/2026 2120
PFOSA	40	39	M-03	1	97	70-145	02/04/2026 2120
PFOS	37	44	M-03	1	119	55-150	02/04/2026 2120
PFOA	40	46		1	115	70-150	02/04/2026 2120
PFPeS	38	39		1	103	65-140	02/04/2026 2120
PFPeA	80	86	M-03	1	108	65-135	02/04/2026 2120
3:3FTCA	200	200		1	98	65-130	02/04/2026 2120
PFTeDA	40	43		1	109	60-140	02/04/2026 2120
PFTrDA	40	45		1	113	65-140	02/04/2026 2120
PFUnA	40	42		1	105	70-145	02/04/2026 2120

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS	M-03	94	40-200
13C2-6:2FTS		83	40-200
13C2-8:2FTS	M-03	93	40-300

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29557-002
Batch: 29557
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Surrogate	Q	% Rec	Acceptance Limit
13C8-PFOSA		85	40-130
D5-NEtFOSA		59	10-130
D3-NMeFOSA		61	10-130
D5-NEtFOSAA		81	25-135
D3-NMeFOSAA		85	40-170
13C4-PFBA		83	5-130
13C5-PFPeA		92	40-130
13C5-PFHxA		95	40-130
13C4-PFHpA		89	40-130
13C8-PFOA		94	40-130
13C9-PFNA	M-03	89	40-130
13C6-PFDA		84	40-130
13C3-PFBS		85	40-135
13C3-PFHxS		83	40-130
13C8-PFOS		77	40-130
13C7-PFUnA	M-03	81	30-130
13C2-PFDoA		77	10-130
13C2-PFTeDA		73	10-130
13C3-HFPO-DA		94	40-130
D7-NMeFOSE		77	10-130
D9-NEtFOSE		75	10-130
13C3-PFPrA		87	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29557-102
Batch: 29557
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Parameter	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	6.3	6.8	M-03	1	109	70-140	02/04/2026 2130
11Cl-PF3OUdS	12	12		1	99	55-160	02/04/2026 2130
9Cl-PF3ONS	12	14		1	119	70-155	02/04/2026 2130
ADONA	12	16		1	132	65-145	02/04/2026 2130
8:2FTS	12	15		1	126	60-150	02/04/2026 2130
4:2FTS	12	15		1	125	70-145	02/04/2026 2130
6:2FTS	12	16	M-03	1	133	65-155	02/04/2026 2130
5:3FTCA	80	95	M-03	1	119	70-135	02/04/2026 2130
HFPO-DA	13	16		1	127	70-140	02/04/2026 2130
NEtFOSA	3.2	3.4	M-03	1	105	65-145	02/04/2026 2130
NEtFOSAA	3.2	4.4	M-03	1	136	70-145	02/04/2026 2130
NEtFOSE	32	37		1	115	70-135	02/04/2026 2130
NMeFOSA	3.2	4.1	M-03	1	129	60-150	02/04/2026 2130
NMeFOSAA	3.2	3.6	M-03	1	114	50-140	02/04/2026 2130
NMeFOSE	32	36	M-03	1	113	70-145	02/04/2026 2130
NFDHA	6.4	7.0	M-03	1	109	50-150	02/04/2026 2130
PFEESA	5.7	6.6		1	116	70-140	02/04/2026 2130
PFMBA	6.4	7.0	M-09	1	110	60-150	02/04/2026 2130
PFBS	2.8	3.0	M-03	1	104	60-145	02/04/2026 2130
PFDS	3.1	3.0		1	97	60-145	02/04/2026 2130
PFDA	3.2	3.5	M-03	1	108	70-140	02/04/2026 2130
PFDoS	3.1	3.1	M-03	1	99	50-145	02/04/2026 2130
PFDoA	3.2	4.2	M-03	1	131	70-140	02/04/2026 2130
PFHpS	3.0	3.3		1	108	70-150	02/04/2026 2130
PFHpA	3.2	3.5	M-03	1	110	70-150	02/04/2026 2130
7:3FTCA	80	100	M-03	1	124	50-145	02/04/2026 2130
PFHxS	2.9	3.7	M-03	1	128	65-145	02/04/2026 2130
PFHxA	3.2	3.9	M-03	1	121	70-145	02/04/2026 2130
PFNS	3.1	3.8	M-03	1	124	65-145	02/04/2026 2130
PFNA	3.2	3.5	M-03	1	110	70-150	02/04/2026 2130
PFOSA	3.2	3.6	M-03	1	113	70-145	02/04/2026 2130
PFOS	3.0	2.8	M-03	1	95	55-150	02/04/2026 2130
PFOA	3.2	4.0	M-03	1	124	70-150	02/04/2026 2130
PFPeS	3.0	2.9		1	97	65-140	02/04/2026 2130
PFPeA	6.4	7.4		1	116	65-135	02/04/2026 2130
3:3FTCA	16	15	M-03	1	95	65-130	02/04/2026 2130
PFTeDA	3.2	3.6	M-03	1	112	60-140	02/04/2026 2130
PFTrDA	3.2	3.5		1	109	65-140	02/04/2026 2130
PFUnA	3.2	3.6	M-03	1	114	70-145	02/04/2026 2130

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS	M-03	95	40-200
13C2-6:2FTS		89	40-200
13C2-8:2FTS		92	40-300

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - LCS

Sample ID: BQ29557-102
Batch: 29557
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Surrogate	Q	% Rec	Acceptance Limit
13C8-PFOSA		83	40-130
D5-NEtFOSA	M-03	65	10-130
D3-NMeFOSA		63	10-130
D5-NEtFOSAA		82	25-135
D3-NMeFOSAA	M-03	82	40-170
13C4-PFBA		84	5-130
13C5-PFPeA		95	40-130
13C5-PFHxA		96	40-130
13C4-PFHpA	M-03	93	40-130
13C8-PFOA		96	40-130
13C9-PFNA		88	40-130
13C6-PFDA	M-03	93	40-130
13C3-PFBS		91	40-135
13C3-PFHxS		95	40-130
13C8-PFOS		90	40-130
13C7-PFUnA	M-03	97	30-130
13C2-PFDoA	M-03	84	10-130
13C2-PFTeDA		74	10-130
13C3-HFPO-DA		94	40-130
D7-NMeFOSE		75	10-130
D9-NEtFOSE		71	10-130
13C3-PFPrA		91	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MS

Sample ID: BA20004-002MS
Batch: 29557
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Parameter	Sample Amount (ng/L)	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
TFSI	ND	1600	1800	M-03	1	115	70-140	02/04/2026 2150
11Cl-PF3OUdS	ND	3000	3400		1	114	55-160	02/04/2026 2150
9Cl-PF3ONS	ND	3000	3500		1	118	70-155	02/04/2026 2150
ADONA	ND	3000	3500		1	115	65-145	02/04/2026 2150
8:2FTS	ND	3100	4000	M-03	1	129	60-150	02/04/2026 2150
4:2FTS	ND	3000	3100		1	104	70-145	02/04/2026 2150
6:2FTS	ND	3000	3000		1	98	65-155	02/04/2026 2150
5:3FTCA	ND	20000	24000		1	122	70-135	02/04/2026 2150
HFPO-DA	ND	3200	3800		1	119	70-140	02/04/2026 2150
NEtFOSA	ND	800	900	M-03	1	113	65-145	02/04/2026 2150
NEtFOSAA	ND	800	870	M-03	1	109	70-145	02/04/2026 2150
NEtFOSE	ND	8000	9400	M-03	1	117	70-135	02/04/2026 2150
NMeFOSA	ND	800	870	M-03	1	108	60-150	02/04/2026 2150
NMeFOSAA	ND	800	1000	M-03	1	128	50-140	02/04/2026 2150
NMeFOSE	ND	8000	8900	M-03	1	111	70-145	02/04/2026 2150
NFDHA	ND	1600	1800		1	114	50-150	02/04/2026 2150
PFEESA	ND	1400	1700		1	117	70-140	02/04/2026 2150
PFMBA	ND	1600	1800	M-09	1	112	60-150	02/04/2026 2150
PFBS	30	710	800		1	108	60-145	02/04/2026 2150
PFDS	ND	770	830		1	108	60-145	02/04/2026 2150
PFDA	ND	800	960		1	120	70-140	02/04/2026 2150
PFDoS	ND	770	790	M-03	1	101	50-145	02/04/2026 2150
PFDoA	ND	800	970	M-03	1	121	70-140	02/04/2026 2150
PFHpS	ND	760	900	M-03	1	118	70-150	02/04/2026 2150
PFHpA	15	800	900		1	111	70-150	02/04/2026 2150
7:3FTCA	ND	20000	25000	M-03	1	127	50-145	02/04/2026 2150
PFHxS	16	730	850	M-03	1	114	65-145	02/04/2026 2150
PFHxA	37	800	910		1	109	70-145	02/04/2026 2150
PFNS	ND	770	830	M-03	1	109	65-145	02/04/2026 2150
PFNA	ND	800	860	M-03	1	108	70-150	02/04/2026 2150
PFOSA	ND	800	900	M-03	1	112	70-145	02/04/2026 2150
PFOS	ND	740	810	M-03	1	109	55-150	02/04/2026 2150
PFOA	24	800	970		1	119	70-150	02/04/2026 2150
PFPeS	ND	750	720		1	96	65-140	02/04/2026 2150
PFPeA	38	1600	1900	M-03	1	116	65-135	02/04/2026 2150
3:3FTCA	ND	4000	3900		1	98	65-130	02/04/2026 2150
PFTeDA	ND	800	900	M-03	1	113	60-140	02/04/2026 2150
PFTrDA	ND	800	870		1	108	65-140	02/04/2026 2150
PFUnA	ND	800	880	M-03	1	110	70-145	02/04/2026 2150

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS	M-03	100	40-200
13C2-6:2FTS		108	40-200
13C2-8:2FTS	M-03	85	40-300

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MS

Sample ID: BA20004-002MS
Batch: 29557
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Surrogate	Q	% Rec	Acceptance Limit
13C8-PFOSA		87	40-130
D5-NEtFOSA		65	10-130
D3-NMeFOSA		63	10-130
D5-NEtFOSAA	M-03	79	25-135
D3-NMeFOSAA		84	40-170
13C4-PFBA		84	5-130
13C5-PFPeA		91	40-130
13C5-PFHxA		90	40-130
13C4-PFHpA		94	40-130
13C8-PFOA		92	40-130
13C9-PFNA		87	40-130
13C6-PFDA		82	40-130
13C3-PFBS		91	40-135
13C3-PFHxS		96	40-130
13C8-PFOS	M-03	87	40-130
13C7-PFUnA	M-03	90	30-130
13C2-PFDoA		78	10-130
13C2-PFTeDA		75	10-130
13C3-HFPO-DA		94	40-130
D7-NMeFOSE		79	10-130
D9-NEtFOSE		75	10-130
13C3-PFPrA		85	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MSD

Sample ID: BA20004-002MD
Batch: 29557
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Parameter	Sample Amount (ng/L)	Spike Amount (ng/L)	Result (ng/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
TFSI	ND	1600	1600		1	102	11	70-140	30	02/04/2026 2200
11Cl-PF3OUdS	ND	3000	3200		1	105	7.9	55-160	30	02/04/2026 2200
9Cl-PF3ONS	ND	3000	3400	M-03	1	115	2.7	70-155	30	02/04/2026 2200
ADONA	ND	3000	3500		1	116	0.72	65-145	30	02/04/2026 2200
8:2FTS	ND	3100	3400	M-03	1	111	15	60-150	30	02/04/2026 2200
4:2FTS	ND	3000	3000		1	102	2.3	70-145	30	02/04/2026 2200
6:2FTS	ND	3000	3700		1	121	22	65-155	30	02/04/2026 2200
5:3FTCA	ND	20000	22000		1	111	9.9	70-135	30	02/04/2026 2200
HFPO-DA	ND	3200	3400		1	108	10	70-140	30	02/04/2026 2200
NEtFOSA	ND	800	870	M-03	1	108	3.9	65-145	30	02/04/2026 2200
NEtFOSAA	ND	800	860	M-03	1	107	1.4	70-145	30	02/04/2026 2200
NEtFOSE	ND	8000	8900	M-03	1	111	5.3	70-135	30	02/04/2026 2200
NMeFOSA	ND	800	860	M-03	1	108	0.20	60-150	30	02/04/2026 2200
NMeFOSAA	ND	800	870	M-03	1	109	16	50-140	30	02/04/2026 2200
NMeFOSE	ND	8000	8600	M-03	1	107	3.3	70-145	30	02/04/2026 2200
NFDHA	ND	1600	1800		1	112	2.0	50-150	30	02/04/2026 2200
PFEESA	ND	1400	1600		1	112	4.3	70-140	30	02/04/2026 2200
PFMBA	ND	1600	1700	M-09	1	108	4.0	60-150	30	02/04/2026 2200
PFBS	30	710	760		1	103	4.5	60-145	30	02/04/2026 2200
PFDS	ND	770	780	M-03	1	101	6.0	60-145	30	02/04/2026 2200
PFDA	ND	800	970	M-03	1	121	1.2	70-140	30	02/04/2026 2200
PFDoS	ND	770	800	M-03	1	103	1.5	50-145	30	02/04/2026 2200
PFDoA	ND	800	1000	M-03	1	125	3.3	70-140	30	02/04/2026 2200
PFHpS	ND	760	790		1	104	13	70-150	30	02/04/2026 2200
PFHpA	15	800	890		1	109	1.6	70-150	30	02/04/2026 2200
7:3FTCA	ND	20000	26000	M-03	1	131	3.5	50-145	30	02/04/2026 2200
PFHxS	16	730	860	M-03	1	115	0.96	65-145	30	02/04/2026 2200
PFHxA	37	800	890		1	107	2.3	70-145	30	02/04/2026 2200
PFNS	ND	770	800	M-03	1	104	4.2	65-145	30	02/04/2026 2200
PFNA	ND	800	960	M-03	1	120	10	70-150	30	02/04/2026 2200
PFOSA	ND	800	860	M-03	1	107	4.6	70-145	30	02/04/2026 2200
PFOS	ND	740	790	M-03	1	106	2.6	55-150	30	02/04/2026 2200
PFOA	24	800	890	M-03	1	109	8.5	70-150	30	02/04/2026 2200
PFPeS	ND	750	780	M-03	1	103	7.3	65-140	30	02/04/2026 2200
PFPeA	38	1600	1700		1	104	11	65-135	30	02/04/2026 2200
3:3FTCA	ND	4000	3700	M-03	1	93	4.8	65-130	30	02/04/2026 2200
PFTeDA	ND	800	890		1	111	2.1	60-140	30	02/04/2026 2200
PFTrDA	ND	800	810		1	102	6.3	65-140	30	02/04/2026 2200
PFUnA	ND	800	860	M-03	1	107	2.2	70-145	30	02/04/2026 2200

Surrogate	Q	% Rec	Acceptance Limit
13C2-4:2FTS		103	40-200
13C2-6:2FTS		89	40-200
13C2-8:2FTS		94	40-300

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PFAS by LC/MS/MS - MSD

Sample ID: BA20004-002MD
Batch: 29557
Analytical Method: 1633

Matrix: Aqueous
Prep Method: 1633
Prep Date: 02/03/2026 0729

Surrogate	Q	% Rec	Acceptance Limit
13C8-PFOSA		98	40-130
D5-NEtFOSA		68	10-130
D3-NMeFOSA	M-03	65	10-130
D5-NEtFOSAA		87	25-135
D3-NMeFOSAA	M-03	94	40-170
13C4-PFBA		89	5-130
13C5-PFPeA	M-03	101	40-130
13C5-PFHxA		99	40-130
13C4-PFHpA	M-03	96	40-130
13C8-PFOA		104	40-130
13C9-PFNA		92	40-130
13C6-PFDA		86	40-130
13C3-PFBS		98	40-135
13C3-PFHxS		97	40-130
13C8-PFOS	M-03	93	40-130
13C7-PFUnA	M-03	87	30-130
13C2-PFDoA		82	10-130
13C2-PFTeDA		74	10-130
13C3-HFPO-DA		106	40-130
D7-NMeFOSE		84	10-130
D9-NEtFOSE		81	10-130
13C3-PFPrA		91	5-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

U = Not detected at or above the LOD
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA20004

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BA20004-001	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BA20004-001	1	Perfluorodecanoic acid (PFDA)	M-03
1633	BA20004-001	1	Perfluorononanoic acid (PFNA)	M-03
1633	BA20004-001	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA20004-001	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA20004-001	1	13C2-6:2FTS	M-03
1633	BA20004-001	1	13C2-8:2FTS	M-03
1633	BA20004-001	1	D5-NEtFOSAA	M-03
1633	BA20004-001	1	13C6-PFDA	M-03
1633	BA20004-001	1	D9-NEtFOSE	M-03
1633	BA20004-002	2	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	BA20004-002	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BA20004-002	2	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BA20004-002	2	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BA20004-002	2	Perfluorohexanoic acid (PFHxA)	M-03
1633	BA20004-002	2	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BA20004-002	2	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA20004-002	2	Perfluorooctanoic acid (PFOA)	M-03
1633	BA20004-002	2	Perfluoropentanoic acid (PFPeA)	M-08
1633	BA20004-002	1	D5-NEtFOSA	M-03
1633	BA20004-002	2	D5-NEtFOSAA	M-03
1633	BA20004-002	1	D3-NMeFOSAA	M-03
1633	BA20004-002	2	13C2-PFDoA	M-03
1633	BA20004-002	2	D7-NMeFOSE	M-03
1633	BQ29382-102	1	Bis(trifluoromethylsulfonyl)amine (TFSI)	M-03
1633	BQ29382-102	1	11-Chloroeicosafluoro-3-oxaundecane-	M-03
1633	BQ29382-102	1	1H,1H,2H,2H-Perfluorodecane sulfonic	M-03
1633	BQ29382-102	1	1H,1H,2H,2H-Perfluorooctane sulfonic	M-03
1633	BQ29382-002	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29382-102	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29382-002	1	N-ethyl	M-03
1633	BQ29382-102	1	N-ethyl	M-03
1633	BQ29382-001	1	N-ethyl	M-03
1633	BQ29382-102	1	N-ethyl	M-03
1633	BQ29382-002	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29382-102	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29382-002	1	N-methyl	M-03
1633	BQ29382-102	1	N-methyl	M-03
1633	BQ29382-002	1	N-methyl	M-03
1633	BQ29382-102	1	N-methyl	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA20004

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BQ29382-102	1	Nonafluoro-3,6-dioxaheptanoic acid	M-03
1633	BQ29382-102	1	Perfluoro(2-ethoxyethane)sulfonic acid	M-03
1633	BQ29382-002	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29382-102	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29382-002	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29382-102	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29382-102	1	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	BQ29382-002	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29382-102	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29382-102	1	Perfluorodecanoic acid (PFDA)	M-03
1633	BQ29382-002	1	Perfluorododecanesulfonic acid (PFDoS)	M-03
1633	BQ29382-102	1	Perfluorododecanoic acid (PFDoA)	M-03
1633	BQ29382-102	1	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BQ29382-102	1	3-Perfluoroheptyl propanoic acid	M-03
1633	BQ29382-102	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BQ29382-102	1	Perfluorohexanoic acid (PFHxA)	M-03
1633	BQ29382-002	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BQ29382-102	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BQ29382-002	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29382-102	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29382-002	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29382-102	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29382-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29382-102	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29382-102	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BQ29382-102	1	Perfluoropentanesulfonic acid (PFPeS)	M-03
1633	BQ29382-102	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29382-001	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29382-002	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29382-102	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29382-002	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29382-102	1	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29382-102	1	Perfluorotetradecanoic acid (PFTeDA)	M-03
1633	BQ29382-102	1	Perfluorotridecanoic acid (PFTrDA)	M-03
1633	BQ29382-002	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BQ29382-001	1	13C2-4:2FTS	M-03
1633	BQ29382-102	1	D5-NEtFOSA	M-03
1633	BQ29382-002	1	D3-NMeFOSA	M-03
1633	BQ29382-001	1	13C4-PFBA	M-03
1633	BQ29382-002	1	13C4-PFBA	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA20004

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BQ29382-102	1	13C4-PFBA	M-03
1633	BQ29382-001	1	13C6-PFDA	M-03
1633	BQ29382-001	1	13C3-PFBS	M-03
1633	BQ29382-002	1	13C3-PFBS	M-03
1633	BQ29382-001	1	13C7-PFUnA	M-03
1633	BQ29382-001	1	D9-NEtFOSE	M-03
1633	BQ29382-001	1	13C3-PFPrA	M-03
1633	BQ29382-002	1	13C3-PFPrA	M-03
1633	BQ29382-102	1	13C3-PFPrA	M-03
1633	BQ29557-102	1	Bis(trifluoromethylsulfonyl)amine (TFSI)	M-03
1633	BA20004-002MS	2	Bis(trifluoromethylsulfonyl)amine (TFSI)	M-03
1633	BA20004-002MD	2	9-Chlorohexadecafluoro-3-oxanonane-	M-03
1633	BA20004-002MS	2	1H,1H,2H,2H-Perfluorodecane sulfonic	M-03
1633	BA20004-002MD	2	1H,1H,2H,2H-Perfluorodecane sulfonic	M-03
1633	BQ29557-102	1	1H,1H,2H,2H-Perfluorooctane sulfonic	M-03
1633	BQ29557-102	1	2H,2H,3H,3H-Perfluorooctanoic acid	M-03
1633	BQ29557-002	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29557-102	1	N-ethyl perfluorooctanesulfonamide	M-03
1633	BA20004-002MS	2	N-ethyl perfluorooctanesulfonamide	M-03
1633	BA20004-002MD	2	N-ethyl perfluorooctanesulfonamide	M-03
1633	BQ29557-002	1	N-ethyl	M-03
1633	BQ29557-102	1	N-ethyl	M-03
1633	BA20004-002MS	2	N-ethyl	M-03
1633	BA20004-002MD	2	N-ethyl	M-03
1633	BQ29557-002	1	N-ethyl	M-03
1633	BA20004-002MS	2	N-ethyl	M-03
1633	BA20004-002MD	2	N-ethyl	M-03
1633	BQ29557-002	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29557-102	1	N-methyl perfluorooctanesulfonamide	M-03
1633	BA20004-002MS	2	N-methyl perfluorooctanesulfonamide	M-03
1633	BA20004-002MD	2	N-methyl perfluorooctanesulfonamide	M-03
1633	BQ29557-102	1	N-methyl	M-03
1633	BA20004-002MS	2	N-methyl	M-03
1633	BA20004-002MD	2	N-methyl	M-03
1633	BQ29557-002	1	N-methyl	M-03
1633	BQ29557-102	1	N-methyl	M-03
1633	BA20004-002MS	2	N-methyl	M-03
1633	BA20004-002MD	2	N-methyl	M-03
1633	BQ29557-102	1	Nonafluoro-3,6-dioxaheptanoic acid	M-03
1633	BQ29356-002	1	Perfluoro-3-methoxypropanoic acid	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA20004

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BQ29356-102	1	Perfluoro-3-methoxypropanoic acid	M-03
1633	BQ29557-002	1	Perfluoro-4-methoxybutanoic acid	M-03
1633	BQ29557-102	1	Perfluoro-4-methoxybutanoic acid	M-09
1633	BA20004-002MS	2	Perfluoro-4-methoxybutanoic acid	M-09
1633	BA20004-002MD	2	Perfluoro-4-methoxybutanoic acid	M-09
1633	BQ29557-102	1	Perfluorobutanesulfonic acid (PFBS)	M-03
1633	BQ29356-002	1	Perfluorobutanoic acid (PFBA)	M-03
1633	BQ29557-002	1	Perfluorodecanesulfonic acid (PFDS)	M-03
1633	BA20004-002MD	2	Perfluorodecanesulfonic acid (PFDS)	M-03
1633	BQ29557-002	1	Perfluorodecanoic acid (PFDA)	M-03
1633	BQ29557-102	1	Perfluorodecanoic acid (PFDA)	M-03
1633	BA20004-002MD	2	Perfluorodecanoic acid (PFDA)	M-03
1633	BQ29557-102	1	Perfluorododecanesulfonic acid (PFDoS)	M-03
1633	BA20004-002MS	2	Perfluorododecanesulfonic acid (PFDoS)	M-03
1633	BA20004-002MD	2	Perfluorododecanesulfonic acid (PFDoS)	M-03
1633	BQ29557-002	1	Perfluorododecanoic acid (PFDoA)	M-03
1633	BQ29557-102	1	Perfluorododecanoic acid (PFDoA)	M-03
1633	BA20004-002MS	2	Perfluorododecanoic acid (PFDoA)	M-03
1633	BA20004-002MD	2	Perfluorododecanoic acid (PFDoA)	M-03
1633	BQ29557-002	1	Perfluoroheptanesulfonic acid (PFHpS)	M-03
1633	BA20004-002MS	2	Perfluoroheptanesulfonic acid (PFHpS)	M-03
1633	BQ29557-102	1	Perfluoroheptanoic acid (PFHpA)	M-03
1633	BQ29557-002	1	3-Perfluoroheptyl propanoic acid	M-03
1633	BQ29557-102	1	3-Perfluoroheptyl propanoic acid	M-03
1633	BA20004-002MS	2	3-Perfluoroheptyl propanoic acid	M-03
1633	BA20004-002MD	2	3-Perfluoroheptyl propanoic acid	M-03
1633	BQ29557-002	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BQ29557-102	1	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BA20004-002MS	2	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BA20004-002MD	2	Perfluorohexanesulfonic acid (PFHxS)	M-03
1633	BQ29557-102	1	Perfluorohexanoic acid (PFHxA)	M-03
1633	BQ29557-102	1	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BA20004-002MS	2	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BA20004-002MD	2	Perfluorononanesulfonic acid (PFNS)	M-03
1633	BQ29557-002	1	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29557-102	1	Perfluorononanoic acid (PFNA)	M-03
1633	BA20004-002MS	2	Perfluorononanoic acid (PFNA)	M-03
1633	BA20004-002MD	2	Perfluorononanoic acid (PFNA)	M-03
1633	BQ29557-002	1	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29557-102	1	Perfluorooctanesulfonamide (PFOSA)	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA20004

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BA20004-002MS	2	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BA20004-002MD	2	Perfluorooctanesulfonamide (PFOSA)	M-03
1633	BQ29557-002	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29557-102	1	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA20004-002MS	2	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BA20004-002MD	2	Perfluorooctanesulfonic acid (PFOS)	M-03
1633	BQ29557-102	1	Perfluorooctanoic acid (PFOA)	M-03
1633	BA20004-002MD	2	Perfluorooctanoic acid (PFOA)	M-03
1633	BA20004-002MD	2	Perfluoropentanesulfonic acid (PFPeS)	M-03
1633	BQ29557-002	1	Perfluoropentanoic acid (PFPeA)	M-03
1633	BA20004-002MS	2	Perfluoropentanoic acid (PFPeA)	M-03
1633	BQ29356-102	1	Perfluoropropanoic acid (PFPrA)	M-03
1633	BQ29557-102	1	3-Perfluoropropyl propanoic acid	M-03
1633	BA20004-002MD	2	3-Perfluoropropyl propanoic acid	M-03
1633	BQ29557-102	1	Perfluorotetradecanoic acid (PFTeDA)	M-03
1633	BA20004-002MS	2	Perfluorotetradecanoic acid (PFTeDA)	M-03
1633	BQ29557-102	1	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BA20004-002MS	2	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BA20004-002MD	2	Perfluoroundecanoic acid (PFUnA)	M-03
1633	BQ29356-001	1	13C2-4:2FTS	M-03
1633	BQ29557-002	1	13C2-4:2FTS	M-03
1633	BQ29557-102	1	13C2-4:2FTS	M-03
1633	BA20004-002MS	2	13C2-4:2FTS	M-03
1633	BQ29557-001	1	13C2-8:2FTS	M-03
1633	BQ29557-002	1	13C2-8:2FTS	M-03
1633	BA20004-002MS	2	13C2-8:2FTS	M-03
1633	BQ29356-001	1	D5-NEtFOSA	M-03
1633	BQ29557-102	1	D5-NEtFOSA	M-03
1633	BA20004-002MD	2	D3-NMeFOSA	M-03
1633	BA20004-002MS	2	D5-NEtFOSAA	M-03
1633	BQ29557-102	1	D3-NMeFOSAA	M-03
1633	BA20004-002MD	2	D3-NMeFOSAA	M-03
1633	BQ29557-001	1	13C5-PFPeA	M-03
1633	BA20004-002MD	2	13C5-PFPeA	M-03
1633	BQ29557-102	1	13C4-PFHpA	M-03
1633	BA20004-002MD	2	13C4-PFHpA	M-03
1633	BQ29356-001	1	13C9-PFNA	M-03
1633	BQ29557-001	1	13C9-PFNA	M-03
1633	BQ29557-002	1	13C9-PFNA	M-03
1633	BQ29356-001	1	13C6-PFDA	M-03

Manual Integration Summary
Pace Analytical LLC
Lot Number: BA20004

Where applicable, analytes for which manual integration occurred have been flagged with the following:

Qualifier	Technical Justification	Qualifier	Technical Justification	Qualifier	Technical Justification
M-01	Split peak	M-07	Low fit	M-13	Error
M-02	Peak tailing	M-08	Peak not found	M-14	Baseline
M-03	Incorrect auto integration	M-09	Analyte not Identified by the Data System	M-15	Other
M-04	Poor chromatography	M-10	Analyte misidentified by the Data System	M-16	Retention time shift
M-05	Manually assigned peak	M-11	Invalid integration	M-17	Shouldering
M-06	Wrong isomer	M-12	Wrong peak		

A summary of instances where manual integration occurred is included below:

Method	Sample	Run Number	Parameter	Qualifier
1633	BQ29356-102	1	13C6-PFDA	M-03
1633	BQ29557-102	1	13C6-PFDA	M-03
1633	BQ29557-001	1	13C3-PFHxS	M-03
1633	BQ29356-002	1	13C8-PFOS	M-03
1633	BQ29557-001	1	13C8-PFOS	M-03
1633	BA20004-002MS	2	13C8-PFOS	M-03
1633	BA20004-002MD	2	13C8-PFOS	M-03
1633	BQ29356-001	1	13C7-PFUnA	M-03
1633	BQ29557-001	1	13C7-PFUnA	M-03
1633	BQ29557-002	1	13C7-PFUnA	M-03
1633	BQ29557-102	1	13C7-PFUnA	M-03
1633	BA20004-002MS	2	13C7-PFUnA	M-03
1633	BA20004-002MD	2	13C7-PFUnA	M-03
1633	BQ29557-102	1	13C2-PFDoA	M-03

If you have any questions regarding this report, please contact the Pace Project Manager listed on the cover page.

Chain of Custody
and
Miscellaneous Documents

Sub-Contract Chain of Custody

Batch Date/Time: 01/19/26 10:28
Sub-Contract Lab: PACEWCSC
Address: 106 Vantage Point Dr.
City/State: West Columbia, SC 29172
Contact: Edward.Burnett@pacelabs.com
Owner Lab: PACEMTJL
Address: 12065 Lebanon Rd.
City/State: Mt. Juliet, TN 37122
Phone: (615) 773-9756
Fax: (615) 758-5859

BA20004

ETD2

Pace Analytical

12065 Lebanon Rd.
Mt. Juliet, TN 37122
Phone:(615) 773-9756
Fax:(615) 758-5859

WO: WG2677502
Email: MTJL.SubcontTeam@pacelabs.com
Results Due Date: 02/09/26
ESC Purchase Order #: L1936535
Send Reports to: Skylar S DeBeer

Sample ID Container ID	Matrix	State	Collect Date	Description	Sample Number Lab Use Only	Sample Comments Lab Use Only
CL-P1636-IIP55/57-SPT-10 PFAS-90mlPP-NoPres - 55094840	SS	NC	01/13/26 16:50	SUBPFAS1633	1. L1936535-01	Excel EDD, level 2
CL-LIQUID-IDW-01 PFAS-250HDPE-NoPres - 55094924 PFAS-250HDPE-NoPres - 55094925	GW	NC	01/13/26 17:30	PFAS1633	2. L1936535-02	Excel EDD, level 2

*– Container used for multiple Samples and/or Analyses

Relinquished by: [signature] Date 1-19-26

T= 1.8°C

Received by: Date

Relinquished by: FEDEX Date 1/20/26

Received by: [signature] PACE Date 1/20/26

DC#_Title: ENV-FRM-WCOL-0286 v02_Samples Receipt Checklist (SRC)
Effective Date: 8/2/2022

BA20004

Sample Receipt Checklist (SRC)

Client: PACE Cooler Inspected by/date: CNF / 1/20/26 Lot #:

Means of receipt: [ ] Pace [ ] Client [ ] UPS [✓] FedEx [ ] Other: _____

[✓] Yes	[ ] No		1. Were custody seals present on the cooler?
[✓] Yes	[ ] No	[ ] NA	2. If custody seals were present, were they intact and unbroken?

pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA

Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: 337205

1.8 / 1.8 °C NA / NA °C NA / NA °C NA / NA °C

Method: [ ] Temperature Blank [✓] Against Bottles IR Gun ID: 8 IR Gun Correction Factor: 0 °C

Method of coolant: [✓] Wet Ice [ ] Ice Packs [ ] Dry Ice [ ] None

[✓] Yes	[ ] No	[ ] NA	3. Were all coolers received at or below 6.0°C? If no, was Project Manager notified? PM was Notified by: phone / email / face-to-face (circle one).
[✓] Yes	[ ] No	[ ] NA	4. Is the commercial courier's packing slip attached to this form?
[✓] Yes	[ ] No		5. Were proper custody procedures (relinquished/received) followed?
[✓] Yes	[ ] No		6. Were sample IDs listed on the COC and all sample containers?
[✓] Yes	[ ] No		7. Was collection date & time listed on the COC and all sample containers?
[✓] Yes	[ ] No		8. Did all container label information (ID, date, time) agree with the COC?
[✓] Yes	[ ] No		9. Were tests to be performed listed on the COC?
[✓] Yes	[ ] No		10. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)? _____
[✓] Yes	[ ] No		11. Was adequate sample volume available?
[ ] Yes	[✓] No		12. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
[✓] Yes	[ ] No		13. Were all samples containers accounted for? (No missing/excess)
[ ] Yes	[ ] No	[✓] NA	14. Were VOA, 8015C and RSK-175 samples free of bubbles >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
[ ] Yes	[ ] No	[✓] NA	15. Were all DRO/metals/nutrient samples received at a pH of < 2?
[ ] Yes	[ ] No	[✓] NA	16. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
[ ] Yes	[ ] No	[✓] NA	17. Were all applicable NH_3/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
[ ] Yes	[✓] No	[ ] NA	18. Was the quote number listed on the container label? If yes, Quote # _____

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) NA _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # NA. ☐
Time of preservation NA. If more than one preservative is needed, please note in the comments below.

Sample(s) NA _____ were received with bubbles >6 mm in diameter.

Samples(s) NA _____ were received with TRC > 0.5 mg/L (If #19 is *no*) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Unique ID: NA.

Comments:

Qualtrax ID: 56360 Pace® Analytical Services, LLC Page 1 of 1

Supporting Information

Contents:

SPT General Notes
CPT General Notes
Unified Soil Classification System
Private Utility Location Documentation
NRCS Report

Terracon
2108 Capital Dr, Ste 103
Wilmington, NC

General Notes

Sampling	Water Level	Field Tests
Composite Hand Auger Sample Bulk CBR Sample GeoProbe Macro Core Shelby Tube Split Spoon	While Drilling Water Level After a Specified Period of Time Water Level After a Specified Period of Time Cave In Encountered Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.	N — Standard Penetration Test Resistance (Blows/Ft.) (HP) — Hand Penetrometer (T) — Torvane (DCP) — Dynamic Cone Penetrometer UC — Unconfined Compressive Strength (PID) — Photo-Ionization Detector (OVA) — Organic Vapor Analyzer

Descriptive Soil Classification

Soil classification as noted on the soil boring logs is based Unified Soil Classification System. Where sufficient laboratory data exist to classify the soils consistent with ASTM D2487 "Classification of Soils for Engineering Purposes" this procedure is used. ASTM D2488 "Description and Identification of Soils (Visual-Manual Procedure)" is also used to classify the soils, particularly where insufficient laboratory data exist to classify the soils in accordance with ASTM D2487. In addition to USCS classification, coarse grained soils are classified on the basis of their in-place relative density, and fine-grained soils are classified on the basis of their consistency. See "Strength Terms" table below for details. The ASTM standards noted above are for reference to methodology in general. In some cases, variations to methods are applied as a result of local practice or professional judgment.

Location And Elevation Notes

Exploration point locations as shown on the Exploration Plan and as noted on the soil boring logs in the form of Latitude and Longitude are approximate. See Exploration and Testing Procedures in the report for the methods used to locate the exploration points for this project. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

Strength Terms

Relative Density of Coarse-Grained Soils (More than 50% retained on No. 200 sieve.) Density determined by Standard Penetration Resistance		Consistency of Fine-Grained Soils (50% or more passing the No. 200 sieve.) Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance		
Relative Density	**Standard Penetration or N-Value (Blows/Ft.)**	**Consistency**	**Unconfined Compressive Strength Qu (tsf)**	**Standard Penetration or N-Value (Blows/Ft.)**
Very Loose	0 - 3	Very Soft	less than 0.25	0 - 1
Loose	4 - 9	Soft	0.25 to 0.50	2 - 4
Medium Dense	10 - 29	Medium Stiff	0.50 to 1.00	5 - 8
Dense	30 - 50	Stiff	1.00 to 2.00	9 - 15
Very Dense	> 50	Very Stiff	2.00 to 4.00	16 - 30
		Hard	> 4.00	> 30

Relevance of Exploration and Laboratory Test Results

Exploration/field results and/or laboratory test data contained within this document are intended for application to the project as described in this document. Use of such exploration/field results and/or laboratory test data should not be used independently of this document.

CPT GENERAL NOTES

DESCRIPTION OF MEASUREMENTS AND CALIBRATIONS

To be reported per ASTM D5778:

Uncorrected Tip Resistance, q_c
Measured force acting on the cone divided by the cone's projected area

Corrected Tip Resistance, q_t
Cone resistance corrected for porewater and net area ratio effects
$q_t = q_c + u_2(1 - a)$

Where a is the net area ratio, a lab calibration of the cone typically between 0.70 and 0.85

Pore Pressure, u
Pore pressure measured during penetration
u_1 - sensor on the face of the cone
u_2 - sensor on the shoulder (more common)

Sleeve Friction, f_s
Frictional force acting on the sleeve divided by its surface area

Normalized Friction Ratio, F_r
The ratio as a percentage of f_s to q_t, accounting for overburden pressure

To be reported per ASTM D7400, if collected:

Shear Wave Velocity, V_s
Measured in a Seismic CPT and provides direct measure of soil stiffness

DESCRIPTION OF GEOTECHNICAL CORRELATIONS

Normalized Tip Resistance, Q_{tn}
$Q_{tn} = ((q_t - \sigma_{v0})/P_a)(P_a/\sigma'_{v0})^n$
$n = 0.381(I_c) + 0.05(\sigma'_{v0}/P_a) - 0.15$

Over Consolidation Ratio, OCR
$OCR\ (1) = 0.25(Q_{tn})^{1.25}$
$OCR\ (2) = 0.33(Q_{tn})$

Undrained Shear Strength, S_u
$S_u = Q_{tn} \times \sigma'_{v0}/N_{kt}$
N_{kt} is a soil-specific factor (shown on S_u plot)

Sensitivity, S_t
$S_t = (q_t - \sigma_{v0}/N_{kt}) \times (1/f_s)$

Effective Friction Angle, ϕ'
$\phi'\ (1) = \tan^{-1}(0.373[\log(q_c/\sigma'_{v0}) + 0.29])$
$\phi'\ (2) = 17.6 + 11[\log(Q_{tn})]$

Unit Weight, γ
$\gamma = (0.27[\log(F_r)]+0.36[\log(q_t/atm)]+1.236) \times \gamma_{water}$
σ_{v0} is taken as the incremental sum of the unit weights

Small Strain Shear Modulus, G_0
$G_0\ (1) = \rho V_s^2$
$G_0\ (2) = 0.015 \times 10^{(0.55Ic + 1.68)}(q_t - \sigma_{v0})$

Soil Behavior Type Index, I_c
$I_c = [(3.47 - \log(Q_{tn}))^2 + (\log(F_r) + 1.22)^2]^{0.5}$

SPT N_{60}
$N_{60} = (q_t/atm) / 10^{(1.1268 - 0.2817Ic)}$

Elastic Modulus, E_s (assumes $q/q_{ultimate} \sim 0.3$, i.e. FS = 3)
$E_s\ (1) = 2.6\psi G_0$ where $\psi = 0.56 - 0.33\log Q_{tn,clean\ sand}$
$E_s\ (2) = G_0$
$E_s\ (3) = 0.015 \times 10^{(0.55Ic + 1.68)}(q_t - \sigma_{v0})$ for Ic<2.2
$E_s\ (4) = 2.5q_t$

Constrained Modulus, M
$M = \alpha_M(q_t - \sigma_{v0})$
For $I_c > 2.2$ (fine-grained soils)
$\alpha_M = Q_{tn}$ with maximum of 14
For $I_c < 2.2$ (coarse-grained soils)
$\alpha_M = 0.0188 \times 10^{(0.55Ic + 1.68)}$

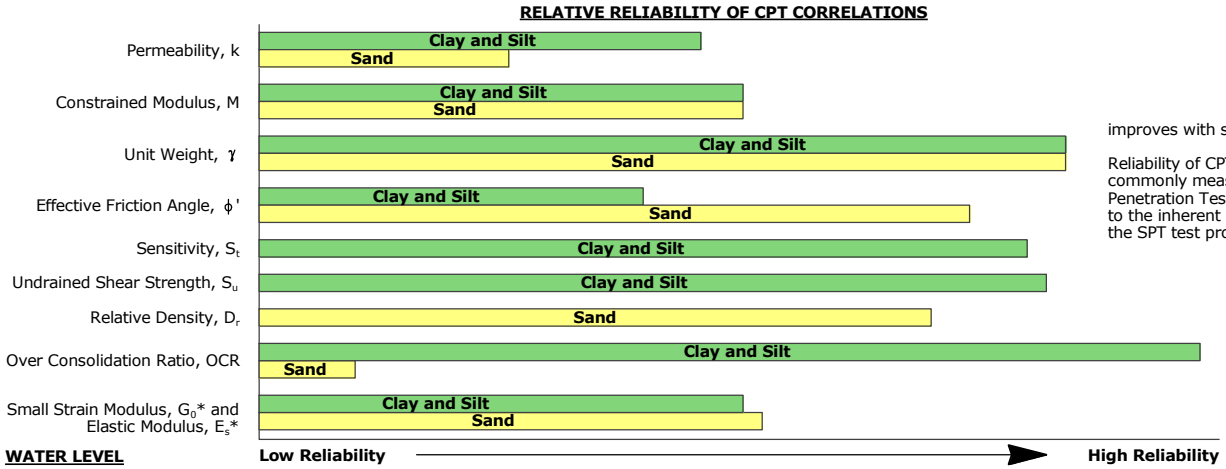
Hydraulic Conductivity, k
For $1.0 < I_c < 3.27$ $k = 10^{(0.952 - 3.04Ic)}$
For $3.27 < I_c < 4.0$ $k = 10^{(-4.52 - 1.37Ic)}$

Relative Density, D_r
$D_r = (Q_{tn} / 350)^{0.5} \times 100$

REPORTED PARAMETERS

CPT logs as provided, at a minimum, report the data as required by ASTM D5778 and ASTM D7400 (if applicable). This minimum data include q_t, f_s, and u. Other correlated parameters may also be provided. These other correlated parameters are interpretations of the measured data based upon published and reliable references, but they do not necessarily represent the actual values that would be derived from direct testing to determine the various parameters. To this end, more than one correlation to a given parameter may be provided. The following chart illustrates estimates of reliability associated with correlated parameters based upon the literature referenced below.

RELATIVE RELIABILITY OF CPT CORRELATIONS



improves with seismic V_s measurements

Reliability of CPT-predicted N_{60} values as commonly measured by the Standard Penetration Test (SPT) is not provided due to the inherent inaccuracy associated with the SPT test procedure.

WATER LEVEL

The groundwater level at the CPT location is used to normalize the measurements for vertical overburden pressures and as a result influences the normalized soil behavior type classification and correlated soil parameters. The water level may either be "measured" or "estimated:"

Measured - Depth to water directly measured in the field

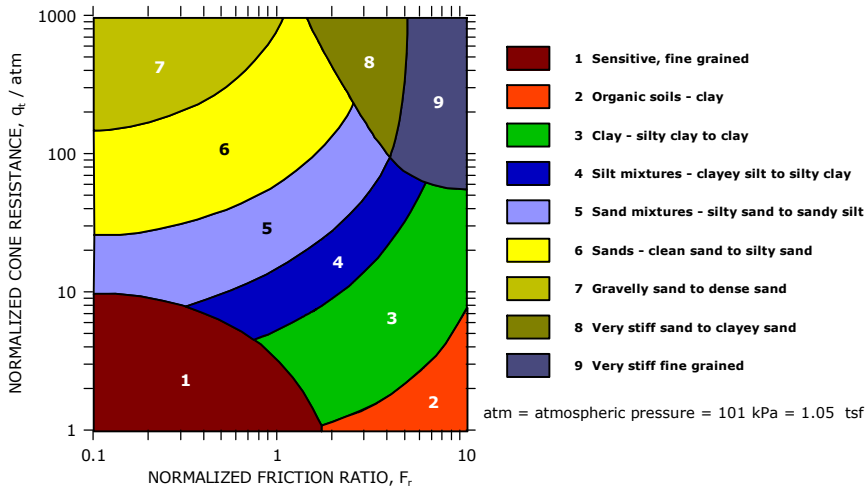
Estimated - Depth to water interpolated by the practitioner using pore pressure measurements in coarse grained soils and known site conditions

While groundwater levels displayed as "measured" more accurately represent site conditions at the time of testing than those "estimated," in either case the groundwater should be further defined prior to construction as groundwater level variations will occur over time.

CONE PENETRATION SOIL BEHAVIOR TYPE

The estimated stratigraphic profiles included in the CPT logs are based on relationships between corrected tip resistance (q_t), friction resistance (f_s), and porewater pressure (u_2). The normalized friction ratio (F_r) is used to classify the soil behavior type.

Typically, silts and clays have high F_r values and generate large excess penetration porewater pressures; sands have lower F_r's and do not generate excess penetration porewater pressures. The adjacent graph (Robertson *et al.*) presents the soil behavior type correlation used for the logs. This normalized SBT chart, generally considered the most reliable, does not use pore pressure to determine SBT due to its lack of repeatability in onshore CPTs.



atm = atmospheric pressure = 101 kPa = 1.05 tsf

REFERENCES

Kulhawy, F.H., Mayne, P.W., (1997). "Manual on Estimating Soil Properties for Foundation Design," Electric Power Research Institute, Palo Alto, CA.

Mayne, P.W., (2013). "Geotechnical Site Exploration in the Year 2013," Georgia Institue of Technology, Atlanta, GA.

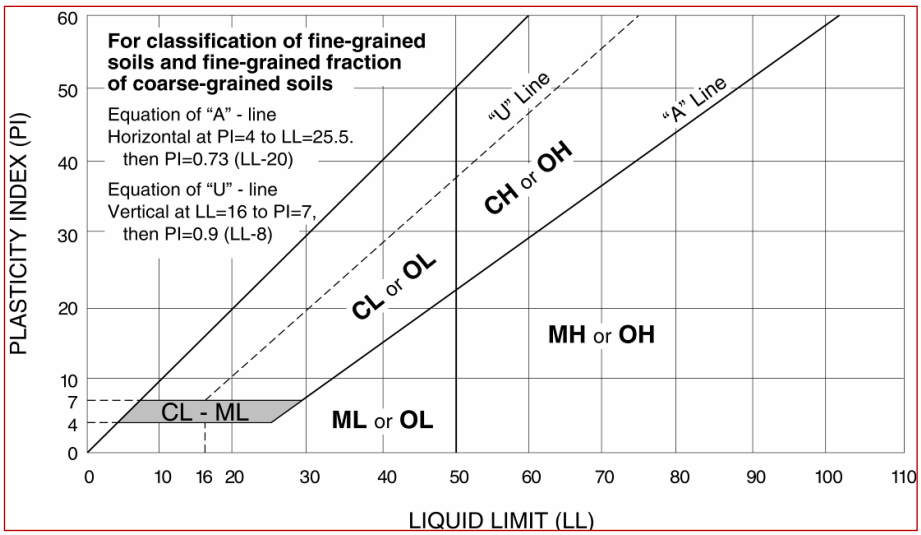
Robertson, P.K., Cabal, K.L. (2012). "Guide to Cone Penetration Testing for Geotechnical Engineering," Signal Hill, CA.

Schmertmann, J.H., (1970). "Static Cone to Compute Static Settlement over Sand,"*Journal of the Soil Mechanics and Foundations Division*,96(SM3), 1011-1043.

Unified Soil Classification System

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests [A]				Soil Classification	
				Group Symbol	Group Name [B]
Coarse-Grained Soils: More than 50% retained on No. 200 sieve	**Gravels:** More than 50% of coarse fraction retained on No. 4 sieve	**Clean Gravels:** Less than 5% fines [C]	Cu≥4 and 1≤Cc≤3 [E]	GW	Well-graded gravel [F]
			Cu<4 and/or [Cc<1 or Cc>3.0] [E]	GP	Poorly graded gravel [F]
		Gravels with Fines: More than 12% fines [C]	Fines classify as ML or MH	GM	Silty gravel [F, G, H]
			Fines classify as CL or CH	GC	Clayey gravel [F, G, H]
	Sands: 50% or more of coarse fraction passes No. 4 sieve	**Clean Sands:** Less than 5% fines [D]	Cu≥6 and 1≤Cc≤3 [E]	SW	Well-graded sand [I]
			Cu<6 and/or [Cc<1 or Cc>3.0] [E]	SP	Poorly graded sand [I]
		Sands with Fines: More than 12% fines [D]	Fines classify as ML or MH	SM	Silty sand [G, H, I]
			Fines classify as CL or CH	SC	Clayey sand [G, H, I]
Fine-Grained Soils: 50% or more passes the No. 200 sieve	**Silts and Clays:** Liquid limit less than 50	**Inorganic:**	PI > 7 and plots above "A" line [J]	CL	Lean clay [K, L, M]
			PI < 4 or plots below "A" line [J]	ML	Silt [K, L, M]
		Organic:	$(LL\ oven\ dried)/(LL\ not\ dried) < 0.75$	OL	Organic clay [K, L, M, N]
					Organic silt [K, L, M, O]
	Silts and Clays: Liquid limit 50 or more	**Inorganic:**	PI plots on or above "A" line	CH	Fat clay [K, L, M]
			PI plots below "A" line	MH	Elastic silt [K, L, M]
		Organic:	<	OH	Organic clay [K, L, M, P]
					Organic silt [K, L, M, Q]
Highly organic soils:	Primarily organic matter, dark in color, and organic odor			PT	Peat

[A] Based on the material passing the 3-inch (75-mm) sieve.
[B] If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.
[C] Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.
[D] Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay.
[E] $Cu = D_{60}/D_{10}$ $\quad Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
[F] If soil contains ≥ 15% sand, add "with sand" to group name.
[G] If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.
[H] If fines are organic, add "with organic fines" to group name.
[I] If soil contains ≥ 15% gravel, add "with gravel" to group name.
[J] If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.
[K] If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.
[L] If soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.
[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.
[N] PI ≥ 4 and plots on or above "A" line.
[O] PI < 4 or plots below "A" line.
[P] PI plots on or above "A" line.
[Q] PI plots below "A" line.



Private Utility Location Documentation

2108 Capital Drive, Suite 103
Wilmington, North Carolina 28405
P (910) 478-9915
North Carolina Registered, F-0869
Terracon.com

December 1, 2025

Job Site Competent Person
Nicholas Lindley
Terracon Consultants, Inc

Work Performed – Subsurface Utility Locate and Geotechnical Exploration
Location of Work Performed – MCB Camp Lejeune, Jacksonville, NC

The purpose of this letter is to designate Nicholas Lindley as the job site competent person while on the proposed work site, and to ensure that proper safety guidelines are followed at all times.

It is his responsibility to ensure:

1. Proper PPE is worn at all times.
2. Potential work hazards on the job site are identified and mitigated
3. Visual safety checks are performed on all work equipment and PPE
4. All safety guidelines are followed while on the job site.
5. All utility structures are securely closed
6. Work in progress is immediately halted when it is determined to be unsafe to continue.

It has been determined that Nicholas Lindley has received the proper safety training, can identify job site work safety hazards, and can take prompt measures to correct them.

Nicholas Lindley has demonstrated the knowledge for safety requirements and has the responsibility to ensure a safe job site.

Sincerely,

Justin L. DeNicola, PE
Office Manager – Wilmington, NC

Private Utility Locate Report

Terracon

Project Number: K625P194
Project Name: Camp Lejeune P-1634
Site Location:
Project Manager:
Second Contact:
Lead Locator: MB

Service Date:

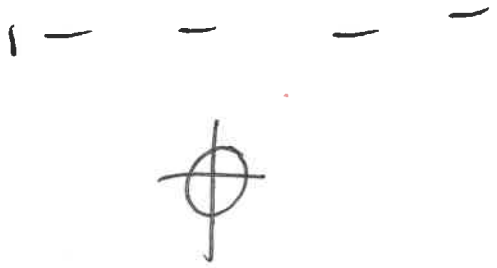
Equipment Used

- [x] Ground Penetraing Radar
- [x] Electromagnetic Line Locator
- [x] Metal Detector
- [ ] Other:

Field Work Summary

Boring I.D.: SPT-08

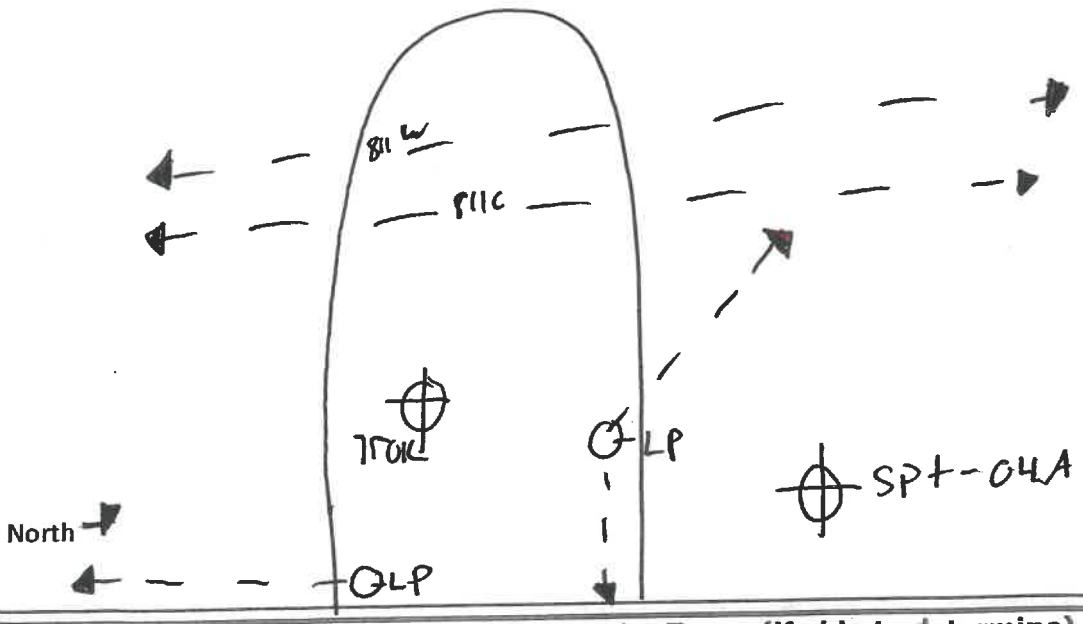
Comments:



North

Boring I.D.: SPT-04

Comments:



North

Legend

- Original Boring Location
- Alternate/Moved Boring Location
- Unknown Object to Avoid

Utility Types (if able to determine)

E	Electric	SD	Stormwater
C	Communication	SS	Sanitary
G	Natural Gas	UU	Unknown
W	Water		

Borings without utilities (within 20'):

Photography Log – Utility Locate

Photos taken during site visit on December 15, 2025

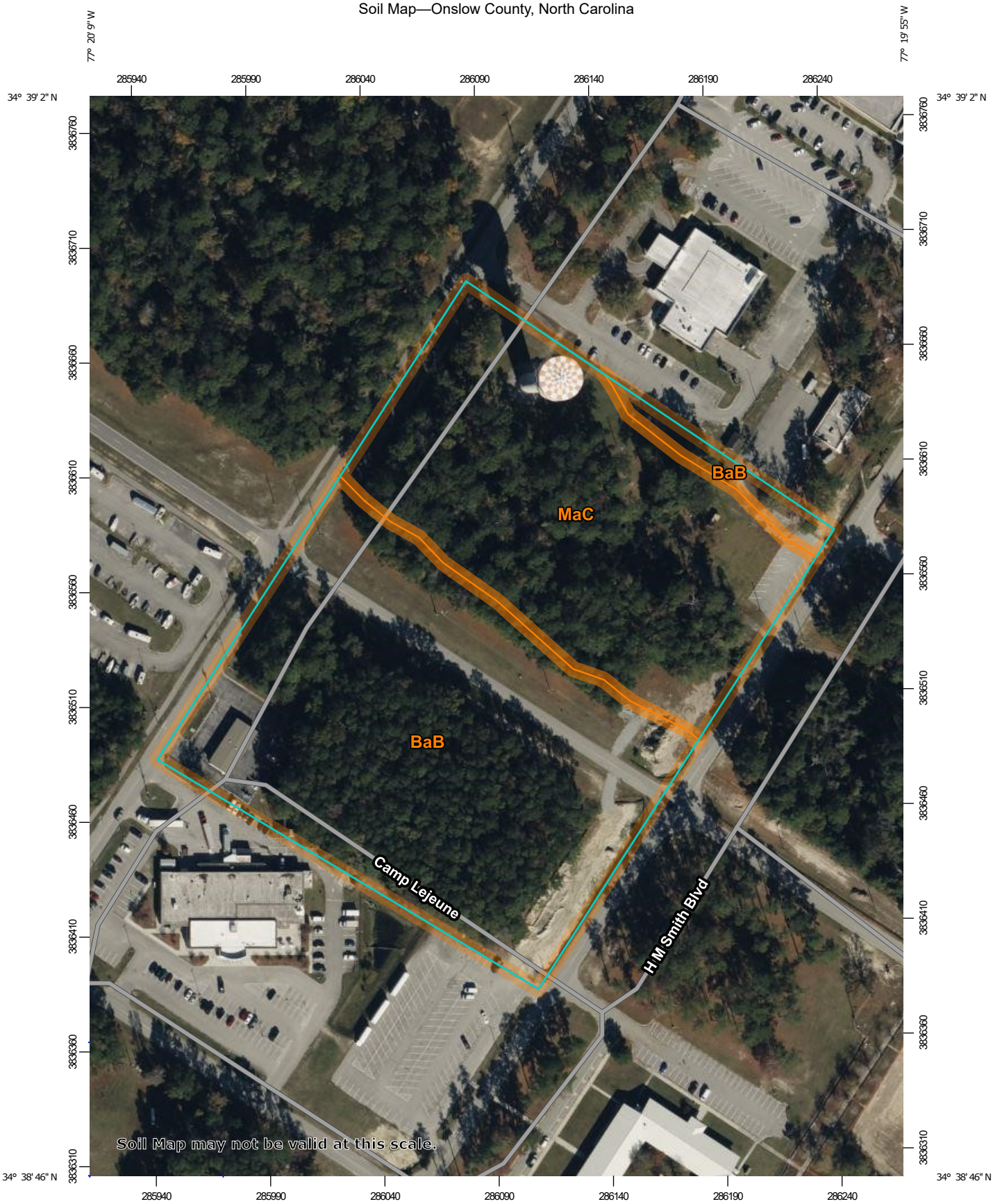
Photo 1: Location SPT-04

Photo 2: Location SPT-04A

Photo 3: Location SPT-04

Photo 4: Location SPT-08

NRCS Report



Map Scale: 1:2,290 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 30 60 120 180

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Onslow County, North Carolina
Survey Area Data: Version 28, Aug 27, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 8, 2022—Dec 1, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BaB	Baymeade fine sand, 0 to 6 percent slopes	6.8	58.0%
MaC	Marvyn loamy fine sand, 6 to 15 percent slopes	4.9	42.0%
Totals for Area of Interest		**11.7**	**100.0%**