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Attachments: MMP Package ~ 3-Bay Hangar.pdf; 3-Bay Specialized Hangar Sampling Report July 2020.pdf

Steve,

For your review and subsequent approval.

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Site Characterization Report

XGFG189002 – F35: 3-Bay Specialized Hangar W50S9F20F0001
Truax Field
Madison, Wisconsin

Prepared for:

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July 2020

Site Characterization Report

XGFG189002 – F35: 3-Bay Specialized Hangar
W50S9F20F0001
Truax Field
Madison, WI

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Executive Summary

Frankfurt-Short-Bruza Associates, P.C. (FSB) was retained by the Wisconsin Air National Guard (WIANG) to upgrade their installation to accommodate the F-35A aircraft including the demolition of Hangar 414 and subsequent construction of a specialized hangar for the F-35A. Ayres Associates partnered with FSB on the project to provide environmental services including assessment of soil and groundwater for previously documented volatile organic compounds (VOC) and per-and polyfluorinated alkyl substances (PFAS). The purpose of this scope of work is to assess and characterize potential environmental impacts that may exist at the subject property and their potential impact to site redevelopment.

Unconsolidated sediments at the site consist of natural fill materials and stratified layers of ground moraine and lake plain deposits to the depth of exploration at 15 feet. The sediments consist of fine-grained silty sand, clayey sand, silt, and low plasticity clay deposits of low to medium permeability overlying fine to coarse-grained, poorly graded sand and gravel materials of medium to high permeability. Bedrock in the site area is estimated to be over 300 below ground surface.

Depth to water ranged from 3.79 feet below the top of well casing in well AA-MW-2 to 5.02 feet in well AA-MW-1. The water table was found at or slightly above the interface of the two hydrostratigraphic units (i.e., clay/sand unit interface). Groundwater flow in the shallow unconsolidated deposits was generally northwest across the site at an average horizontal hydraulic gradient of 0.001. The average horizontal groundwater flow velocity in the unconsolidated water table aquifer across the subject site is approximately 0.39 feet/day or 142 feet/year.

Per-and Polyfluorinated Alkyl Substances (PFAS) were detected in each of the 10 soil samples submitted for PFAS analysis. None of these constituents exceeded their respective regulatory standards in soil samples analyzed during this assessment. One VOC (xylene) was detected above laboratory detection levels in the 10 soil samples submitted for VOC analysis. No VOCs exceeded regulatory levels.

Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) concentrations exceeded the NR 140 Wisconsin Administrative Code enforcement standard of 0.02 µg/L, as well as the USEPA Health Advisory of 0.07 µg/L in samples collected from each of the monitoring wells. Petroleum and chlorinated hydrocarbon constituents were detected in samples collected from wells AA-MW-1 and AA-MW-5 at concentrations above NR 140 Wisconsin Administrative Code enforcement standards (ES).

A qualitative vapor assessment was performed during this assessment. Ayres Associates concludes that residual hydrocarbon contamination in soil and groundwater is not of sufficient concentration to be a concern from vapor migration or intrusion in existing or future utilities and buildings.

Soil and groundwater and building materials at the site will require proper handling and management during construction in accordance with an approved Materials Management Plan.

Introduction

Frankfurt-Short-Bruza Associates, P.C. (FSB) was retained by the Wisconsin Air National Guard (WIANG) to upgrade their installation to accommodate the F-35A aircraft including the demolition of Hangar 414 and subsequent construction of a specialized hangar for the F-35A. The project associated with the new hangar is identified as the XGFG189002 F35: 3-Bay Specialized Hangar. Ayres Associates partnered with FSB on the project to provide environmental services including assessment of soil and groundwater for previously documented volatile organic compounds (VOC) and per-and polyfluorinated alkyl substances (PFAS). These compounds have been detected during previous environmental investigations conducted at the site. The presence of VOC compounds in soil and groundwater are associated with the use and storage of petroleum and other hazardous substances at the installation. The PFAS contamination detected at the site is attributed to the storage and use of firefighting foams at Hangar 414 and other nearby buildings or firefighting equipment testing areas at the base.

The Wisconsin Department of Natural Resources (WDNR) required confirmation of VOC and PFAS concentrations in soil and groundwater at the site and submittal of a Materials Management Plan (MMP) based upon the results of this assessment. In addition to the subsurface investigation and preparation of a materials management plan, a survey of building materials was conducted so that potential asbestos, lead-bearing paint, and other potentially hazardous materials are identified for proper removal prior to demolition. Therefore, the scope of work performed included evaluation and analysis of existing environmental data, soil sampling in the unsaturated zone, installation of monitoring wells, hydraulic conductivity testing, collection of soil, groundwater, asbestos, lead, and hexavalent chromium samples, and laboratory analysis of the environmental samples. Proposed sample locations include areas of known or suspected impacts based on historical information obtained from the WDNR Bureau of Remediation and Redevelopment Tracking System (BBRTS) on the Web and the “Draft Report, FY 16 Phase I Regional Site Inspections for Perfluorinated Compounds (March 2018), prepared by Amex Foster Wheeler under contract to the WIANG.

A Site Characterization Investigation was conducted at the site in June 2020. The primary objectives of the investigation were to:

- Define the local geology including the origin, texture, thickness, and distribution of the unconsolidated deposits
- Determine the local hydrogeologic conditions including depth to groundwater, hydraulic conductivity, and groundwater flow directions and gradients
- Determine the type and distribution of contaminants of concern in the soil and groundwater
- Evaluate potential contaminant pathways and the potential for migration in soil and groundwater
- Use data collected during this assessment and assessments completed by others to prepare a materials management plan to manage potentially impacted environmental media during construction.

Environmental assessment and management activities related to site development are the subjects of this report.

Background

Site Location and Description

The XGFG189002 F35: 3-Bay Specialized Hangar site, is located in the Northeast ¼ of the Northwest ¼ of Section 29, Township 8 North, Range 10 East, Dane County, Wisconsin. The site (herein referred to as site or property) is located at Truax Field, 3200 Pierstorff Street, Madison, Wisconsin (Figure 1).

The current building on the site, Hangar 414, is used for operations associated with F-16 aircraft. With the recent announcement that the base will be transitioning to F-35A aircraft, the hangar will become obsolete and will require replacement with a facility that can accommodate the new aircraft.

Site History and Background

The history of the site was obtained from environmental reports obtained from the WDNR BRRTS on the Web and from the "Draft Report, FY 16 Phase 1 Regional Site Inspections for Perfluorinated Compounds (March 2018), prepared by Amec Foster Wheeler under contract to the WIANG.

The WIANG installation at Truax Field was originally constructed in 1942 as an Army base. The base was deactivated as an active military base in 1968 when it became occupied by the WIANG. Since 1942, fighter/attack aircraft have been housed at Truax Field. Over the years, the installation has used and stored petroleum and other hazardous materials.

The Department of Defense has conducted environmental investigations at military bases across the county as part of the Installation Restoration Program. The WIANG base at Truax Field was one of the facilities included in the program. According to the WDDNR BRRTS, environmental activities have been conducted on the site since 1990 when a preliminary facility investigation indicated soil and groundwater in proximity of Hangar 414 was impacted by petroleum. Subsequent investigation conducted by Dames and Moore defined an area of soil and groundwater contamination that resulted in excavation and disposal of petroleum-contaminated soil and operation of a soil vapor extraction system (SVE). The site was closed by the WDNR in 2012 with residual soil and groundwater contamination.

A Perfluorinated Compound Preliminary Assessment Site Visit was conducted on the base by BB&E, Inc. in 2015. The purpose of the visit was to identify sites with potential perfluorinated compound releases associated with Aqueous Film Forming Foam (AFFF) use and storage. The results of the assessment are documented in the "Final Perfluorinated Compounds Preliminary Assessment Site Visit Report (December 2015) prepared by BB&E, Inc. Findings of the report concluded that Hangar 414 was equipped with a fire suppression system supplied with AFFF and that a site investigation of soil and groundwater was recommended.

A Phase 1 Regional Site Inspection for Perfluorinated Compounds was conducted at the base by Amec Foster Wheeler in 2017. This work included subsurface investigation of soil and groundwater for perfluorinated compounds based upon the recommendations of the 2015 BB&E Site Visit Report. Three soil boring were advanced at the Hangar 414 site for collection of six soil samples. Soil samples were collected from the 0.5'-1' interval and just above the water table at a depth of 4.5' to 5.5'. One temporary well was also installed for collection of one groundwater sample. Results of soil sample analysis indicated detectable perfluorinated compound concentrations. However, none of the compounds detected in soil exceeded the screening criteria. Groundwater analysis detected six perfluorinated compounds with two compounds exceeding the EPA Drinking Water Health Advisory.

Recognized Environmental Concerns

Environmental concerns regarding the site are related to the known VOC contamination discovered during environmental activities conducted in the 1990s by Dames and Moore and others. The BRRTS site related to this contamination is closed with inclusion on the GIS registry indicating residual soil and groundwater contamination. A more recent site investigation conducted on the site by Amec Foster and Wheeler detected perfluorinated compound concentrations in soil and groundwater at the site.

Hangar 414 on the site is scheduled for demolition to build a specialized hangar to accommodate F-35A aircraft. Based upon the age of the hangar, asbestos and lead bearing paint may be present in the building materials. Because the hangar is being demolished asbestos and lead-bearing paint inspection will be conducted. Also, cleaning processes or activities performed on aircraft at the site may have generated dust containing hexavalent chromium and will be assessed prior to building demolition.

Regional Geology and Hydrogeology

Geology

Evaluation of the site geology is based on existing published regional information[1], and site-specific data collected from borings advanced in the project area. Subsurface information collected during previous assessment activities conducted on the site indicates that the unconsolidated sediments consist primarily of between 3 and 7 feet of clay and silty clay underlain by fine to medium-grained sand to a depth of at least 18 feet below ground surface (bgs).

Regional information indicates that surficial unconsolidated deposits consist of glacial ground moraine and lake plain sediments consisting of stratified layers of sand, silt, and clay. Information obtained by the author of this report from a site investigation performed in 1992 for the City of Madison at the Truax Landfill located southwest of the project site indicates a deep, pre-glacial bedrock valley runs beneath the Truax Regional airport and project site. The unconsolidated deposits in the bedrock valley beneath the site area are estimated to be over 300 feet thick. The uppermost bedrock unit beneath the site is the Cambrian age Mount Simon Sandstone.

Hydrogeology

Groundwater is found within the unconsolidated glacial deposits and underlying sandstone bedrock. These aquifers are the source for domestic, municipal, and industrial water supplies in the Madison area and Dane County. The bedrock aquifer is the principal source for municipal water in Dane County. The City of Madison uses wells completed in the Mount Simon sandstone for its municipal water supply. Truax Field is supplied water from the City of Madison distribution system.

Depth to groundwater is less than ten feet below ground surface. Previous investigations at the site indicate that shallow groundwater has been interpreted to flow south-southeast.

[1] Clayton, Lee and Attig, J.W. 1997. “Pleistocene Geologic Map of Dane County, Wisconsin, WGNHS Bulletin 95, Plate 1.

Site Geology and Hydrogeology

Site Stratigraphy

Subsurface conditions were evaluated based on information collected from five (5) soil borings advanced to a maximum depth of 15 feet below ground surface (bgs) during this assessment. Boring depths were terminated at 10 feet bgs instead of 15 feet bgs as indicated in the work plan due to shallow groundwater, except for boring AA-MW-2. Boring AA-MW-2 was advanced to 15 feet bgs to obtain additional hydrogeologic information at depth in case dewatering is required. Each of the five soil borings advanced were used for the installation of monitoring wells (AA-MW-1 through AA-MW-5). Locations of the borings and monitoring wells are shown in Figure 2. Geologic cross-section A-A' is shown in Figure 3. Geologic boring and well construction logs are presented in Appendix A.

Subsurface information collected during this assessment indicates the unconsolidated sediments at the site consist of natural fill materials and stratified layers of ground moraine and lake plain deposits to the depth of exploration at 15 feet. The unconsolidated sediments are presented as two hydrostratigraphic units on cross-sections A-A' based on similar hydrologic characteristics such as grain size and permeability. The top unit consists of finer-grained silty sand, clayey sand, silt, and low plasticity clay deposits of low to medium permeability. The lower unit consists of fine to coarse-grained, poorly graded sand and gravel materials of medium to high permeability. A one to two-foot thick clay layer was encountered above the lower sand unit in each of the borings except MW-4 and AA-MW-5 where the clay was replaced by silty sand fill material during previous remediation efforts.

Bedrock was not encountered during this assessment. Depth to bedrock in the site area is estimated to be over 300 below ground surface.

Groundwater Flow Conditions

Groundwater Levels

Groundwater level and elevation data were obtained from the monitoring wells on June 24 and June 25, 2020 (Table 1). Water level data collected on June 24 indicate that depth to water ranged from 3.79 feet below the top of well casing in well AA-MW-2 to 5.02 feet in well AA-MW-1. Water levels were 0.07 to 0.1 feet (0.84 to 1.2 inches) lower in each of the five wells when measured on June 25, 2020. The water table was found at or slightly above the interface of the two hydrostratigraphic units (i.e., clay/sand unit interface).

Groundwater Flow

Water level data obtained from the temporary monitoring wells on June 25, 2020, were used to construct a water table contour map (Figure 4). Groundwater flow in the shallow unconsolidated deposits was generally northwest across the site during the June 2020 sampling event at an average horizontal hydraulic gradient of 0.001.

Vertical Gradients

Differences in hydraulic head can occur between different geologic units. The difference in hydraulic head is caused by steep hydraulic gradients induced by heavy groundwater pumping, large topographic relief, or by differences in hydraulic conductivity. Vertical gradients can induce or prevent contaminant migration in and between aquifers depending on the magnitude and direction of the gradient.

Vertical gradients could not be calculated as no well nests were installed during this assessment.

Hydraulic Conductivity Testing

Hydraulic conductivity (slug) tests were performed on four of the five monitoring wells installed at the site. Slug tests were not performed on well AW-MW-5 due to apparent hydrocarbon contamination in this well. The slug tests were performed by inserting a solid cylinder (slug) into the well and allowing the water level to equilibrate. The slug was then rapidly removed from the well to cause an instantaneous drop in water level (rising head test), then measuring the return of the water level to its static condition. Water level data were recorded with an automated pressure transducer and data logger system. Slug test data were evaluated using Aqtesolv v. 4.5 graphical analysis and reporting software. The slug tests were analyzed using the methods of Bouwer and Rice (1976) for unconfined aquifers.[2] The results of the slug tests are summarized in Table 2. Slug test data, test parameters, and curves are presented in Appendix B.

Hydraulic conductivity values (recovery test only) calculated for the four temporary monitoring wells tested ranged from 2.4×10^{-2} cm/sec to 7.1×10^{-2} cm/sec. Each well was screened mostly or entirely within the coarse-grained sand and gravel layer beneath the site.

Groundwater Flow Velocity

Groundwater flow velocity was calculated for the water table aquifer at this site using the formula:

$V = ki/n_e$

Where:

V = horizontal groundwater flow velocity

k = hydraulic conductivity

i = hydraulic gradient

n_e = effective porosity

An average hydraulic conductivity value of 4.1×10^{-2} cm/sec was used in calculating groundwater flow velocity in the water-table aquifer. This value was obtained by calculating the arithmetic mean of hydraulic conductivity results for tests performed on water table wells at the site.

The hydraulic gradient (i) used to calculate horizontal groundwater flow velocity is based on water levels measured on June 25, 2020. An average horizontal gradient of 0.001 ft/ft was used to calculate groundwater flow in the upper unconsolidated aquifer.

The velocity of groundwater is also influenced by the porosity of the aquifer material. The effective porosity (n_e) is a measure of the amount of interconnecting pore space that is available in a given volume of material through which water can move. The average effective porosity of the unconsolidated material is assumed to be 30 percent.

Based on the values stated above, the average horizontal groundwater flow velocity in the unconsolidated water table aquifer across the subject site is approximately 0.39 feet/day or 142 feet/year.

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[2] Bouwer, H. and R.C. Rice, A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers with Completely or Partially Penetrating Wells, *Water Resources Research*, Vol.12, No.3, 1976, pp.423-428

Soil Quality Assessment

Soil samples were collected from the five soil probes advanced during the assessment and submitted to CT Laboratories in Baraboo, Wisconsin, for analysis. Selected samples were analyzed for VOC and PFAS. CT labs subcontracted Vista Analytical to analyze PFAS samples. The locations of the proposed borings and wells, and the depth of sampling, were prescribed by the WDNR and WIANG based upon previous site assessment findings completed by others as discussed in the WDNR-approved Sampling and Analysis Plan. Soil samples at each of the five probe locations were selected for laboratory analysis from the 0-1-foot interval and the interval approximately one-foot above the water table. Within those prescribed intervals, the soil sample with the highest PID readings at each sampling location was selected for laboratory analysis. If no volatile organic contamination was identified above background during field screening, a sample from each sampling location was selected based on obvious discoloration or other visible signs of contamination. Soil samples were submitted to the laboratory and analyzed for PFAS and VOC using Vista's PFAS Isotope Dilution Method and EPA Method 8260C, respectively.

Field Observations and Screening Results

Headspace analysis was performed on each of the soil samples obtained from the probes. Headspace analysis is a screening tool used to qualitatively assess the degree of potential impacts to soil from volatile organic compounds. The headspace analysis was performed using a photoionization detector (PID) equipped with an 11.7 eV lamp in accordance with Ayres Associates' standard operating procedure #210. Headspace analysis results are shown on the boring logs in Appendix A.

Results of the headspace analysis do not indicate the potential presence of elevated levels of volatile organic constituents in the soil samples collected for lab analysis from any of the probes advanced during this assessment. However, elevated PID results were obtained for soil samples collected at and below the water table in probes AA-MW-1 and AA-MW-5. The highest PID readings measured (955 instrument units) were found in soil samples collected from probe AA-MW-5.

Results of Soil Sample Laboratory Analysis

Ten soil samples collected from the soil probes advanced during this assessment were submitted for analysis. Samples were analyzed for VOCs and PFAS. VOCs were analyzed using EPA Method 8260C and PFAS was analyzed using Vista's PFAS Isotope Dilution Method. A summary of analyte detections in soil is presented in Table 3 and Table 4. Laboratory data reports for soil samples are presented in Appendix C. The locations of analyte detections in soil are shown in Figure 5.

Per-and Polyfluorinated Alkyl Substances (PFAS)

Per-and Polyfluorinated Alkyl Substances (PFAS) were detected in each of the 10 soil samples submitted for PFAS analysis. Trace concentrations of perfluorooctanesulfonic acid (PFOS) were detected in each of the soil samples analyzed. However, PFOS was also detected in a sample of the decontamination water and equipment blank sample, albeit at lower concentrations than most of the soil samples. Trace concentrations of perfluorooctanoic acid (PFOA) were detected in only one of the soil samples analyzed as well as a sample of the decontamination water. The parameters PFOS and PFOA are the only two PFAS constituents that have established regulatory standards for soil in Wisconsin. Neither of these constituents exceeded their respective regulatory standards in soil samples analyzed during this assessment.

Volatile Organic Compound Analysis (VOC)

Only one VOC was detected above laboratory detection levels in the 10 soil samples submitted for VOC analysis. Xylene was detected in a soil sample from probe AW-MW-5 at a depth of 0-1-foot below ground surface. No VOCs exceeded regulatory levels. All samples were collected from above the water table.

Groundwater Quality Assessment

Groundwater samples were collected from each of the five monitoring wells installed at the project site. The purpose of this sampling is to characterize the nature and extent of potential contamination at the site by determining the type, distribution, and concentration of chemical constituents present in the groundwater. The analytical data will also be used to evaluate potential treatment or disposal options for groundwater should dewatering be required during construction.

Ayres Associates collected one round of groundwater samples from the five monitoring wells. Samples were collected from the wells on June 25, 2020, and submitted to CT Laboratories in Baraboo, Wisconsin for analysis of VOCs. Samples for PFAS analysis were submitted to Vista Analytical, a subcontractor of CT Labs. Each of the groundwater samples was analyzed for VOC and PFAS. VOCs were analyzed using EPA SW-846 Method 8260C and PFAS were analyzed using Vista's PFAS Isotope Dilution Method. A summary of analyte detections in groundwater samples is presented in Table 5 and Table 6. Low-flow stabilization data are presented in Appendix D and laboratory datasheets for the groundwater sampling event are presented in Appendix E. The locations of analyte detections and exceedances in groundwater are shown on Figure 6.

Per-and Polyfluorinated Alkyl Substances (PFAS)

Each of the five groundwater samples collected was submitted for PFAS analysis. Detectable concentrations PFAS compounds were found in each of the five groundwater samples analyzed. Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) concentrations exceeded the NR 140 Wisconsin Administrative Code enforcement standard of 0.02 µg/L, as well as the USEPA Health Advisory of 0.07 µg/L in samples collected from each of the monitoring wells. The parameters PFOS and PFOA are the only two PFAS constituents that have established regulatory standards for groundwater in Wisconsin.

Volatile Organic Compound Analysis (VOCs)

Laboratory results indicate detectable concentrations of VOC constituents in three of the five groundwater samples collected, although the acetone detection in the sample from well AA-MW-2 is a likely lab artifact. Petroleum and chlorinated hydrocarbon constituents were detected in samples collected from wells AA-MW-1 and AA-MW-5 where olfactory observations during well development indicated the likely presence of hydrocarbons. Benzene and vinyl chloride detected at concentrations of 150 µg/L and 0.74 µg/L in a sample collected from well AA-MW-1 exceeded their respective NR 140 Wisconsin Administrative Code enforcement standards (ES). The constituents 1,2-Dichloroethane, 1,2-Dichloropropane, bromodichloromethane, and naphthalene exceeded their respective NR 140 Wis. Adm. Code preventive action limits (PAL) in the sample from well AA-MW-1.

Naphthalene and 1,2,4-trimethylbnzene exceeded the ES in a sample collected from well AA-MW-5. The constituent 1,1,2-trichloroethane also exceeded the NR 140 PAL in the sample collected from this well.

Field Parameters

Real-time data on temperature, pH, specific conductance, dissolved oxygen, oxidation-reduction potential (ORP), and turbidity were collected from wells AA-MW-1 through AA-MW-5 to complement the analytical data. These data were used to construct a "geochemical model" of conditions at the site to assist in the interpretation and understanding of attenuation and or transformation processes that may be occurring, and the potential fate of the constituents of interest. Temperature, pH, specific conductance, turbidity, dissolved oxygen, and redox potential were obtained using an In-Situ®, Inc. AquaTROLL 600 multi-parameter water quality monitoring system. Simultaneous temperature, pH, specific conductance,

turbidity, dissolved oxygen, and redox readings were taken continuously during pumping until readings stabilized. Field parameter data are presented in Table 7 and in the low-flow stabilization logs in Appendix D.

The field parameter data are relatively consistent in each of the five wells. The field data indicate neutral pH conditions in groundwater from well AA-MW-5 while slightly lower pH (Ave. 6.78) readings were noted in groundwater from the other four wells. Specific conductivity is an indirect measure of the amount of dissolved solids in groundwater and is used as an indicator of water impacts. Specific conductivity measurements measured at the site were similar between wells and the range of values measured do not indicate significant impacts on groundwater. Conductivity values were not elevated in groundwater samples collected from wells AA-MW-1 and AA-MW-5 where olfactory observations indicate potential hydrocarbon impacts because organic hydrocarbons have low conductivity when dissolved in water.

Dissolved oxygen (DO) and oxidation-reduction (ORP) values in groundwater samples were lower than expected given the shallow depth to water, although the presence of lower permeability silt and clay materials above the water table may limit infiltration that could otherwise bring oxygenated water into the aquifer. The low DO and ORP values indicate reducing conditions within the aquifer that could be advantageous for the dechlorination of chlorinated hydrocarbons but would inhibit oxidation and natural attenuation of petroleum hydrocarbons. Little is known about the potential for natural attenuation of PFAS in the environment.

Building Materials Assessment

Building material samples were collected from the hangar before demolition to assess the presence of asbestos-containing materials (ACM), lead-bearing paint (LBP), and hexavalent chromium. Results of this sampling and analysis were submitted in a separate report

Vapor Assessment

Vapor intrusion is the migration of volatile constituents from contaminated subsurface soil or groundwater into indoor air spaces of overlying buildings or underground routes such as buried utility lines and trenches. Most vapor intrusion occurs when gases or contaminants in the underlying soil, or contaminants at the water table, enter the unsaturated zone above the water table and migrate to the atmosphere, or into the air space of overlying structures or utility trenches. Less frequently, vapors can enter buildings with groundwater seepage into sumps or flooded basements where contaminants partition directly from the groundwater into indoor air.

No subsurface vapor sampling was proposed or performed during this assessment because existing data do not indicate the presence of hydrocarbons in soil or groundwater at concentrations of concern. However, a qualitative vapor assessment was performed to evaluate the potential for volatile constituents to migrate into buildings and utilities, or along utility trenches across or away from the site after hydrocarbons were detected in soil and groundwater at the site. Based on the results of this assessment, Ayres Associates concludes that residual hydrocarbon contamination in soil and groundwater is not of sufficient concentration to be a concern from vapor migration or intrusion in existing or future utilities and buildings. Also, the low organic content of the natural soils and fill material at the site will not likely promote the generation and migration of methane or other gases through the decomposition of organic matter.

Summary of Findings

Geology and Hydrogeology

Subsurface information collected during this assessment indicates the unconsolidated sediments at the site consist of natural fill materials and stratified layers of ground moraine and lake plain deposits to the depth of exploration at 15 feet. The unconsolidated sediments are presented as two hydrostratigraphic units based on similar hydrologic characteristics such as grain size and permeability. The top unit consists of finer-grained silty sand, clayey sand, silt, and low plasticity clay deposits of low to medium permeability. The lower unit consists of fine to coarse-grained, poorly graded sand and gravel materials of medium to high permeability. Bedrock in the site area is estimated to be over 300 below ground surface.

Water level data collected on June 24 indicate that depth to water ranged from 3.79 feet below the top of the well casing in well AA-MW-2 to 5.02 feet in well AA-MW-1. The water table was found at or slightly above the interface of the two hydrostratigraphic units (i.e., clay/sand unit interface).

Groundwater flow in the shallow unconsolidated deposits was generally northwest across the site during the June 2020 sampling event at an average horizontal hydraulic gradient of 0.001. The average horizontal groundwater flow velocity in the unconsolidated water table aquifer across the subject site is approximately 0.39 feet/day or 142 feet/year.

Soil Assessment

Per-and Polyfluorinated Alkyl Substances (PFAS)

Per-and Polyfluorinated Alkyl Substances (PFAS) were detected in each of the 10 soil samples submitted for PFAS analysis. Trace concentrations of perfluorooctanesulfonic acid (PFOS) were detected in each of the soil samples analyzed. Trace concentrations of perfluorooctanoic acid (PFOA) were detected in only one of the soil samples analyzed as well as a sample of the decontamination water. The parameters PFOS and PFOA are the only two PFAS constituents that have established regulatory standards for soil in Wisconsin. Neither of these constituents exceeded their respective regulatory standards in soil samples analyzed during this assessment.

Volatile Organic Compound Analysis (VOCs)

Only one VOC was detected above laboratory detection levels in the 10 soil samples submitted for VOC analysis. Xylene was detected in a soil sample from probe AW-MW-5 at a depth of 0-1-foot below ground surface. No VOCs exceeded regulatory levels. All samples were collected from above the water table.

Groundwater Assessment

Per-and Polyfluorinated Alkyl Substances (PFAS)

Detectable concentrations PFAS compounds were found in each of the five groundwater samples analyzed. Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) concentrations exceeded the NR 140 Wisconsin Administrative Code enforcement standard of 0.02 µg/L, as well as the USEPA Health Advisory of 0.07 µg/L in samples collected from each of the monitoring wells. The parameters PFOS and PFOA are the only two PFAS constituents that have established regulatory standards for groundwater in Wisconsin.

Volatile Organic Compound Analysis (VOCs)

Petroleum and chlorinated hydrocarbon constituents were detected in samples collected from wells AA-MW-1 and AA-MW-5 where olfactory observations during well development indicated the likely presence of hydrocarbons. Benzene and vinyl chloride detected at concentrations of 150 µg/L and 0.74 µg/L in a sample collected from well AA-MW-1 exceeded their respective NR 140 Wisconsin Administrative Code enforcement standards (ES). The constituents 1,2-Dichloroethane, 1,2-Dichloropropane, bromodichloromethane, and naphthalene exceeded their respective NR 140 Wis. Adm. Code preventive action limits (PAL) in the sample from well AA-MW-1.

Naphthalene and 1,2,4-trimethylbnzene exceeded the ES in a sample collected from well AA-MW-5. The constituent 1,1,2-trichloroethane also exceeded the NR 140 PAL in the sample collected from this well.

Vapor Assessment

A qualitative vapor assessment was performed during this assessment. Ayres Associates concludes that residual hydrocarbon contamination in soil and groundwater is not of sufficient concentration to be a concern from vapor migration or intrusion in existing or future utilities and buildings. Also, the low organic content of the natural soils and fill material at the site will not promote the generation and migration of methane or other gases through the decomposition of organic matter.

Recommendations

The following recommendations are provided based on information collected during the Site Characterization Assessment:

- Submit this Site Characterization Report to the Wisconsin Department of Natural Resources along with the appropriate review fees in accordance with Wis. Stats. 292.

- Prepare a Materials Management Plan (MMP) to address soil and groundwater impacts in the subsurface that are consistent with site redevelopment. The remediation/materials management options selected will be contingent on the specific redevelopment plans.

References

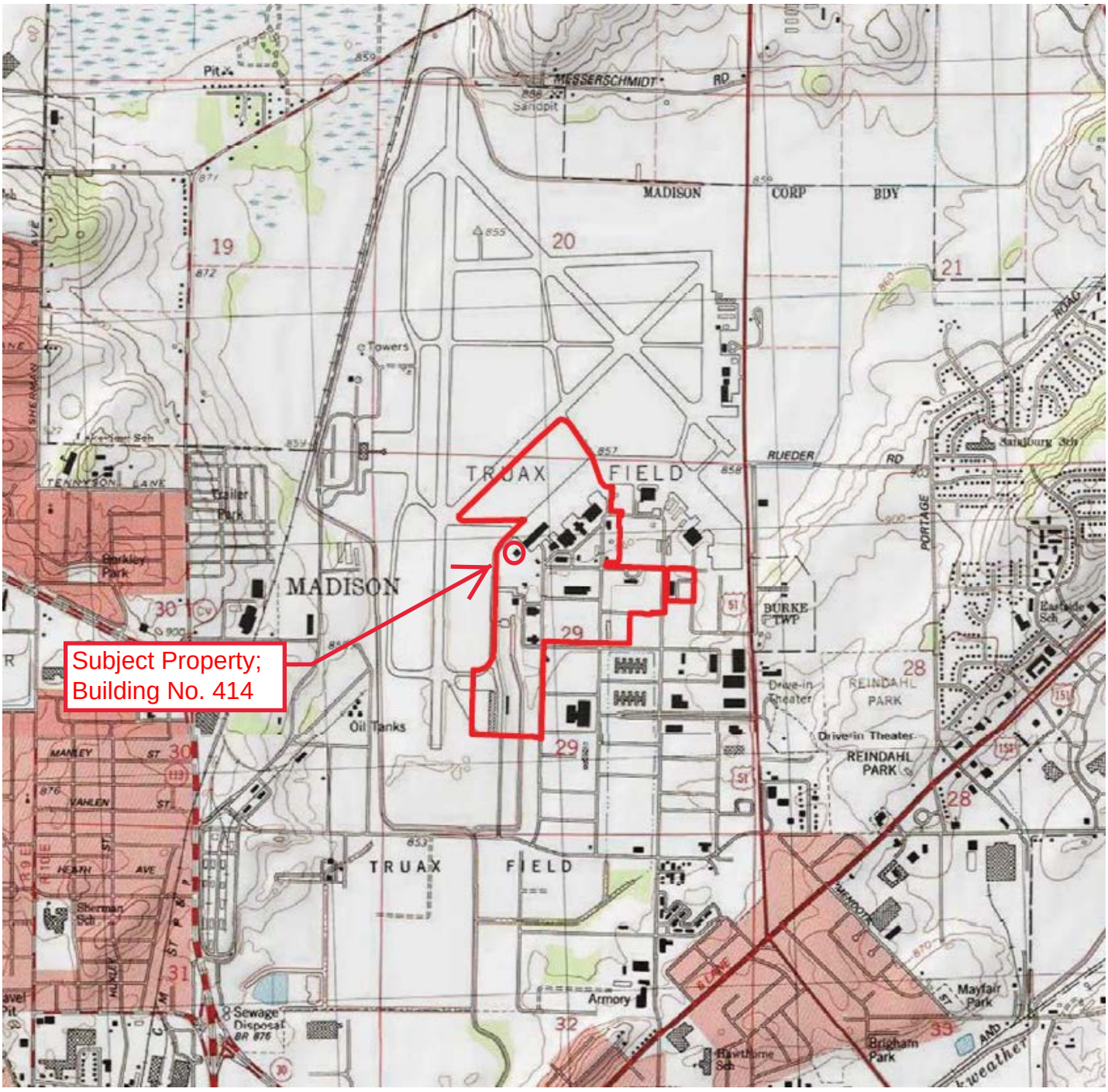
Bouwer, H. and R.C. Rice, A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers with Completely or Partially Penetrating Wells, *Water Resources Research*, Vol.12, No.3, 1976, pp.423-428

Amec Foster Wheeler, “Draft Report, FY 16 Phase 1 Regional Site Inspections for Perfluorinated Compounds” (March 2018)

BB&E Inc., “Final Perfluorinated Compounds Preliminary Assessment Site Visit Report” (December 2015)

Clayton, Lee and Attig, J.W. 1997. “Pleistocene Geologic Map of Dane County, Wisconsin, WGNHS Bulletin 95, Plate 1.

Figures



Source: Amec Foster Wheeler, March 2019

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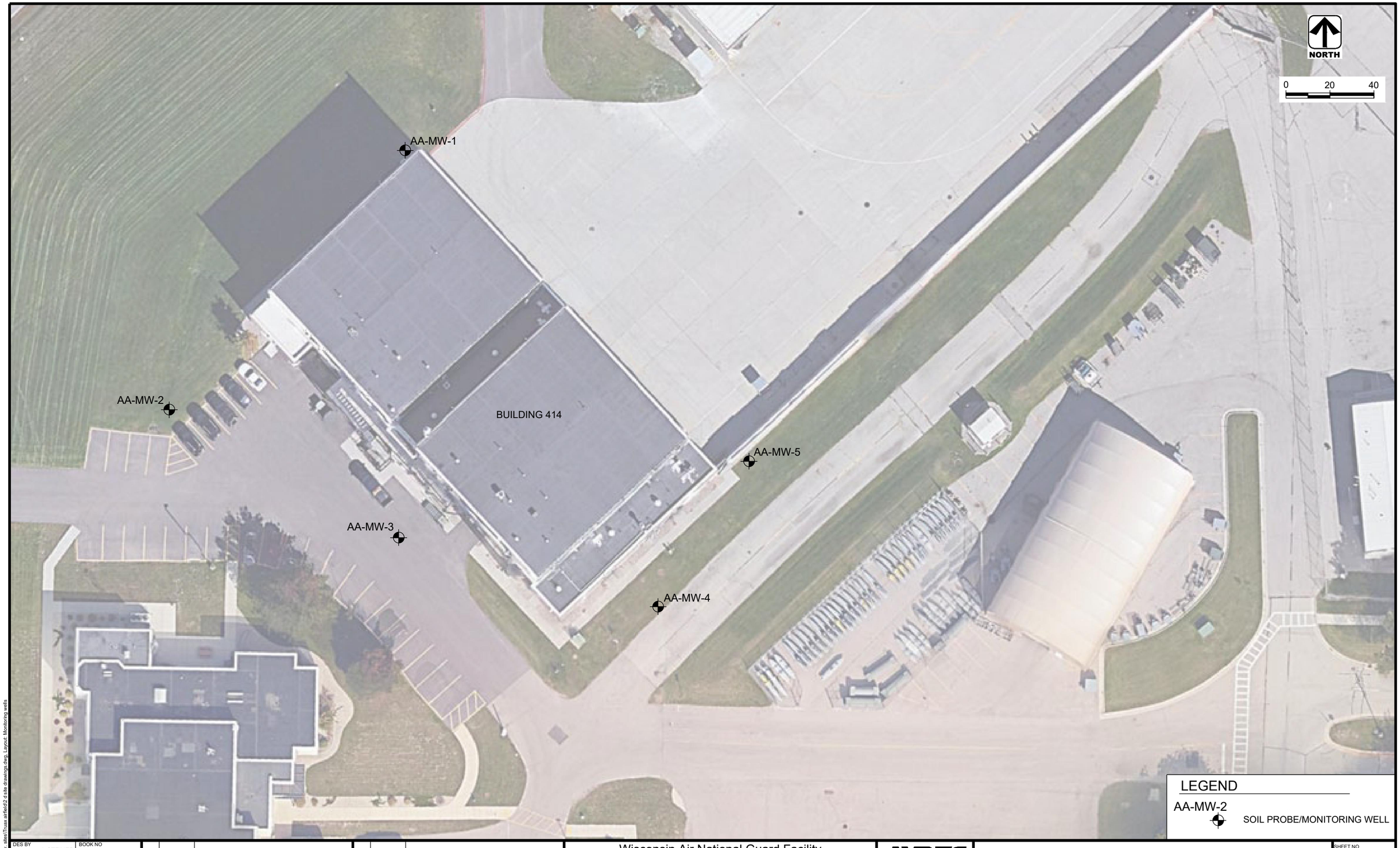
Figure 1 – Location Map
Site Characterization Report
XGFG189002 – F35: 3-Bay Specialized Hangar (Building No. 414)
Truax Field, Madison, Wisconsin
July 2020 51-0444.00

AYRES ENVIRONMENTAL



DES BY J. STEINER	BOOK NO							Wisconsin Air National Guard Facility 3200 Pierstorff St. Madison, Wisconsin	AYRES Eau Claire, WI 54701 715.834.3161	SOIL PROBE AND MONITORING WELL LOCATION MAP	SHEET NO 2
DR BY T. SHUPERT	PROJ NO 51-0444.00										
CHK BY J. STEINER	DATE JULY 2020	NO	DATE	REVISION	NO	DATE	REVISION				

AA-Standard.stb
7/28/2020
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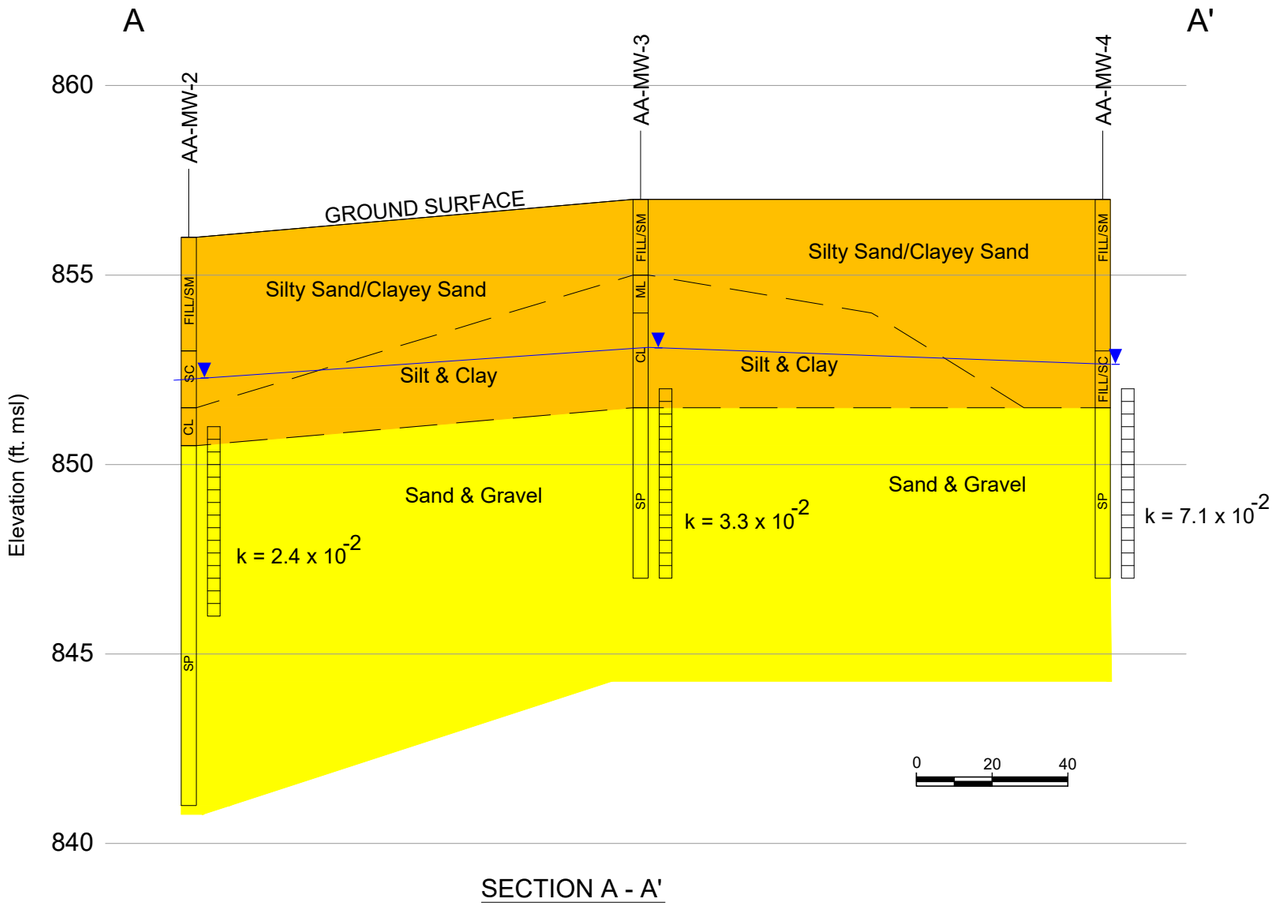
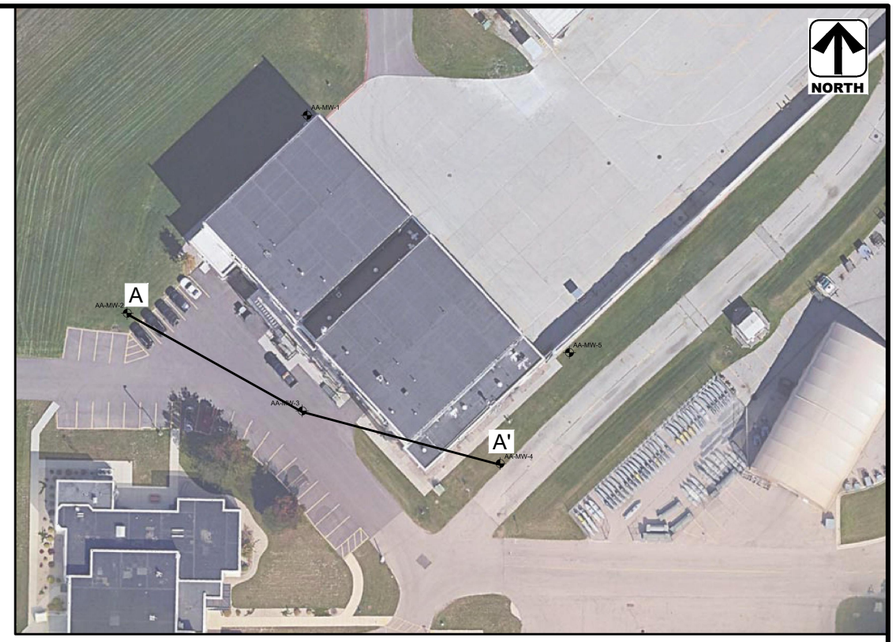


SECTION A - A'



SECTION LOCATION MAP
NOT TO SCALE

HYDROSTRATIGRAPHIC UNITS

- FINE-GRAINED CLAYEY SAND, SILTY SAND, SILT, AND CLAY DEPOSITS OF LOW PERMEABILITY
- FINE TO VERY COARSE-GRAINED, POORLY-GRADED SAND AND GRAVEL DEPOSITS OF MEDIUM TO HIGH PERMEABILITY

LEGEND

CL	INORGANIC CLAYS OF LOW PLASTICITY
ML	INORGANIC SILTS AND VERY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
SC	CLAYEY SANDS, SAND-CLAY MIXTURES
SM	SILTY SANDS, SAND-SILT MIXTURES
SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
▼	WATER LEVEL MEASURED IN WATER TABLE OBSERVATION WELL
	MONITORING WELL SCREEN INTERVAL
K	HYDRAULIC CONDUCTIVITY (CM/SEC)

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DR BY T. SHUPERT | PROJ NO 51-0444.00
CHK BY J. STEINER | DATE JULY 2020

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Madison, Wisconsin

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GEOLOGIC CROSS SECTION A-A'

SHEET NO 3

AA-Standard.stb
7/15/2020
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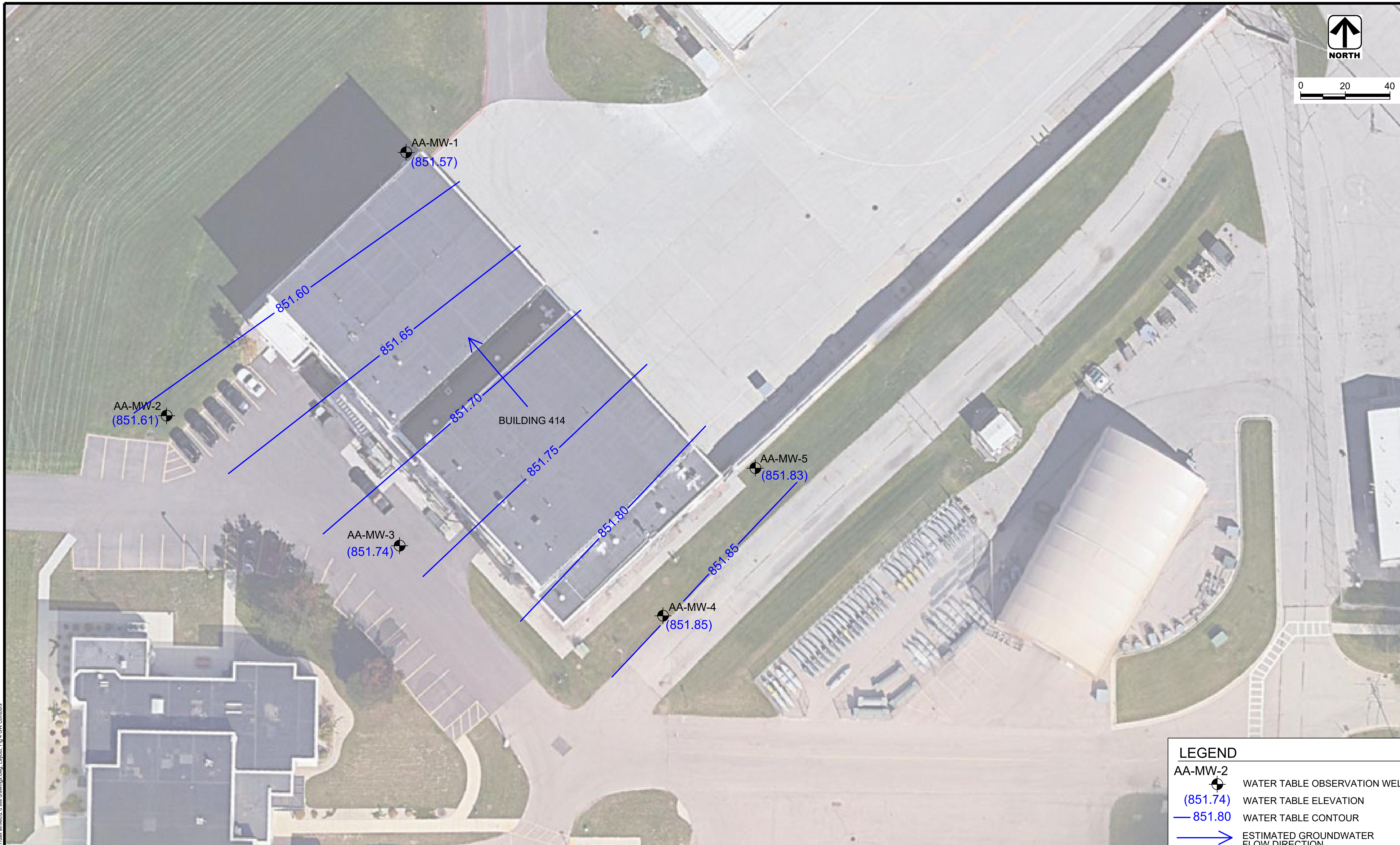

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DR BY	T. SHUPERT	PROJ NO	51-0444.00
CHK BY	J. STEINER	DATE	JULY 2020

NO	DATE	REVISION	NO	DATE	REVISION

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Madison, Wisconsin

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WATER TABLE CONTOUR MAP (JUNE 25, 2020)

SHEET NO 4

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7/28/2020
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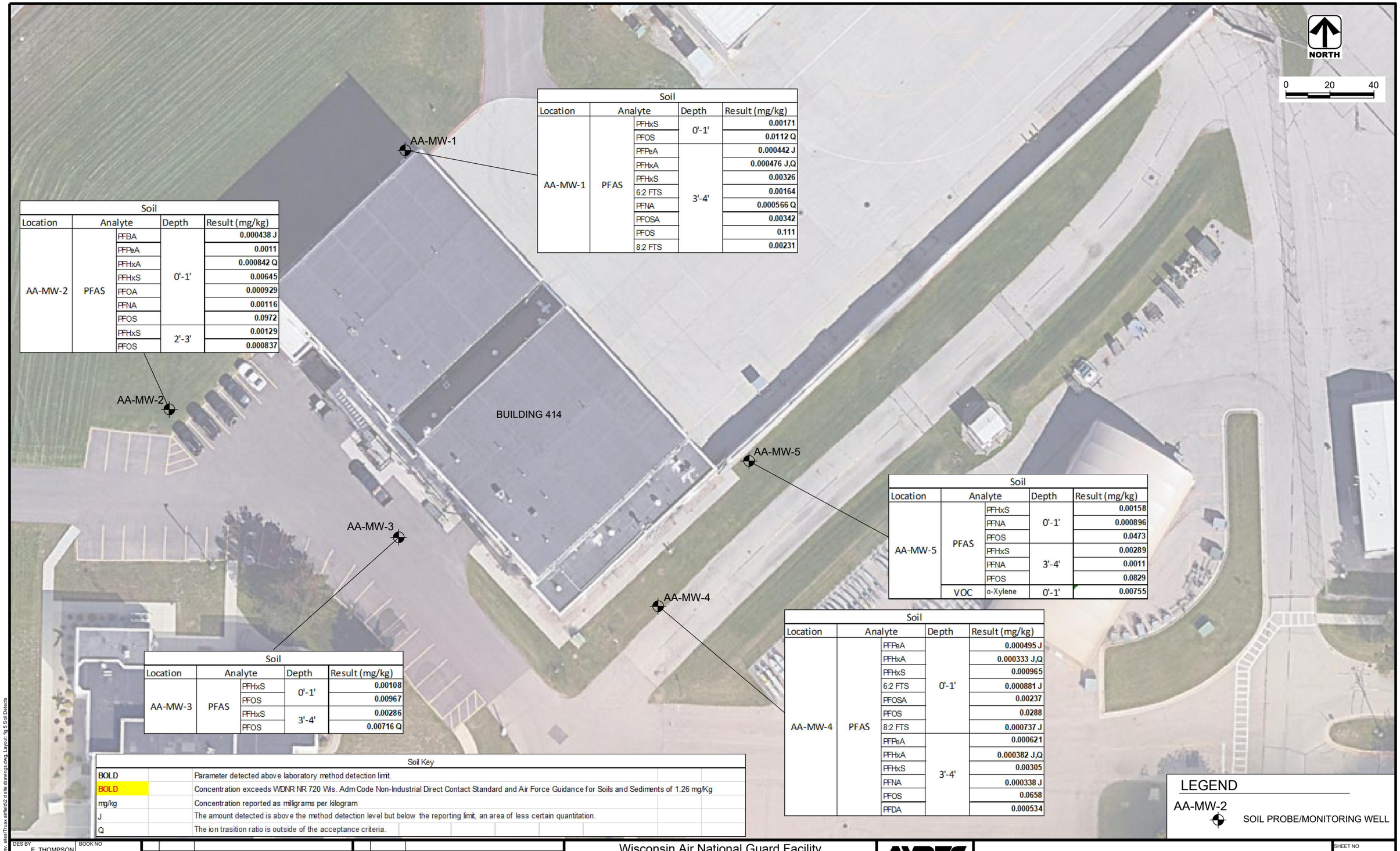

Soil				
Location	Analyte		Depth	Result (mg/kg)
AA-MW-2	PFAS	PFBA	0'-1'	0.000438 J
		PFPeA		0.0011
		PFHxA		0.000842 Q
		PFHxS		0.00645
		PFOA		0.000929
		PFNA		0.00116
		PFOS		0.0972
		PFHxS	2'-3'	0.00129
		PFOS		0.000837

Soil				
Location	Analyte		Depth	Result (mg/kg)
AA-MW-1	PFAS	PFHxS	0'-1'	0.00171
		PFOS		0.0112 Q
		PFPeA	3'-4'	0.000442 J
		PFHxA		0.000476 J,Q
		PFHxS		0.00326
		6:2 FTS		0.00164
		PFNA		0.000566 Q
		PFOSA		0.00342
		PFOS		0.111
		8:2 FTS		0.00231

Soil				
Location	Analyte		Depth	Result (mg/kg)
AA-MW-5	PFAS	PFHxS	0'-1'	0.00158
		PFNA		0.000896
		PFOS		0.0473
		PFHxS	3'-4'	0.00289
		PFNA		0.0011
		PFOS		0.0829
	VOC	o-Xylene	0'-1'	0.00755

Soil				
Location	Analyte		Depth	Result (mg/kg)
AA-MW-3	PFAS	PFHxS	0'-1'	0.00108
		PFOS		0.00967
		PFHxS	3'-4'	0.00286
		PFOS		0.00716 Q

Soil				
Location	Analyte		Depth	Result (mg/kg)
AA-MW-4	PFAS	PFPeA	0'-1'	0.000495 J
		PFHxA		0.000333 J,Q
		PFHxS		0.000965
		6:2 FTS		0.000881 J
		PFOSA		0.00237
		PFOS		0.0288
		8:2 FTS		0.000737 J
		PFPeA	3'-4'	0.000621
		PFHxA		0.000382 J,Q
		PFHxS		0.00305
		PFNA		0.000338 J
		PFOS		0.0658
		PFDA		0.000534

Soil Key	
BOLD	Parameter detected above laboratory method detection limit.
BOLD	Concentration exceeds WDNR NR 720 Wis. Adm Code Non-Industrial Direct Contact Standard and Air Force Guidance for Soils and Sediments of 1.26 mg/Kg
mg/kg	Concentration reported as milligrams per kilogram
J	The amount detected is above the method detection level but below the reporting limit, an area of less certain quantitation.
Q	The ion trasition ratio is outside of the acceptance criteria.

LEGEND

AA-MW-2 — SOIL PROBE/MONITORING WELL

AA-Standard.stb
7/28/2020
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DES BY	BOOK NO
E. THOMPSON	
DR BY	PROJ NO
T. SHUPERT	51-0444.00
CHK BY	DATE
J. STEINER	JULY 2020

NO	DATE	REVISION

NO	DATE	REVISION

Wisconsin Air National Guard Facility
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Madison, Wisconsin

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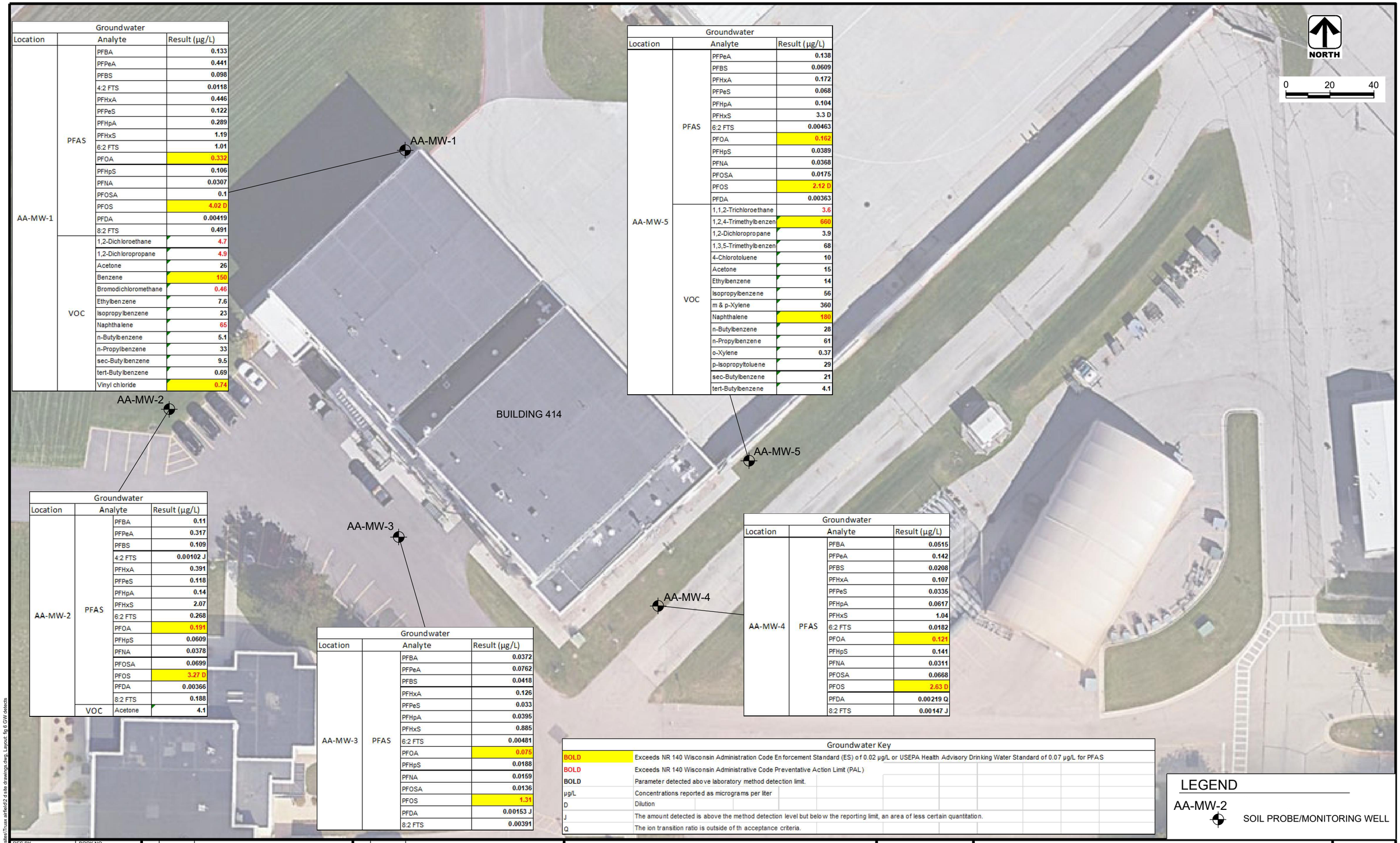
SUMMARY OF ANALYTE DETECTIONS IN SOIL

SHEET NO 5



Groundwater			
Location	Analyte		Result (µg/L)
AA-MW-1	PFAS	PFBA	0.133
		PFPeA	0.441
		PFBS	0.098
		4:2 FTS	0.0118
		PFHxA	0.446
		PFPeS	0.122
		PFHpA	0.289
		PFHxS	1.19
		6:2 FTS	1.01
		PFOA	0.332
		PFHpS	0.106
		PFNA	0.0307
		PFOSA	0.1
		PFOS	4.02 D
		PFDA	0.00419
		8:2 FTS	0.491
	VOC	1,2-Dichloroethane	4.7
		1,2-Dichloropropane	4.9
		Acetone	26
		Benzene	150
		Bromodichloromethane	0.46
		Ethylbenzene	7.6
		Isopropylbenzene	23
		Naphthalene	65
		n-Butylbenzene	5.1
		n-Propylbenzene	33
		sec-Butylbenzene	9.5
		tert-Butylbenzene	0.69
		Vinyl chloride	0.74

Groundwater			
Location	Analyte		Result (µg/L)
AA-MW-5	PFAS	PFPeA	0.138
		PFBS	0.0609
		PFHxA	0.172
		PFPeS	0.068
		PFHpA	0.104
		PFHxS	3.3 D
		6:2 FTS	0.00463
		PFOA	0.162
		PFHpS	0.0389
		PFNA	0.0368
		PFOSA	0.0175
		PFOS	2.12 D
		PFDA	0.00363
	VOC	1,1,2-Trichloroethane	3.6
		1,2,4-Trimethylbenzen	660
		1,2-Dichloropropane	3.9
		1,3,5-Trimethylbenzen	68
		4-Chlorotoluene	10
		Acetone	15
		Ethylbenzene	14
		Isopropylbenzene	56
		m & p-Xylene	360
		Naphthalene	180
		n-Butylbenzene	28
		n-Propylbenzene	61
		o-Xylene	0.37
		p-Isopropyltoluene	29
		sec-Butylbenzene	21
		tert-Butylbenzene	4.1

Groundwater			
Location	Analyte		Result (µg/L)
AA-MW-2	PFAS	PFBA	0.11
		PFPeA	0.317
		PFBS	0.109
		4:2 FTS	0.00102 J
		PFHxA	0.391
		PFPeS	0.118
		PFHpA	0.14
		PFHxS	2.07
		6:2 FTS	0.268
		PFOA	0.191
		PFHpS	0.0609
		PFNA	0.0378
		PFOSA	0.0699
		PFOS	3.27 D
		PFDA	0.00366
		8:2 FTS	0.188
	VOC	Acetone	4.1

Groundwater			
Location	Analyte		Result (µg/L)
AA-MW-3	PFAS	PFBA	0.0372
		PFPeA	0.0762
		PFBS	0.0418
		PFHxA	0.126
		PFPeS	0.033
		PFHpA	0.0395
		PFHxS	0.885
		6:2 FTS	0.00481
		PFOA	0.075
		PFHpS	0.0188
		PFNA	0.0159
		PFOSA	0.0136
		PFOS	1.31
		PFDA	0.00153 J
		8:2 FTS	0.00391

Groundwater			
Location	Analyte		Result (µg/L)
AA-MW-4	PFAS	PFBA	0.0515
		PFPeA	0.142
		PFBS	0.0208
		PFHxA	0.107
		PFPeS	0.0335
		PFHpA	0.0617
		PFHxS	1.04
		6:2 FTS	0.0182
		PFOA	0.121
		PFHpS	0.141
		PFNA	0.0311
		PFOSA	0.0668
		PFOS	2.63 D
		PFDA	0.00219 Q
		8:2 FTS	0.00147 J

Groundwater Key	
BOLD	Exceeds NR 140 Wisconsin Administration Code Enforcement Standard (ES) of 0.02 µg/L or USEPA Health Advisory Drinking Water Standard of 0.07 µg/L for PFAS
BOLD	Exceeds NR 140 Wisconsin Administrative Code Preventative Action Limit (PAL)
BOLD	Parameter detected above laboratory method detection limit.
µg/L	Concentrations reported as micrograms per liter
D	Dilution
J	The amount detected is above the method detection level but below the reporting limit, an area of less certain quantitation.
Q	The ion transition ratio is outside of th acceptance criteria.

LEGEND

AA-MW-2 — SOIL PROBE/MONITORING WELL

AA-Standard.stb
7/28/2020
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DES BY	BOOK NO
E. THOMPSON	
DR BY	PROJ NO
T. SHUPERT	51-0444.00
CHK BY	DATE
J. STEINER	JULY 2020

NO	DATE	REVISION

NO	DATE	REVISION

Wisconsin Air National Guard Facility
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Madison, Wisconsin

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Eau Claire, WI 54701
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SUMMARY OF ANALYTE DETECTIONS
AND EXCEEDANCES IN GROUNDWATER

SHEET NO
6

Tables

Table 1
Groundwater Elevation Data
Hangar 414 - Truax Field
Madison, Wisconsin

WELL ID	TOP OF PVC CASING ELEVATION	6/24/2020		6/25/2020	
		DEPTH TO WATER (ft)	GW ELEVATION	DEPTH TO WATER (ft)	GW ELEVATION
AA-MW-1	856.66	5.02	851.64	5.09	851.57
AA-MW-2	855.50	3.79	851.71	3.89	851.61
AA-MW-3	856.05	4.21	851.84	4.31	851.74
AA-MW-4	856.47	4.55	851.92	4.62	851.85
AA-MW-5	856.49	4.58	851.91	4.66	851.83

Note:
1. All well locations surveyed to State Plane Grid coordinates.
2. Top of PVC elevations surveyed to North American Vertical Datum of 1988 (NAVD88).

Table 2
Summary of Hydraulic Conductivity Test Results
WIANG – Building 414
Madison, Wisconsin

Well Number /Test[1]	Hydraulic Conductivity[2] (ft/sec)	Hydraulic Conductivity[3] (cm/sec)	Material Surrounding[4] Screen (USCS)
AA-MW-1 Slug Out	1.2×10^{-3}	3.6×10^{-2}	SP
AA-MW-2 Slug Out	7.9×10^{-4}	2.4×10^{-2}	SP
AA-MW-3 Slug Out	1.1×10^{-3}	3.3×10^{-2}	SP
AA-MW-4 Slug Out	2.3×10^{-3}	7.1×10^{-2}	SP
AA-MW-5 Slug Out	NA	NA	SP

Notes:
[1]Slug out test = rising head test
[2]ft/sec = hydraulic conductivity in units of feet per second
[3]cm/sec = hydraulic conductivity in units of centimeters per second
[4]See Figure 3 for Unified Soil Classification System (USCS) soil descriptions
NA – No test was performed. Strong hydrocarbon odors in well.

Table 3
Summary of Soil Sample Analytical Results - Per-and Polyfluorinated Alkyl Substances (PFAS)
Wisconsin Air National Guard - Truax Field - Building 414
6/24/2020

Boring Number/Depth		AA-MW-1 0-1'	AA-MW-1 3-4'	AA-MW-2 0-1'	AA-MW-2 2-3'	AA-MW-3 0-1'	AA-MW-3 3-4'	Soil Standards			
Soil Type		SM	SC/CL	SM	SM/SC	SM/SC	CL	WDNR NR 720 Wis. Adm. Code[1]		Air Force Guidance for Soils and Sediments[2] (mg/Kg)	USEPA Regional Screening Level (RSL)[3] Residential Soil (mg/Kg)
Solids, Percent	CAS #	95.0	85.7	83.1	87.2	94.4	80.2				
Per-and Polyfluorinated Alkyl Substances (PFAS) Acronym / (Name)		Analytical Result (mg/Kg)						Non-Industrial Direct Contact (mg/Kg)	Industrial Direct Contact (mg/Kg)		
PFBA (Perfluorobutanoic acid)	375-22-4	<0.000347	<0.000338	**0.000438 J**	<0.000346	<0.000347	<0.000344	ns	ns	ns	ns
PFPeA (Perfluoropentanoic acid)	2706-90-3	<0.000399	**0.000442 J**	**0.0011**	<0.000398	<0.000399	<0.000396	ns	ns	ns	ns
PFBS (Perfluorobutanesulfonic acid)	375-73-5	<0.000305	<0.000297	<0.000292	<0.000304	<0.000305	<0.000302	ns	ns	ns	1,300
4:2 FTS (4:2 Fluorotelomer sulfonic acid)	757124-72-4	<0.000361	<0.000352	<0.000345	<0.000360	<0.000361	<0.000358	ns	ns	ns	ns
PFHxA (Perfluorohexanoic acid)	307-24-4	<0.000217	**0.000476 J,Q**	**0.000842 Q**	<0.000216	<0.000217	<0.000215	ns	ns	ns	ns
PFPeS (Perfluoropentanesulfonic acid)	2706-91-4	<0.00066	<0.000643	<0.000631	<0.000658	<0.00066	<0.000654	ns	ns	ns	ns
HFPO-DA (Hexafluoropropylene oxide dimer acid)	13252-13-6	<0.00118	<0.00115	<0.00113	<0.00118	<0.00118	<0.00117	ns	ns	ns	ns
PFHpA (Perfluoroheptanoic acid)	375-85-9	<0.000479	<0.000467	<0.000459	<0.000478	<0.00048	<0.000475	ns	ns	ns	ns
ADONA (Ammonium 4,8 dioxa 3H perfluorononanoate)	919005-14-4	<0.000341	<0.000332	<0.000326	<0.00034	<0.000341	<0.000338	ns	ns	ns	ns
PFHxS (Perfluorohexanesulfonic acid)	355-46-4	**0.00171**	**0.00326**	**0.00645**	**0.00129**	**0.00108**	**0.00286**	ns	ns	ns	ns
6:2 FTS (6:2 Fluorotelomer sulfonic acid)	27619-97-2	<0.000656	**0.00164**	<0.000627	<0.000654	<0.000656	<0.00065	ns	ns	ns	ns
PFOA (Perfluorooctanoic acid)	335-67-1	<0.000471	<0.000459	**0.000929**	<0.00047	<0.000472	<0.000467	1.26	16.4	1.26	ns
PFHpS (Perfluoroheptanesulfonic acid)	375-92-8	<0.00074	<0.000721	<0.000708	<0.000738	<0.000741	<0.000733	ns	ns	ns	ns
PFNA (Perfluorononanoic acid)	375-95-1	<0.000313	**0.000566 Q**	**0.00116**	<0.000312	<0.000313	<0.00031	ns	ns	ns	ns
PFOSA (Perfluorooctane sulfonamide)	754-91-6	<0.00101	**0.00342**	<0.000967	<0.00101	<0.00101	<0.001	ns	ns	ns	ns
PFOS (Perfluorooctanesulfonic acid)	1763-23-1	**0.0112 Q**	**0.111**	**0.0972**	**0.000837**	**0.00967**	**0.00716 Q**	1.26	16.4	1.26	ns
9Cl-PF3ONS (9 chlorohexadecafluoro 3 oxanonane 1 sulfonic acid)	756426-58-1	<0.000371	<0.000362	<0.000355	<0.00037	<0.000371	<0.000368	ns	ns	ns	ns
PFDA (Perfluorodecanoic acid)	335-76-2	<0.000453	<0.000442	<0.000434	<0.000452	<0.000454	<0.000449	ns	ns	ns	ns
8:2 FTS (8:2 Fluorotelomer sulfonic acid)	39108-34-4	<0.000724	**0.00231**	<0.000693	<0.000722	<0.000724	<0.000718	ns	ns	ns	ns
PFNS (Perfluorononanesulfonic acid)	68259-12-1	<0.00115	<0.00112	<0.0011	<0.00115	<0.00115	<0.00114	ns	ns	ns	ns
MeFOSAA (N Methyl perfluorooctane sulfonamidoacetic acid)	2355-31-9	<0.000738	<0.000719	<0.000706	<0.000736	<0.000739	<0.000732	ns	ns	ns	ns
EtFOSAA (N Ethyl perfluorooctane sulfonamidoacetic acid)	2991-50-6	<0.00069	<0.000672	<0.00066	<0.000688	<0.00069	<0.000684	ns	ns	ns	ns
PFUnA (Perfluoroundecanoic acid)	2058-94-8	<0.000259	<0.000252	<0.000248	<0.000258	<0.000259	<0.000256	ns	ns	ns	ns
PFDS (Perfluorodecanesulfonic acid)	335-77-3	<0.000692	<0.000674	<0.000662	<0.00069	<0.000692	<0.000686	ns	ns	ns	ns
11Cl-PF3OUdS (11 chloroeicosafluoro 3 oxaundecane 1 sulfonic acid)	763051-92-9	<0.000724	<0.000706	<0.000693	<0.000722	<0.000724	<0.000718	ns	ns	ns	ns
10:2 FTS (10:2 Fluorotelomer sulfonic acid)	120226-60-0	<0.00102	<0.000993	<0.000975	<0.00102	<0.00102	<0.00101	ns	ns	ns	ns
PFDoA (Perfluorododecanoic acid)	307-55-1	<0.000405	<0.000395	<0.000388	<0.000404	<0.000405	<0.000402	ns	ns	ns	ns
MeFOSA (N Methyl perfluorooctane sulfonamide)	31506-32-8	<0.00579	<0.00565	<0.00554	<0.00578	<0.0058	<0.00574	ns	ns	ns	ns
PFTrDA (Perfluorotridecanoic acid)	72629-94-8	<0.000403	<0.000393	<0.000386	<0.000402	<0.000403	<0.0004	ns	ns	ns	ns
PFDoS (Perfluorododecanesulfonic acid)	79780-39-5	<0.000601	<0.000586	<0.000576	<0.0006	<0.000602	<0.000596	ns	ns	ns	ns
PFTeDA (Perfluorotetradecanoic acid)	376-06-7	<0.000265	<0.000258	<0.000253	<0.000264	<0.000265	<0.000262	ns	ns	ns	ns
EtFOSA (N Ethyl perfluorooctane sulfonamide)	4151-50-2	<0.00385	<0.00375	<0.00368	<0.00384	<0.00385	<0.00382	ns	ns	ns	ns
PFHxDA (Perfluorohexadecanoic acid)	67905-19-5	<0.00017	<0.000166	<0.000163	<0.00017	<0.000171	<0.000169	ns	ns	ns	ns
PFODA (Perfluorooctadecanoic acid)	16517-11-6	<0.000488	<0.000501	<0.000480	<0.000496	<0.00048	<0.000493	ns	ns	ns	ns
MeFOSE (N Methyl perfluorooctane sulfonamidoethanol)	24448-09-7	<0.00497	<0.00485	<0.00476	<0.00496	<0.00498	<0.00493	ns	ns	ns	ns
EtFOSE (N Ethyl perfluorooctane sulfonamidoethanol)	1691-99-2	<0.00539	<0.00526	<0.00516	<0.00538	<0.0054	<0.00535	ns	ns	ns	ns

BOLD	Concentration exceeds WDNR NR 720 Wis. Adm Code Non-Industrial Direct Contact Standard and Air Force Guidance for Soils and Sediments
BOLD	Concentration detected above laboratory method detection limit
ns	No standard established.
<	Concentration less than laboratory method detection limit
Dup	Duplicate
mg/Kg	Milligrams per kilogram (equivalent to parts per million)
µg/Kg	µg/kg = Micrograms per Kilogram (equivalent to parts per billion)
J	The amount detected is above the method detection level but below the reporting limit, an area of less certain quantitation.
Q	The ion trasition ratio is outside of the acceptance criteria.

[1]Wisconsin Department of Natural Resources NR 720 Wisconsin Administrative Code Residual Contaminant Levels (RCLs) for soil.
[2]Air Force Guidance screening levels calculated using the USEPA Regional Screening Level calculator [https://epa-prgs.ornl.gov/cgibin/chemicals/csl_search].
[3]Unites States Environmental Protection Agency Regional Screening Levels (USEPA, 2017).

Table 3 (continued)
Summary of Soil Sample Analytical Results - Per-and Polyfluorinated Alkyl Substances (PFAS)
Wisconsin Air National Guard - Truax Field - Building 414
6/24/2020

Boring Number/Depth		AA-MW-4 0-1'	AA-MW-4 3-4'	AA-MW-5 0-1'	AA-MW-5 3-4'	AA-MW-3 EB	Field Blank	Decon Water	Soil Standards			
Soil Type		SM	SM/SC	SM/SC	SC/SM	Water	Water	Water	WDNR NR 720 Wis. Adm. Code[1]		Air Force Guidance for Soils and Sediments[2] (mg/Kg)	USEPA Regional Screening Level (RSL)[3] Residential Soil (mg/Kg)
Solids, Percent	CAS #	87.1	81.3	91.1	94.7	--	--	--	Non-Industrial Direct Contact (mg/Kg)	Industrial Direct Contact (mg/Kg)		
Per-and Polyfluorinated Alkyl Substances (PFAS) Acronym / (Name)		Analytical Result (mg/Kg)										
PFBA (Perfluorobutanoic acid)	375-22-4	<0.000347	<0.000341	<0.000333	<0.000333	<0.000371	<0.000373	<0.000354	ns	ns	ns	ns
PFPeA (Perfluoropentanoic acid)	2706-90-3	**0.000495 J**	**0.000621**	<0.000383	<0.000383	<0.000651	<0.000654	<0.000621	ns	ns	ns	ns
PFBS (Perfluorobutanesulfonic acid)	375-73-5	<0.000305	<0.0003	<0.000292	<0.000292	<0.00091	<0.000915	<0.000869	ns	ns	ns	1,300
4:2 FTS (4:2 Fluorotelomer sulfonic acid)	757124-72-4	<0.000362	<0.000355	<0.000346	<0.000346	<0.000707	<0.00071	<0.000675	ns	ns	ns	ns
PFHxA (Perfluorohexanoic acid)	307-24-4	**0.000333 J,Q**	**0.000382 J,Q**	<0.000208	<0.000208	<0.00111	<0.00111	<0.00106	ns	ns	ns	ns
PFPeS (Perfluoropentanesulfonic acid)	2706-91-4	<0.000661	<0.000649	<0.000633	<0.000633	<0.00123	<0.00124	<0.00117	ns	ns	ns	ns
HFPO-DA (Hexafluoropropylene oxide dimer acid)	13252-13-6	<0.00118	<0.00116	<0.00113	<0.00114	<0.00245	<0.00246	<0.00234	ns	ns	ns	ns
PFHpA (Perfluoroheptanoic acid)	375-85-9	<0.00048	<0.000471	<0.00046	<0.00046	<0.000301	<0.000302	<0.000287	ns	ns	ns	ns
ADONA (Ammonium 4,8 dioxa 3H perfluorononanoate)	919005-14-4	<0.000341	<0.000335	<0.000327	<0.000327	<0.000367	<0.000369	<0.00035	ns	ns	ns	ns
PFHxS (Perfluorohexanesulfonic acid)	355-46-4	**0.000965**	**0.00305**	**0.00158**	**0.00289**	<0.000482	<0.000484	<0.00046	ns	ns	ns	ns
6:2 FTS (6:2 Fluorotelomer sulfonic acid)	27619-97-2	**0.000881 J**	<0.000645	<0.000629	<0.000629	<0.00102	<0.00102	<0.000971	ns	ns	ns	ns
PFOA (Perfluorooctanoic acid)	335-67-1	<0.000472	<0.000463	<0.000452	<0.000452	<0.000331	<0.000333	**0.00123 J,Q**	1.26	16.4	1.26	ns
PFHpS (Perfluoroheptanesulfonic acid)	375-92-8	<0.000741	<0.000728	<0.00071	<0.00071	<0.000477	<0.000479	<0.000455	ns	ns	ns	ns
PFNA (Perfluorononanoic acid)	375-95-1	<0.000313	**0.000338 J**	**0.000896**	**0.0011**	<0.000412	<0.000414	<0.000393	ns	ns	ns	ns
PFOSA (Perfluorooctane sulfonamide)	754-91-6	**0.00237**	<0.000994	<0.000969	<0.00097	<0.0009	<0.000905	**0.0149**	ns	ns	ns	ns
PFOS (Perfluorooctanesulfonic acid)	1763-23-1	**0.0288**	**0.0658**	**0.0473**	**0.0829**	**0.000768 J**	<0.000412	**0.000864 J**	1.26	16.4	1.26	ns
9Cl-PF3ONS (9 chlorohexadecafluoro 3 oxanonane 1 sulfonic ac	756426-58-1	<0.000372	<0.000365	<0.000356	<0.000356	<0.000738	<0.000741	<0.000704	ns	ns	ns	ns
PFDA (Perfluorodecanoic acid)	335-76-2	<0.000454	**0.000534**	<0.000435	<0.000435	<0.000758	<0.000761	<0.000723	ns	ns	ns	ns
8:2 FTS (8:2 Fluorotelomer sulfonic acid)	39108-34-4	**0.000737 J**	<0.000712	<0.000694	<0.000694	<0.00105	<0.00105	<0.001	ns	ns	ns	ns
PFNS (Perfluorononanesulfonic acid)	68259-12-1	<0.00115	<0.00113	<0.00111	<0.00111	<0.00197	<0.00198	<0.00188	ns	ns	ns	ns
MeFOSAA (N Methyl perfluorooctane sulfonamidoacetic acid)	2355-31-9	<0.000739	<0.000726	<0.000708	<0.000708	<0.000839	<0.000843	<0.000801	ns	ns	ns	ns
EtFOSAA (N Ethyl perfluorooctane sulfonamidoacetic acid)	2991-50-6	<0.000691	<0.000678	<0.000662	<0.000662	<0.000697	<0.0007	<0.000665	ns	ns	ns	ns
PFUnA (Perfluoroundecanoic acid)	2058-94-8	<0.000259	<0.000254	<0.000248	<0.000248	<0.000534	<0.000537	<0.00051	ns	ns	ns	ns
PFDS (Perfluorodecanesulfonic acid)	335-77-3	<0.000693	<0.00068	<0.000664	<0.000664	<0.000626	<0.000629	<0.000597	ns	ns	ns	ns
11Cl-PF3OUdS (11 chloroeicosafluoro 3 oxaundecane 1 sulfonic	763051-92-9	<0.000725	<0.000712	<0.000694	<0.000694	<0.00123	<0.00123	<0.00117	ns	ns	ns	ns
10:2 FTS (10:2 Fluorotelomer sulfonic acid)	120226-60-0	<0.00102	<0.001	<0.000977	<0.000977	<0.00159	<0.0016	<0.00152	ns	ns	ns	ns
PFDoA (Perfluorododecanoic acid)	307-55-1	<0.000406	<0.000398	<0.000389	<0.000389	<0.000403	<0.000405	<0.000384	ns	ns	ns	ns
MeFOSA (N Methyl perfluorooctane sulfonamide)	31506-32-8	<0.0058	<0.0057	<0.00556	<0.00556	<0.00195	<0.00196	<0.00186	ns	ns	ns	ns
PFTrDA (Perfluorotridecanoic acid)	72629-94-8	<0.000404	<0.000396	<0.000387	<0.000387	<0.000251	<0.000252	<0.00024	ns	ns	ns	ns
PFDoS (Perfluorododecanesulfonic acid)	79780-39-5	<0.000603	<0.000592	<0.000577	<0.000577	<0.00212	<0.00213	<0.00202	ns	ns	ns	ns
PFTeDA (Perfluorotetradecanoic acid)	376-06-7	<0.000265	<0.00026	<0.000254	<0.000254	<0.000384	<0.000386	<0.000366	ns	ns	ns	ns
EtFOSA (N Ethyl perfluorooctane sulfonamide)	4151-50-2	<0.00386	<0.00379	<0.00369	<0.00369	<0.0026	<0.00261	<0.00248	ns	ns	ns	ns
PFHxDA (Perfluorohexadecanoic acid)	67905-19-5	<0.000171	<0.000168	<0.000164	<0.000164	<0.00015	<0.00015	<0.000143	ns	ns	ns	ns
PFODA (Perfluorooctadecanoic acid)	16517-11-6	<0.000498	<0.000486	<0.000494	<0.000499	<0.00312	<0.00314	<0.00298	ns	ns	ns	ns
MeFOSE (N Methyl perfluorooctane sulfonamidoethanol)	24448-09-7	<0.00498	<0.00489	<0.00477	<0.00477	<0.00309	<0.0031	<0.00295	ns	ns	ns	ns
EtFOSE (N Ethyl perfluorooctane sulfonamidoethanol)	1691-99-2	<0.0054	<0.0053	<0.00517	<0.00518	<0.0048	<0.00482	<0.00458	ns	ns	ns	ns

BOLD	Concentration exceeds WDNR NR 720 Wis. Adm Code Non-Industrial Direct Contact Standard and Air Force Guidance for Soils and Sediments
BOLD	Concentration detected above laboratory method detection limit
ns	No standard established.
<	Concentration less than laboratory method detection limit
Dup	Duplicate
mg/Kg	Milligrams per kilogram (equivalent to parts per million)
µg/Kg	µg/kg = Micrograms per Kilogram (equivalent to parts per billion)
J	The amount detected is above the method detection level but below the reporting limit, an area of less certain quantitation.
Q	The ion trasition ratio is outside of the acceptance criteria.

[1]Wisconsin Department of Natural Resources NR 720 Wisconsin Administrative Code Residual Contaminant Levels (RCLs) for soil.

[2]Air Force Guidance screening levels calculated using the USEPA Regional Screening Level calculator [https://epa-prgs.ornl.gov/cgibin/chemicals/csl_search].

Table 4
Summary of Soil Sample Analytical Results - Volatile Organic Compounds
Wisconsin Air National Guard - Truax Field - Building 414
6/24/2020

Boring Number/Depth		AA-MW-1 0-1'	AA-MW-1 3-4'	AA-MW-2 0-1'	AA-MW-2 2-3'	AA-MW-3 0-1'	AA-MW-3 3-4'	AA-MW-4 0-1'	AA-MW-4 3-4'	AA-MW-5 0-1'	AA-MW-5 0-1 DUP	AA-MW-5 3-4'	**Soil Standards (RCLs)**	
Soil Type		SM	SC/CL	SM	SM/SC	SM/SC	CL	SM	SM/SC	SM/SC	SM/SC	SC/SM	**WDNR NR 720 Wis. Adm. Code**	
Solids, Percent	CAS #	95.0	85.7	83.1	87.2	94.4	80.2	87.1	81.3	91.1	85.3	94.7		
Volatile Organic Compounds		**Analytical Result (mg/Kg)**											**Non-Industrial Direct Contact (mg/Kg)**	**Industrial Direct Contact (mg/Kg)**
1,1,1,2-Tetrachloroethane	630-20-6	<0.056	<0.067	<0.068	<0.072	<0.055	<0.072	<0.066	<0.073	<0.060	<0.073	<0.058	12.3	2.78
1,1,1-Trichloroethane	71-55-6	<0.015	<0.018	<0.018	<0.019	<0.015	<0.019	<0.018	<0.019	<0.016	<0.019	<0.015	640	640
1,1,2,2-Tetrachloroethane	79-34-5	<0.020	<0.023	<0.024	<0.025	<0.019	<0.025	<0.023	<0.025	<0.021	<0.025	<0.020	3.6	0.81
1,1,2-Trichloroethane	79-00-5	<0.011	<0.013	<0.014	<0.014	<0.011	<0.014	<0.013	<0.015	<0.012	<0.015	<0.012	7.01	1.59
1,1-Dichloroethane	75-34-3	<0.0066	<0.0078	<0.0079	<0.0085	<0.0064	<0.0084	<0.0077	<0.0085	<0.0070	<0.0085	<0.0067	5.06	22.2
1,1-Dichloroethene	75-35-4	<0.020	<0.023	<0.024	<0.025	<0.019	<0.025	<0.023	<0.025	<0.021	<0.025	<0.020	320	1,190
1,1-Dichloropropene	563-58-6	<0.025	<0.030	<0.030	<0.033	<0.025	<0.032	<0.030	<0.033	<0.027	<0.033	<0.026	ns	ns
1,2,3-Trichlorobenzene	87-61-6	<0.010	<0.012	<0.012	<0.013	<0.010	<0.013	<0.012	<0.013	<0.011	<0.013	<0.011	62.6	934
1,2,3-Trichloropropane	96-18-4	<0.038	<0.044	<0.045	<0.048	<0.037	<0.048	<0.044	<0.048	<0.040	<0.048	<0.039	0.0051	0.109
1,2,4-Trichlorobenzene	120-82-1	<0.016	<0.019	<0.019	<0.021	<0.016	<0.020	<0.019	<0.021	<0.017	<0.021	<0.016	24	113
1,2,4-Trimethylbenzene	95-63-6	<0.010	<0.012	<0.012	<0.013	<0.010	<0.013	<0.012	<0.013	<0.011	<0.013	<0.011	219	219
1,2-Dibromo-3-chloropropane	96-12-8	<0.066	<0.078	<0.079	<0.085	<0.064	<0.084	<0.077	<0.085	<0.070	<0.085	<0.067	0.0075	0.0923
1,2-Dibromoethane	106-93-4	<0.010	<0.012	<0.012	<0.013	<0.010	<0.013	<0.012	<0.013	<0.011	<0.013	<0.011	0.05	0.221
1,2-Dichlorobenzene	95-50-1	<0.014	<0.017	<0.017	<0.018	<0.014	<0.018	<0.016	<0.018	<0.015	<0.018	<0.014	376	376
1,2-Dichloroethane	107-06-2	<0.021	<0.024	<0.025	<0.027	<0.020	<0.026	<0.024	<0.027	<0.022	<0.027	<0.021	0.652	2.87
1,2-Dichloropropane	78-87-5	<0.024	<0.029	<0.029	<0.031	<0.024	<0.031	<0.028	<0.031	<0.026	<0.031	<0.025	3.4	15
1,3,5-Trimethylbenzene	108-67-8	<0.012	<0.014	<0.015	<0.016	<0.012	<0.016	<0.014	<0.016	<0.013	<0.016	<0.013	182	182
1,3-Dichlorobenzene	541-73-1	<0.013	<0.016	<0.016	<0.017	<0.013	<0.017	<0.015	<0.017	<0.014	<0.017	<0.013	297	297
1,3-Dichloropropane	142-28-9	<0.013	<0.016	<0.016	<0.017	<0.013	<0.017	<0.015	<0.017	<0.014	<0.017	<0.013	1,490	1,490
1,4-Dichlorobenzene	106-46-7	<0.014	<0.017	<0.017	<0.018	<0.014	<0.018	<0.016	<0.018	<0.015	<0.018	<0.014	3.74	16.4
2,2-Dichloropropane	594-20-7	<0.020	<0.023	<0.024	<0.025	<0.019	<0.025	<0.023	<0.025	<0.021	<0.025	<0.020	191	191
2-Butanone	78-93-3	<0.38	<0.44	<0.45	<0.48	<0.37	<0.48	<0.44	<0.48	<0.40	<0.48	<0.39	28,400	28,400
2-Chlorotoluene	95-49-8	<0.017	<0.020	<0.020	<0.022	<0.017	<0.022	<0.020	<0.022	<0.018	<0.022	<0.017	907	907
2-Hexanone	591-78-6	<0.19	<0.22	<0.23	<0.24	<0.18	<0.24	<0.22	<0.24	<0.20	<0.24	<0.19	237	1,760
4-Chlorotoluene	106-43-4	<0.014	<0.017	<0.017	<0.018	<0.014	<0.018	<0.016	<0.018	<0.015	<0.018	<0.014	253	253
4-Methyl-2-pentanone	108-10-1	<0.17	<0.20	<0.20	<0.22	<0.17	<0.22	<0.20	<0.22	<0.18	<0.22	<0.17	3,360	3,360
Acetone	67-64-1	<0.38	<0.44	<0.45	<0.48	<0.37	<0.48	<0.44	<0.48	<0.40	<0.48	<0.39	63,400	100,000
Benzene	71-43-2	<0.010	<0.012	<0.012	<0.013	<0.010	<0.013	<0.012	<0.013	<0.011	<0.013	<0.011	1.6	7.07
Bromobenzene	108-86-1	<0.015	<0.018	<0.018	<0.019	<0.015	<0.019	<0.018	<0.019	<0.016	<0.019	<0.015	342	679
Bromochloromethane	74-97-5	<0.016	<0.019	<0.019	<0.021	<0.016	<0.020	<0.019	<0.021	<0.017	<0.021	<0.016	216	906
Bromodichloromethane	75-27-4	<0.013	<0.016	<0.016	<0.017	<0.013	<0.017	<0.015	<0.017	<0.014	<0.017	<0.013	0.418	1.83
Bromoform	75-25-2	<0.056	<0.067	<0.068	<0.072	<0.055	<0.072	<0.066	<0.073	<0.060	<0.073	<0.058	25.4	113
Bromomethane	74-83-9	<0.085	<0.10	<0.10	<0.11	<0.083	<0.11	<0.099	<0.11	<0.089	<0.11	<0.087	9.6	43

BOLD	Concentration exceeds WDNR NR 720 Wis. Adm Code Non-Industrial Direct Contact Residual Contaminant Levels (RCLs)
BOLD	Concentration exceeds WDNR NR720 Wis. Adm Code Industrial Direct Contact Residual Contamiant Levels (RCLs)
BOLD	Concentration detected above laboratory method detection limit
ns	No standard established
--	Not Analyzed
<	Concentration less than laboratory method detection limit
Dup	Duplicate
mg/Kg	Concentrations reported in milligrams per kilogram
RCLs	Wisconsin Department of Natural Resources NR 720 Wisconsin Administrative Code Residual Contaminant Levels (RCLs) for soil.

Table 4 (continued)
Summary of Soil Sample Analytical Results - Volatile Organic Compounds
Wisconsin Air National Guard - Truax Field - Building 414
6/24/2020

Boring Number/Depth		AA-MW-1 0-1'	AA-MW-1 3-4'	AA-MW-2 0-1'	AA-MW-2 2-3'	AA-MW-3 0-1'	AA-MW-3 3-4'	AA-MW-4 0-1'	AA-MW-4 3-4'	AA-MW-5 0-1'	AA-MW-5 0-1 DUP	AA-MW-5 3-4'	**Soil Standards (RCLs)**	
Soil Type		SM	SC/CL	SM	SM/SC	SM/SC	CL	SM	SM/SC	SM/SC	SM/SC	SC/SM	**WDNR NR 720 Wis. Adm. Code**	
Solids, Percent	CAS #	95.0	85.7	83.1	87.2	94.4	80.2	87.1	81.3	91.1	85.3	94.7		
Volatile Organic Compounds		**Analytical Result (mg/Kg)**											**Non-Industrial Direct Contact (mg/Kg)**	**Industrial Direct Contact (mg/Kg)**
Carbon disulfide	75-15-0	<0.038	<0.044	<0.045	<0.048	<0.037	<0.048	<0.044	<0.048	<0.040	<0.048	<0.039	738	738
Carbon tetrachloride	56-23-5	<0.013	<0.016	<0.016	<0.017	<0.013	<0.017	<0.015	<0.017	<0.014	<0.017	<0.013	0.916	4.03
Chlorobenzene	108-90-7	<0.0094	<0.011	<0.011	<0.012	<0.0092	<0.012	<0.011	<0.012	<0.0099	<0.012	<0.0096	370	761
Chloroethane	75-00-3	<0.028	<0.033	<0.034	<0.036	<0.028	<0.036	<0.033	<0.036	<0.030	<0.036	<0.029	2,120	2,120
Chloroform	67-66-3	<0.015	<0.018	<0.018	<0.019	<0.015	<0.019	<0.018	<0.019	<0.016	<0.019	<0.015	0.454	1.98
Chloromethane	74-87-3	<0.028	<0.033	<0.034	<0.036	<0.028	<0.036	<0.033	<0.036	<0.030	<0.036	<0.029	159	669
cis-1,2-Dichloroethene	156-59-2	<0.025	<0.030	<0.030	<0.033	<0.025	<0.032	<0.030	<0.033	<0.027	<0.033	<0.026	156	2,340
cis-1,3-Dichloropropene	10061-01-5	<0.013	<0.016	<0.016	<0.017	<0.013	<0.017	<0.015	<0.017	<0.014	<0.017	<0.013	1,210	1,210
Dibromochloromethane	124-48-1	<0.038	<0.044	<0.045	<0.048	<0.037	<0.048	<0.044	<0.048	<0.040	<0.048	<0.039	8.28	38.9
Dibromomethane	74-95-3	<0.020	<0.023	<0.024	<0.025	<0.019	<0.025	<0.023	<0.025	<0.021	<0.025	<0.020	34	143
Dichlorodifluoromethane	75-71-8	<0.047	<0.055	<0.056	<0.060	<0.046	<0.060	<0.055	<0.061	<0.050	<0.060	<0.048	126	530
Diisopropyl ether	108-20-3	<0.017	<0.020	<0.020	<0.022	<0.017	<0.022	<0.020	<0.022	<0.018	<0.022	<0.017	2,260	2,260
Ethylbenzene	100-41-4	<0.010	<0.012	<0.012	<0.013	<0.010	<0.013	<0.012	<0.013	<0.011	<0.013	<0.011	8.02	35.4
Hexachlorobutadiene	87-68-3	<0.022	<0.026	<0.026	<0.028	<0.021	<0.028	<0.025	<0.028	<0.023	<0.028	<0.022	1.63	7.19
Isopropylbenzene	98-82-8	<0.012	<0.014	<0.015	<0.016	<0.012	<0.016	<0.014	<0.016	<0.013	<0.016	<0.013	268	268
m & p-Xylene	179601-23-1	<0.024	<0.028	<0.028	<0.030	<0.023	<0.030	<0.027	<0.030	<0.025	<0.030	<0.024	390	390
Methyl tert-butyl ether	1634-04-4	<0.015	<0.018	<0.018	<0.019	<0.015	<0.019	<0.018	<0.019	<0.016	<0.019	<0.015	63.8	282
Methylene chloride	75-09-2	<0.056	<0.067	<0.068	<0.072	<0.055	<0.072	<0.066	<0.073	<0.060	<0.073	<0.058	61.8	1,150
Naphthalene	91-20-3	<0.014	<0.017	<0.017	<0.018	<0.014	<0.018	<0.016	<0.018	<0.015	<0.018	<0.014	5.52	24.1
n-Butylbenzene	104-51-8	<0.016	<0.019	<0.019	<0.021	<0.016	<0.020	<0.019	<0.021	<0.017	<0.021	<0.016	108	108
n-Propylbenzene	103-65-1	<0.012	<0.014	<0.015	<0.016	<0.012	<0.016	<0.014	<0.016	<0.013	<0.016	<0.013	264	264
o-Xylene	95-47-6	<0.0066	<0.0078	<0.0079	<0.0085	<0.0064	<0.0084	<0.0077	<0.0085	**0.00755**	<0.0085	<0.0067	434	434
p-Isopropyltoluene	99-87-6	<0.012	<0.014	<0.015	<0.016	<0.012	<0.016	<0.014	<0.016	<0.013	<0.016	<0.013	162	162
sec-Butylbenzene	135-98-8	<0.010	<0.012	<0.012	<0.013	<0.010	<0.013	<0.012	<0.013	<0.011	<0.013	<0.011	145	145
Styrene	100-42-5	<0.015	<0.018	<0.018	<0.019	<0.015	<0.019	<0.018	<0.019	<0.016	<0.019	<0.015	867	867
tert-Butylbenzene	98-06-6	<0.011	<0.013	<0.014	<0.014	<0.011	<0.014	<0.013	<0.015	<0.012	<0.015	<0.012	183	183
Tetrachloroethene	127-18-4	<0.010	<0.012	<0.012	<0.013	<0.010	<0.013	<0.012	<0.013	<0.011	<0.013	<0.011	33	145
Tetrahydrofuran	109-99-9	<0.24	<0.28	<0.28	<0.30	<0.23	<0.30	<0.27	<0.30	<0.25	<0.30	<0.24	23,000	100,000
Toluene	108-88-3	<0.015	<0.018	<0.018	<0.019	<0.015	<0.019	<0.018	<0.019	<0.016	<0.019	<0.015	818	818
trans-1,2-Dichloroethene	156-60-5	<0.013	<0.016	<0.016	<0.017	<0.013	<0.017	<0.015	<0.017	<0.014	<0.017	<0.013	1,560	1,850
trans-1,3-Dichloropropene	10061-02-6	<0.038	<0.044	<0.045	<0.048	<0.037	<0.048	<0.044	<0.048	<0.040	<0.048	<0.039	1,510	1,510
Trichloroethene	79-01-6	<0.018	<0.021	<0.021	<0.023	<0.017	<0.023	<0.021	<0.023	<0.019	<0.023	<0.018	1.3	8.41
Trichlorofluoromethane	75-69-4	<0.038	<0.044	<0.045	<0.048	<0.037	<0.048	<0.044	<0.048	<0.040	<0.048	<0.039	1,230	1,230
Vinyl acetate	108-05-4	<0.38	<0.44	<0.45	<0.48	<0.37	<0.48	<0.44	<0.48	<0.40	<0.48	<0.39	1,300	2,750
Vinyl chloride	75-01-4	<0.018	<0.021	<0.021	<0.023	<0.017	<0.023	<0.021	<0.023	<0.019	<0.023	<0.018	0.0668	2.08

BOLD	Concentration exceeds WDNR NR 720 Wis. Adm Code Non-Industrial Direct Contact Residual Contaminant Levels (RCLs)
BOLD	Concentration exceeds WDNR NR720 Wis. Adm Code Industrial Direct Contact Residual Contamiant Levels (RCLs)
BOLD	Concentration detected above laboratory method detection limit
ns	No standard established
--	Not Analyzed
<	Concentration less than laboratory method detection limit
Dup	Duplicate
mg/Kg	Concentrations reported in milligrams per kilogram
RCLs	Wisconsin Department of Natural Resources NR 720 Wisconsin Administrative Code Residual Contaminant Screening Levels (RCSLs) for soil.

Table 5 - Summary of Groundwater Analytical Results - Per-and Polyfluorinated Alkyl Substances (PFAS)
Wisconsin Air National Guard - Truax Field - Building 414
06/25/20

Well Number	CAS #	AA-MW-1	AA-MW-2	AA-MW-3	AA-MW-4	AA-MW-4 Dup	AA-MW-5	Field Blank	Equipment Blank	Groundwater Standards	
										NR 140 Wis. Adm. Code (µg/L)[1]	USEPA Health Advisory
Sampling Date		6/25/2020	6/25/2020	6/25/2020	6/25/2020	6/25/2020	6/25/2020	6/25/2020	6/25/2020	ES	PAL	Drinking Water (Surface Water or Groundwater)
Acronym / (Name)		Analytical Result (µg/L)										(µg/L)
PFBA (Perfluorobutanoic acid)	375-22-4	**0.133**	**0.11**	**0.0372**	**0.0515**	**0.0482**	<0.000367	<0.000357	<0.000363	ns	ns	ns
PFPeA (Perfluoropentanoic acid)	2706-90-3	**0.441**	**0.317**	**0.0762**	**0.142**	**0.142**	**0.138**	<0.000628	<0.000637	ns	ns	ns
PFBS (Perfluorobutanesulfonic acid)	375-73-5	**0.098**	**0.109**	**0.0418**	**0.0208**	**0.0212**	**0.0609**	<0.000878	<0.000891	ns	ns	ns
4:2 FTS (4:2 Fluorotelomer sulfonic acid)	757124-72-4	**0.0118**	**0.00102 J**	<0.000722	<0.000717	<0.000755	<0.0007	<0.000681	<0.000692	ns	ns	ns
PFHxA (Perfluorohexanoic acid)	307-24-4	**0.446**	**0.391**	**0.126**	**0.107**	**0.106**	**0.172**	<0.00107	<0.00108	ns	ns	ns
PFPeS (Perfluoropentanesulfonic acid)	2706-91-4	**0.122**	**0.118**	**0.033**	**0.0335**	**0.0367**	**0.068**	<0.00119	<0.0012	ns	ns	ns
HFPO-DA (Hexafluoropropylene oxide dimer acid)	13252-13-6	<0.0024	<0.00258	<0.0025	<0.00249	<0.00262	<0.00243	<0.00236	<0.0024	ns	ns	ns
PFHpA (Perfluoroheptanoic acid)	375-85-9	**0.289**	**0.14**	**0.0395**	**0.0617**	**0.0598**	**0.104**	<0.00029	<0.000294	ns	ns	ns
ADONA (Ammonium 4,8 dioxa 3H perfluorononanoate)	919005-14-4	<0.000359	<0.000387	<0.000375	<0.000372	<0.000392	<0.000364	<0.000354	<0.000359	ns	ns	ns
PFHxS (Perfluorohexanesulfonic acid)	355-46-4	**1.19**	**2.07**	**0.885**	**1.04**	**1.01**	**3.3 D**	<0.000464	<0.000471	ns	ns	ns
6:2 FTS (6:2 Fluorotelomer sulfonic acid)	27619-97-2	**1.01**	**0.268**	**0.00481**	**0.0182**	**0.0183**	**0.00463**	<0.000981	<0.000995	ns	ns	ns
PFOA (Perfluorooctanoic acid)	335-67-1	**0.332**	**0.191**	**0.075**	**0.121**	**0.117**	**0.162**	<0.000319	<0.000324	0.02	0.002	0.07
PFHpS (Perfluoroheptanesulfonic acid)	375-92-8	**0.106**	**0.0609**	**0.0188**	**0.141**	**0.132**	**0.0389**	<0.000459	<0.000466	ns	ns	ns
PFNA (Perfluorononanoic acid)	375-95-1	**0.0307**	**0.0378**	**0.0159**	**0.0311**	**0.0315**	**0.0368**	<0.000397	<0.000403	ns	ns	ns
PFOSA (Perfluorooctane sulfonamide)	754-91-6	**0.1**	**0.0699**	**0.0136**	**0.0668**	**0.0751**	**0.0175**	<0.000868	<0.000881	ns	ns	ns
PFOS (Perfluorooctanesulfonic acid)	1763-23-1	**4.02 D**	**3.27 D**	**1.31**	**2.63 D**	**2.59 D**	**2.12 D**	**0.000543 J,Q**	<0.000402	0.02	0.002	0.07
9Cl-PF3ONS (9 chlorohexadecafluoro 3 oxanonane 1 sulfonic acid)	756426-58-1	<0.000722	<0.000777	<0.000753	<0.000748	<0.000788	<0.00073	<0.000711	<0.000722	ns	ns	ns
PFDA (Perfluorodecanoic acid)	335-76-2	**0.00419**	**0.00366**	**0.00153 J**	**0.00219 Q**	**0.00196 J**	**0.00363**	<0.000731	<0.000741	ns	ns	ns
8:2 FTS (8:2 Fluorotelomer sulfonic acid)	39108-34-4	**0.491**	**0.188**	**0.00391**	**0.00147 J**	<0.00112	<0.00104	<0.00101	<0.00103	ns	ns	ns
PFNS (Perfluorononanesulfonic acid)	68259-12-1	<0.00193	<0.00207	<0.00201	<0.002	<0.0021	<0.00195	<0.0019	<0.00193	ns	ns	ns
MeFOSAA (N Methyl perfluorooctane sulfonamidoacetic acid)	2355-31-9	<0.000822	<0.000884	<0.000857	<0.000851	<0.000896	<0.000831	<0.000809	<0.000821	ns	ns	ns
EtFOSAA (N Ethyl perfluorooctane sulfonamidoacetic acid)	2991-50-6	<0.000682	<0.000734	<0.000711	<0.000706	<0.000744	<0.00069	<0.000672	<0.000682	ns	ns	ns
PFUnA (Perfluoroundecanoic acid)	2058-94-8	<0.000523	<0.000563	<0.000545	<0.000541	<0.00057	<0.000529	<0.000515	<0.000522	ns	ns	ns
PFDS (Perfluorodecanesulfonic acid)	335-77-3	<0.000612	<0.000659	<0.000639	<0.000634	<0.000668	<0.000619	<0.000603	<0.000612	ns	ns	ns
11Cl-PF3OUdS (11 chloroeicosafluoro 3 oxaundecane 1 sulfonic acid)	763051-92-9	<0.0012	<0.00129	<0.00125	<0.00124	<0.00131	<0.00121	<0.00118	<0.0012	ns	ns	ns
10:2 FTS (10:2 Fluorotelomer sulfonic acid)	120226-60-0	<0.00156	<0.00168	<0.00162	<0.00161	<0.0017	<0.00158	<0.00153	<0.00156	ns	ns	ns
PFDoA (Perfluorododecanoic acid)	307-55-1	<0.000394	<0.000424	<0.000411	<0.000408	<0.00043	<0.000399	<0.000388	<0.000394	ns	ns	ns
MeFOSA (N Methyl perfluorooctane sulfonamide)	31506-32-8	<0.00191	<0.00205	<0.00199	<0.00197	<0.00208	<0.00193	<0.00188	<0.00191	ns	ns	ns
PFTrDA (Perfluorotridecanoic acid)	72629-94-8	<0.000246	<0.000265	<0.000256	<0.000255	<0.000268	<0.000249	<0.000242	<0.000246	ns	ns	ns
PFDoS (Perfluorododecanesulfonic acid)	79780-39-5	<0.00208	<0.00223	<0.00216	<0.00215	<0.00227	<0.0021	<0.00204	<0.00208	ns	ns	ns
PFTeDA (Perfluorotetradecanoic acid)	376-06-7	<0.000376	<0.000405	<0.000392	<0.000389	<0.00041	<0.00038	<0.00037	<0.000376	ns	ns	ns
EtFOSA (N Ethyl perfluorooctane sulfonamide)	4151-50-2	<0.00254	<0.00274	<0.00265	<0.00263	<0.00278	<0.00257	<0.00251	<0.00254	ns	ns	ns
PFHxDA (Perfluorohexadecanoic acid)	67905-19-5	<0.000146	<0.000158	<0.000153	<0.000152	<0.00016	<0.000148	<0.000144	<0.000146	ns	ns	ns
PFODA (Perfluorooctadecanoic acid)	16517-11-6	<0.00306	<0.00329	<0.00319	<0.00317	<0.00334	<0.00309	<0.00301	<0.00306	ns	ns	ns
MeFOSE (N Methyl perfluorooctane sulfonamidoethanol)	24448-09-7	<0.00302	<0.00325	<0.00315	<0.00313	<0.0033	<0.00306	<0.00298	<0.00302	ns	ns	ns
EtFOSE (N Ethyl perfluorooctane sulfonamidoethanol)	1691-99-2	<0.0047	<0.00506	<0.0049	<0.00487	<0.00513	<0.00475	<0.00463	<0.0047	ns	ns	ns

BOLD	Exceeds NR 140 Wisconsin Administration Code Enforcement Standard (ES) or USEPA Health Advisory Drinking Water Standard
BOLD	Exceeds NR 140 Wisconsin Administration Code Preventative Action Limit (PAL)
BOLD	Parameter detected above laboratory method detection limit.
µg/L	Micrograms per Liter (equivalent to parts per billion)
ns	No standard established
D	Dilution
J	The amount detected is above the method detection level but below the reporting limit, an area of less certain quantitation.
Q	The ion transition ratio is outside of th acceptance criteria.

[1]State of Wisconsin groundwater quality standards have not been established for PFAS compounds. The Wisconsin Department of Health Services (DHS) has recommended that an enforcement standard (ES) of 20 ng/L and a preventative action limit (PAL) of 2 ng/L be used for PFOA and PFOS individually and combined.

USEPA = United States Environmental Protection Agency

Table 6 - Summary of Groundwater Analytical Results - Volatile Organic Compounds (VOC)
Wisconsin Air National Guard - Truax Field - Building 414
06/25/20

Well Number	CAS #	AA-MW-1	AA-MW-2	AA-MW-3	AA-MW-4	AA-MW-4 Dup	AA-MW-5	Trip Blank	Groundwater Standards NR 140 Wis. Adm. Code	
Sampling Date		6/25/2020	6/25/2020	6/25/2020	6/25/2020	6/25/2020	6/25/2020	6/25/2020	**ES**	**PAL**
Volatile Organic Compounds		**Analytical Result (µg/L)**							**(µg/L)**	
1,1,1,2-Tetrachloroethane	630-20-6	<0.40	<0.40	<0.40	<0.40	---	<0.40	<0.40	70	7
1,1,1-Trichloroethane	71-55-6	<0.29	<0.29	<0.29	<0.29	---	<0.29	<0.29	200	40
1,1,2,2-Tetrachloroethane	79-34-5	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	0.2	0.02
1,1,2-Trichloroethane	79-00-5	<0.30	<0.30	<0.30	<0.30	---	**3.6**	<0.30	5	0.5
1,1-Dichloroethane	75-34-3	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	850	85
1,1-Dichloroethene	75-35-4	<0.40	<0.40	<0.40	<0.40	---	<0.40	<0.40	7	0.7
1,1-Dichloropropene	563-58-6	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	ns	ns
1,2,3-Trichlorobenzene	87-61-6	<0.23	<0.23	<0.23	<0.23	---	<0.23	<0.23	ns	ns
1,2,3-Trichloropropane	96-18-4	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	60	12
1,2,4-Trichlorobenzene	120-82-1	<0.28	<0.28	<0.28	<0.28	---	<0.28	<0.28	70	14
1,2,4-Trimethylbenzene	95-63-6	<0.29	<0.29	<0.29	<0.29	---	**660**	<0.29	480	96
1,2-Dibromo-3-chloropropane	96-12-8	<0.25	<0.25	<0.25	<0.25	---	<0.25	<0.25	0.2	0.02
1,2-Dibromoethane	106-93-4	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	0.05	0.005
1,2-Dichlorobenzene	95-50-1	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	600	60
1,2-Dichloroethane	107-06-2	**4.7**	<0.24	<0.24	<0.24	---	<0.24	<0.24	5	0.5
1,2-Dichloropropane	78-87-5	**4.9**	<0.18	<0.18	<0.18	---	**3.9**	<0.18	5	0.5
1,3,5-Trimethylbenzene	108-67-8	<0.27	<0.27	<0.27	<0.27	---	**68**	<0.27	480	96
1,3-Dichlorobenzene	541-73-1	<0.26	<0.26	<0.26	<0.26	---	<0.26	<0.26	600	120
1,3-Dichloropropane	142-28-9	<0.17	<0.17	<0.17	<0.17	---	<0.17	<0.17	ns	ns
1,4-Dichlorobenzene	106-46-7	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	75	15
2,2-Dichloropropane	594-20-7	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	ns	ns
2-Butanone	78-93-3	<2.6	<2.6	<2.6	<2.6	---	<2.6	<2.6	4,000	800
2-Chlorotoluene	95-49-8	<0.25	<0.25	<0.25	<0.25	---	<0.25	<0.25	ns	ns
2-Hexanone	591-78-6	<3.0	<3.0	<3.0	<3.0	---	<3.0	<3.0	ns	ns
4-Chlorotoluene	106-43-4	<0.30	<0.30	<0.30	<0.30	---	**10**	<0.30	ns	ns
4-Methyl-2-pentanone	108-10-1	<2.2	<2.2	<2.2	<2.2	---	<2.2	<2.2	500	50
Acetone	67-64-1	**26**	**4.1**	<4.0	<4.0	---	**15**	<4.0	9,000	1,800
Benzene	71-43-2	**150**	<0.40	<0.40	<0.40	---	<0.40	<0.40	5	0.5
Bromobenzene	108-86-1	<0.40	<0.40	<0.40	<0.40	---	<0.40	<0.40	ns	ns
Bromochloromethane	74-97-5	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	ns	ns
Bromodichloromethane	75-27-4	**0.46**	<0.29	<0.29	<0.29	---	<0.29	<0.29	0.5	0.06
Bromoform	75-25-2	<0.40	<0.40	<0.40	<0.40	---	<0.40	<0.40	4.4	0.44
Bromomethane	74-83-9	<0.90	<0.90	<0.90	<0.90	---	<0.90	<0.90	10	1
Carbon disulfide	75-15-0	<0.60	<0.60	<0.60	<0.60	---	<0.60	<0.60	1,000	200
Carbon tetrachloride	56-23-5	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	5	0.5
Chlorobenzene	108-90-7	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	ns	ns
Chloroethane	75-00-3	<0.50	<0.50	<0.50	<0.50	---	<0.50	<0.50	400	80
Chloroform	67-66-3	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	6	0.6
Chloromethane	74-87-3	<0.60	<0.60	<0.60	<0.60	---	<0.60	<0.60	30	3
cis-1,2-Dichloroethene	156-59-2	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	70	7
cis-1,3-Dichloropropene	10061-01-5	<0.16	<0.16	<0.16	<0.16	---	<0.16	<0.16	0.4	0.04
Dibromochloromethane	124-48-1	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	60	6
Dibromomethane	74-95-3	<0.22	<0.22	<0.22	<0.22	---	<0.22	<0.22	ns	ns
Dichlorodifluoromethane	75-71-8	<0.40	<0.40	<0.40	<0.40	---	<0.40	<0.40	1,000	200
Diisopropyl ether	108-20-3	<0.40	<0.40	<0.40	<0.40	---	<0.40	<0.40	ns	ns
Ethylbenzene	100-41-4	**7.6**	<0.30	<0.30	<0.30	---	**14**	<0.30	700	140
Hexachlorobutadiene	87-68-3	<0.40	<0.40	<0.40	<0.40	---	<0.40	<0.40	ns	ns
Isopropylbenzene	98-82-8	**23**	<0.30	<0.30	<0.30	---	**56**	<0.30	ns	ns
m & p-Xylene	179601-23-1	<0.70	<0.70	<0.70	<0.70	---	**360**	<0.70	2000	400
Methyl tert-butyl ether	1634-04-4	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	60	12
Methylene chloride	75-09-2	<0.40	<0.40	<0.40	<0.40	---	<0.40	**0.54**	5	0.5
Naphthalene	91-20-3	**65**	<0.30	<0.30	<0.30	---	**180**	<0.30	100	10
n-Butylbenzene	104-51-8	**5.1**	<0.29	<0.29	<0.29	---	**28**	<0.29	ns	ns
n-Propylbenzene	103-65-1	**33**	<0.30	<0.30	<0.30	---	**61**	<0.30	ns	ns
o-Xylene	95-47-6	<0.26	<0.26	<0.26	<0.26	---	**0.37**	<0.26	2000	400
p-Isopropyltoluene	99-87-6	<0.30	<0.30	<0.30	<0.30	---	**29**	<0.30	ns	ns
sec-Butylbenzene	135-98-8	**9.5**	<0.40	<0.40	<0.40	---	**21**	<0.40	ns	ns
Styrene	100-42-5	<0.29	<0.29	<0.29	<0.29	---	<0.29	<0.29	100	10
tert-Butylbenzene	98-06-6	**0.69**	<0.40	<0.40	<0.40	---	**4.1**	<0.40	ns	ns
Tetrachloroethene	127-18-4	<0.27	<0.27	<0.27	<0.27	---	<0.27	<0.27	5	0.5
Tetrahydrofuran	109-99-9	<3.0	<3.0	<3.0	<3.0	---	<3.0	<3.0	50	10
Toluene	108-88-3	<0.21	<0.21	<0.21	<0.21	---	<0.21	<0.21	800	160
trans-1,2-Dichloroethene	156-60-5	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	100	20
trans-1,3-Dichloropropene	10061-02-6	<0.23	<0.23	<0.23	<0.23	---	<0.23	<0.23	0.4	0.04
Trichloroethene	79-01-6	<0.30	<0.30	<0.30	<0.30	---	<0.30	<0.30	5	0.5
Trichlorofluoromethane	75-69-4	<0.40	<0.40	<0.40	<0.40	---	<0.40	<0.40	ns	ns
Vinyl acetate	108-05-4	<5.0	<5.0	<5.0	<5.0	---	<5.0	<5.0	ns	ns
Vinyl chloride	75-01-4	**0.74**	<0.14	<0.14	<0.14	---	<0.14	<0.14	0.2	0.002

BOLD	Exceeds NR 140 Wisconsin Administration Code Enforcement Standard (ES)
BOLD	Exceeds NR 140 Wisconsin Administration Code Preventative Action Limit (PAL)
BOLD	Parameter detected above laboratory method detection limit.
µg/L	Concentreations reported as micrograms per liter
--	Not analyzed
ns	No standard established
	USEPA = United States Environmental Protection Agency
µg/L	Micrograms per Liter (equivalent to parts per billion)
ng/L	Nanograms per Liter (equivalent to parts pre billion)

Table 7
Water Quality Field Parameter Data
Hangar 414 - Truax Field
Madison, Wisconsin

Well ID	June 25, 2020					
	Temperature (^{0}F)	pH	Specific Conductance (μS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)
AA-MW-1	58.2	6.83	847	0.07	-85.8	0.00
AA-MW-2	60.8	6.64	768	0.23	-57.0	11.11
AA-MW-3	64.7	6.81	543	0.07	-53.3	4.76
AA-MW-4	62.9	6.86	657	0.16	-50.3	0.00
AA-MW-5	59.7	7.01	732	0.10	-73.1	5.12

Appendix A
Geological Logs and Monitoring Well Construction and Development Forms

State of Wiscosnin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 7-98

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name: **WIANG - Building 414**	License/Permit/Monitoring Number:	Boring Number: **AA-MW-1**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Last Name: Firm: **Horizon Construction**	Date Drilling Started: **6/18/2020** M/D/Y	Date Drilling Completed: **6/18/2020** M/D/Y Drilling Method: **Geoprobe**
WI Unique Well No.: __ __ __ __ __ __ / DNR Well Id No.: / Well Name:	Final Static Water Level: **5.02**	Surface Elevation: **857** / Borehole Dia.: **8.25-inch**
Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐ State Plane _____N, _____E **NE 1/4 of SE 1/4, of Section 20, T 7 N, R 22 E**	Lat.: ---------- Long	Local Grid Location (If applicable) ____ Feet ☐ N ☐ S ____ Feet ☐ E ☐ W
Facility Id. / County: **Dane**	County Code	Civil Town/City/or Village: **Madison**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
			0	Topsoil, Silt	SM									
			1	SAND, silty, some gravel, dry, fine grained, no odor, dark brown	Fill/SM			0		M				Sample @ 1-foot
			2											
			3	SAND, some clay, trace gravel, fine to med grained	SC			0		M				Sample @ 3 feet
			4	CLAY, silty, some organic matter, wet, low plasticity, no odor, black	CL			0		W				
			5	SAND, some coarse gravel, trace silt, wet, coarse grained, slight hydrocarbon odor, gray	SP									
			6											
			7					4.3		W				
			8											
			9					12.2		W				
			10	EOB @ 10 feet										
			11											
			12											
			13											
			14											
			15											
			16											
			17											
			18											
			19											
			20											
			21											
			22											
			23											
			24											
			25											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Jeffrey C. Stimm

Firm: AYRES ASSOCIATES

State of Wiscosnin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 7-98

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe	Boring Number
WIANG - Building 414		**AA-MW-2**

Boring Drilled By: Name of crew chief (first,last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: Last Name:			
Firm: **Horizon Construction**	**6/18/2020** M/D/Y	**6/18/2020** M/D/Y	**Geoprobe**

WI Unique Well No.	DNR Well Id No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Dia.
__ __ __ __ __ __			**3.79**	**855.9**	**8.25-inch**

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐	Lat.	Local Grid Location (If applicable)
State Plane _____N, _____E	----------	☐ N ☐ E
NE 1/4 of SE 1/4, of Section 20, T 7 N, R 22 E	Long	____ Feet ☐ S _____ Feet ☐ W

Facility Id.	County	County Code	Civil Town/City/or Village
	Dane		**Madison**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
			-	Topsoil, Silt	SM									
			-1 - -2 -	SAND, silty, some gravel, dry, fine grained, no odor, dark brown	Fill/SM			0		M				Sample @ 1-foot
			-3 - -4 -	SAND, some clay, trace gravel, fine to med grained, moist, no odor, brown	SC			0		M				Sample @ 3 feet
			-5 -	CLAY, silty, some organic matter, wet, low plasticity, no odor, black	CL			4.3		W				
			-6 - -7 - -8 - -9 - -10 - -11 - -12 - -13 - -14 -	SAND, some coarse gravel, trace silt, wet, medium to coarse grained, poorly graded, no odor, gray	SP			4.2		W				
			-15 - -16 - -17 - -18 - -19 - -20 - -21 - -22 - -23 - -24 - -25 -	EOB @ 15 feet bgs.				4.3		W				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Jeffrey C. Stimm	AYRES ASSOCIATES

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis.Stats. Completion of this report is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conductu involved. Personally indentifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wiscosnin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 7-98

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WIANG - Building 414			**AA-MW-3**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Last Name: Firm: **Horizon Construction**	Date Drilling Started **6/18/2020** M/D/Y	Date Drilling Completed **6/18/2020** M/D/Y	Drilling Method **Geoprobe**
WI Unique Well No. __ __ __ __ __ __	DNR Well Id No.	Well Name	Final Static Water Level **4.21**
Surface Elevation **856.7**	Borehole Dia. **8.25-inch**		
Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐ State Plane _____N, _____E **NE 1/4 of SE 1/4, of Section 20, T 7 N, R 22 E**	Lat. ---------- Long	Local Grid Location (If applicable) ☐ N ☐ E _____ Feet ☐ S _____ Feet ☐ W	
Facility Id.	County **Dane**	County Code	Civil Town/City/or Village **Madison**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
			-	Topsoil, Silt	SM									
			-1 -	SAND, some clay, trace gravel, fine to medium grained, moist, no odor, dark brown	Fill/SC			0		M				Sample @ 1-foot
			-2 -	SILT, clayey, some ciarse gravel, moist, non-plastic, no odor, dark brown	ML			0		M				Sample @ 3 feet
			-3 - -4 -	CLAY, silty, organic, wet, no odor, low plasticity, no odor, gray	CL			0		W				
			-5 - -6 - -7 - -8 - -9 -	SAND, some coarse gravel, trace silt, wet, fine to medium grained, poorly graded, no odor, gray	SP			0		W				
			-10 -	EOB @10 feet bgs.				0		W				
			-11 - -12 - -13 - -14 - -15 -	EOB @ 15 feet bgs.										
			-16 - -17 - -18 - -19 - -20 - -21 - -22 - -23 - -24 - -25 -											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Jeffrey C. Stimm	AYRES ASSOCIATES

State of Wiscosnin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 7-98

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe	Boring Number
WIANG - Building 414		**AA-MW-4**

Boring Drilled By: Name of crew chief (first,last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: Last Name:			
Firm: **Horizon Construction**	**6/18/2020** M/D/Y	**6/18/2020** M/D/Y	**Geoprobe**

WI Unique Well No.	DNR Well Id No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Dia.
_ _ _ _ _ _ _			**4.55**	**856.7**	**8.25-inch**

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐	Lat.	Local Grid Location (If applicable)
State Plane _____N, _____E	----------	☐ N ☐ E
NE 1/4 of SE 1/4, of Section 20, T 7 N, R 22 E	Long	_____ Feet ☐ S _____ Feet ☐ W

Facility Id.	County	County Code	Civil Town/City/or Village
	Dane		**Madison**

SAMPLE								SOIL PROPERTIES					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
			- -1 - -2 - -3 - -4 - -5 - -6 - -7 - -8 - -9 - -10 - -11 - -12 - -13 - -14 - -15 - -16 - -17 - -18 - -19 - -20 - -21 - -22 - -23 - -24 - -25 -	Topsoil, Silt SAND, silty, trace gravel, fine to medium grained, moist, no odor, dark brown SAND, clayey, some coarse gained gravel, wet, no odor, brown SAND, some coarse gravel, trace silt, wet, fine to medium grained, poorly graded, no odor, gray EOB @10 feet bgs. EOB @ 15 feet bgs.	SM Fill/SM Fill/SC SP			0 0 0 0 0		M M W W W				Sample @ 1-foot Sample @ 3 feet

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Jeffrey C. Stimm	AYRES ASSOCIATES

State of Wiscosnin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 7-98

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
WIANG - Building 414		**AA-MW-5**

Boring Drilled By: Name of crew chief (first,last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: Last Name:			
Firm: **Horizon Construction**	**6/18/2020** M/D/Y	**6/18/2020** M/D/Y	**Geoprobe**

WI Unique Well No.	DNR Well Id No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Dia.
__ __ __ __ __ __			**4.58**	**856.9**	**8.25-inch**

Local Grid Origin [(estimated: ☐) or Boring Location ☐	Lat.	Local Grid Location (If applicable)
State Plane _____N, _____E	----------	☐ N ☐ E
NE 1/4 of SE 1/4, of Section 20, T 7 N, R 22 E	Long	_____ Feet ☐ S _____ Feet ☐ W

Facility Id.	County	County Code	Civil Town/City/or Village
	Dane		**Madison**

SAMPLE								SOIL PROPERTIES					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
			0	Topsoil, Silt	SM									
			-1	SAND, clayey, trace gravel, fine to medium grained, moist, no odor, dark brown to gray	Fill/SC			0		M				Sample @ 1-foot
			-2											
			-3					0		M				Sample @ 3 feet
			-4	SAND, silty, trace coarse gained gravel, wet, no odor, brown	Fill/SM			0		W				
			-5											
			-6	SAND, trace coarse gravel, trace silt, wet, fine to coarse grained, poorly graded, strong hydrocarbon odor, gray	SP									
			-7					16.5		W				
			-8											
			-9					955		W				
			-10	EOB @10 feet bgs.										
			-11											
			-12											
			-13											
			-14											
			-15											
			-16	EOB @ 15 feet bgs.										
			-17											
			-18											
			-19											
			-20											
			-21											
			-22											
			-23											
			-24											
			-25											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Jeffrey C. Stimm	AYRES ASSOCIATES

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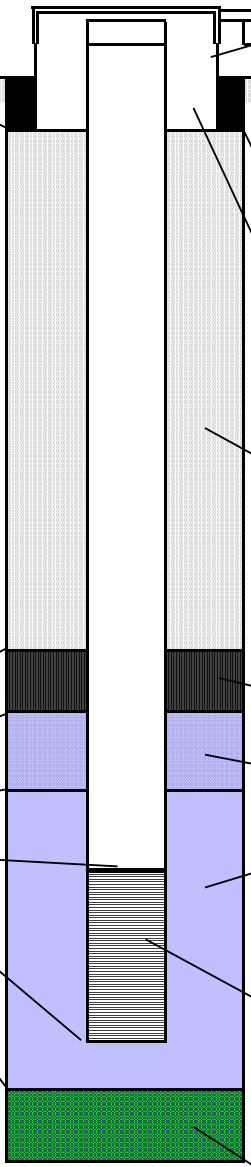
State of Wisconsin | Route to: Solid Waste ____ Haz. Waste ____ Wastewater ____ | MONITORING WELL CONSTRUCTION
Department of Natural Resources | Env. Response & Repair ____ Underground Tanks ____ Other ____ | Form 4400-113A Rev. 4-90

Facility /Project Name: WIANG - Building 414	Local Grid Location of Well: ____ ft. N. ____ ft. S. ____ ft. E. ____ ft. W.	Well Name: AA-MW-1
Facility License, Permit or Monitoring Number:	Grid Origin Location: Lat. ____ Long. ____ or St. Plane ____ ft. N. ____ ft. E.	Wis. Unique Well Number: ____ DNR Well Number: ____
Type of Well: Water Table Observation Well X 11; Piezometer ____ 12	Section Location of Waste/Source	Date Well Installed: 6/18/2020
Distance Well Is From Waste/Source Boundary: ____ ft.		Well Installed By: (Person's Name and Firm): Adam Sweet/Horizon Construction
Is Well A Point of Enforcement Std. Application? X Yes ____ No	Location of Well Relative to Waste/Source: u ____ Upgradient d ____ Downgradient s ____ Sidegradient n ____ Not Known	

A. Protective Pipe, top elevation ____ ft. MSL
B. Well casing, top elevation 856.66 ft. MSL
C. Land surface elevaton 857.0 ft. MSL
D. Surface seal, bottom ____ ft. MSL or 1 ft.

12. USCS classification of soil near screen:
GP ____ GM ____ GC ____ GW ____ SW ____ SP X
SM ____ SC ____ ML ____ MH ____ CL ____ CH ____
Bedrock ____
13. Sieve analysis attached? ____ Yes X No
14. Drilling method used: Rotary ____ 50; Hollow Stem Auger X 41; Other ____
15. Drilling fluid used: Air ____ 01 Water ____ 02; Drilling Mud ____ 03 None X 99
16. Drilling additives used? ____ Yes X No
Describe ____
17. Source of water (attach analysis): ____

E. Bentonite seal, top ____ ft. MSL or 2 ft.
F. Fine sand, top ____ ft. MSL or 2.5 ft.
G. Filter pack, top ____ ft. MSL or 2.5 ft.
H. Screen joint, top ____ ft. MSL or 4.7 ft.
I. Well bottom ____ ft. MSL or 9.7 ft.
J. Filter pack, bottom ____ ft. MSL or 10 ft.
K. Borehole, bottom ____ ft. MSL or 10 ft.
L. Borehole, diameter 8.25 in
M. O.D. well casing 2.25 in
N. I.D. well casing 2 in



1. Cap and Lock? X Yes ____ No
2. Protective cover pipe:
a. Inside diameter: 8 in.
b. Length: 1 ft.
c. Material: Steel X 04; Other ____
d. Additional protection? Yes ____ No X
If yes, describe ____
3. Surface seal: Bentonite ____ 30; Concrete X 01; Other ____
4. Material between well casing and protective pipe: Bentonite X 30; Annular Space Seal ____; Other ____
5. Annular space seal: a. Granular Bentonite X 33
b. ____ Lbs/gal mud weight....Bentonite-sand slurry ____ 35
c. ____ Lbs/gal mud weight.....Bentonite slurry ____ 31
d. ____ % Bentonite.....Bentonite-cement grout ____ 50
e. ____ cubic ft volume added for any of the above
f. How installed: Tremie ____ 01; Tremie pumped ____ 02; Gravity X 08
6. Bentonite seal: a. Bentonite granules ____ 33
b. 1/4in. ____ 3/8in. X 1/2in. ____ Bentonite Pellets ____ 32
c. Bentonite chips ____ Other ____
7. Fine sand material: Manufacturer, product name and mesh size
a. Ohio 40-60
b. Volume Added ____ lbs.
8. Filter pack material: Manufacturer, product name and mesh size
a. Ohio 40-60
b. Volume Added ____ lbs. 20
9. Well casing: Flush threaded PVC schedule 40 X 23; Flush threaded PVC schedule 80 ____ 24; Other ____
10. Screen material: Sch. 40, PVC
a. Screen type: Factory cut ____ 11; Continuous slot X 01; Other ____
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 5 ft.
11. Backfill Material (below filter pack): None ____ 14; Other X
Ohio 40-60

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Jeffrey C. Stumm | Firm: AYRES ASSOCIATES

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147, and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instruction for more information including where the completed form should be sent.

State of Wisconsin | Route to: Solid Waste ____ Haz. Waste ____ Wastewater ____ | MONITORING WELL CONSTRUCTION
Department of Natural Resources | Env. Response & Repair ____ Underground Tanks ____ Other ____ | Form 4400-113A Rev. 4-90

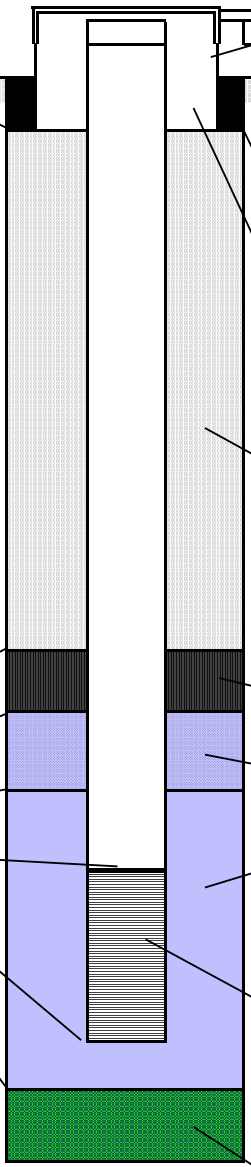
Facility /Project Name: WI. Air National Guard - Building 414	Local Grid Location of Well: ____ ft. N. ____ ft. S. ____ ft. E. ____ ft. W.	Well Name: AA-MW-2
Facility License, Permit or Monitoring Number:	Grid Origin Location: Lat. ____ Long. ____ or St. Plane ____ ft. N. ____ ft.E.	Wis. Unique Well Number: ____ DNR Well Number: ____
Type of Well: Water Table Observation Well X 11; Piezometer ____ 12	Section Location of Waste/Source	Date Well Installed: 6/18/2020
Distance Well Is From Waste/Source Boundary: ____ ft.		Well Installed By: (Person's Name and Firm): Adam Sweet/Horizon Construction
Is Well A Point of Enforcement Std. Application? X Yes ____ No	Location of Well Relative to Waste/Source: u ____ Upgradient d ____ Downgradient s ____ Sidegradient n ____ Not Known	

A. Protective Pipe, top elevation ____ ft. MSL
B. Well casing, top elevation 855.50 ft. MSL
C. Land surface elevaton 855.9 ft. MSL
D. Surface seal, bottom ____ ft. MSL or 1 ft.

12. USCS classification of soil near screen:
GP ____ GM ____ GC ____ GW ____ SW ____ SP X
SM ____ SC ____ ML ____ MH ____ CL ____ CH ____
Bedrock ____

13. Sieve analysis attached? ____ Yes X No
14. Drilling method used: Rotary ____ 50; Hollow Stem Auger X 41; Other ____
15. Drilling fluid used: Air ____ 01 Water ____ 02; Drilling Mud ____ 03 None X 99
16. Drilling additives used? ____ Yes X No
Describe ____
17. Source of water (attach analysis): ____

E. Bentonite seal, top ____ ft. MSL or 2 ft.
F. Fine sand, top ____ ft. MSL or 2.5 ft.
G. Filter pack, top ____ ft. MSL or 2.5 ft.
H. Screen joint, top ____ ft. MSL or 4.75 ft.
I. Well bottom ____ ft. MSL or 9.75 ft.
J. Filter pack, bottom ____ ft. MSL or 10 ft.
K. Borehole, bottom ____ ft. MSL or 10 ft.
L. Borehole, diameter 8.25 in
M. O.D. well casing 2.25 in
N. I.D. well casing 2 in



1. Cap and Lock? X Yes ____ No
2. Protective cover pipe:
a. Inside diameter: 8 in.
b. Length: 1 ft.
c. Material: Steel X 04; Other ____
d. Additional protection? Yes ____ No X
If yes, describe ____
3. Surface seal: Bentonite ____ 30; Concrete X 01; Other ____
4. Material between well casing and protective pipe: Bentonite X 30; Annular Space Seal ____; Other ____
5. Annular space seal: a. Granular Bentonite X 33
b. ____ Lbs/gal mud weight....Bentonite-sand slurry ____ 35
c. ____ Lbs/gal mud weight.....Bentonite slurry ____ 31
d. ____ % Bentonite.....Bentonite-cement grout ____ 50
e. ____ cubic ft volume added for any of the above
f. How installed: Tremie ____ 01; Tremie pumped ____ 02; Gravity X 08
6. Bentonite seal: a. Bentonite granules ____ 33
b. 1/4in. ____ 3/8in. X 1/2in. ____ Bentonite Pellets ____ 32
c. Bentonite chips ____ Other ____
7. Fine sand material: Manufacturer, product name and mesh size
a. Ohio 40-60
b. Volume Added ____ lbs.
8. Filter pack material: Manufacturer, product name and mesh size
a. Ohio 40-60
b. Volume Added ____ lbs. 20
9. Well casing: Flush threaded PVC schedule 40 X 23; Flush threaded PVC schedule 80 ____ 24; Other ____
10. Screen material: Sch. 40, PVC
a. Screen type: Factory cut ____ 11; Continuous slot X 01; Other ____
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 5 ft.
11. Backfill Material (below filter pack): None ____ 14; Other X
Ohio 40-60

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Jeffrey C. Stumm | Firm: AYRES ASSOCIATES

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147, and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instruction for more information including where the completed form should be sent.

State of Wisconsin | Route to: Solid Waste ____ Haz. Waste ____ Wastewater ____ | MONITORING WELL CONSTRUCTION
Department of Natural Resources | Env. Response & Repair ____ Underground Tanks ____ Other ____ | Form 4400-113A Rev. 4-90

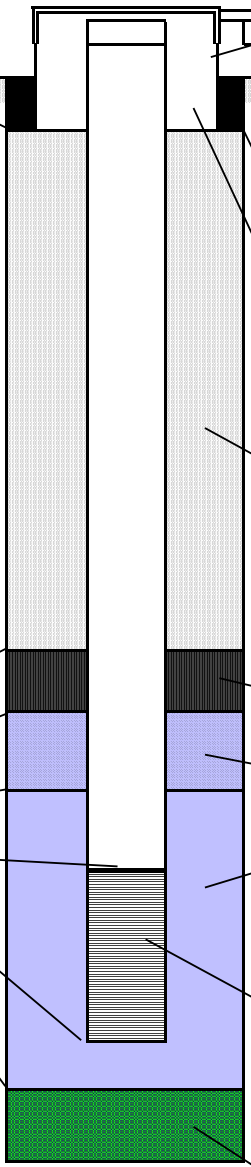
Facility /Project Name: WI. Air National Guard - Building 414	Local Grid Location of Well: ____ ft. N. ____ ft. S. ____ ft. E. ____ ft. W.	Well Name: AA-MW-3
Facility License, Permit or Monitoring Number:	Grid Origin Location: Lat. ____ Long. ____ or St. Plane ____ ft. N. ____ ft.E.	Wis. Unique Well Number: ____ DNR Well Number: ____
Type of Well: Water Table Observation Well X 11; Piezometer ____ 12	Section Location of Waste/Source	Date Well Installed: 6/18/2020
Distance Well Is From Waste/Source Boundary: ____ ft.		Well Installed By: (Person's Name and Firm): Adam Sweet/Horizon Construction
Is Well A Point of Enforcement Std. Application? X Yes ____ No	Location of Well Relative to Waste/Source: u ____ Upgradient s ____ Sidegradient; d ____ Downgradient n ____ Not Known	

A. Protective Pipe, top elevation ____ ft. MSL
B. Well casing, top elevation 856.05 ft. MSL
C. Land surface elevaton 856.7 ft. MSL
D. Surface seal, bottom ____ ft. MSL or 1 ft.

12. USCS classification of soil near screen:
GP ____ GM ____ GC ____ GW ____ SW ____ SP X
SM ____ SC ____ ML ____ MH ____ CL ____ CH ____
Bedrock ____

13. Sieve analysis attached? ____ Yes X No
14. Drilling method used: Rotary ____ 50; Hollow Stem Auger X 41; Other ____
15. Drilling fluid used: Air ____ 01 Water ____ 02; Drilling Mud ____ 03 None X 99
16. Drilling additives used? ____ Yes X No
Describe ____
17. Source of water (attach analysis): ____

E. Bentonite seal, top ____ ft. MSL or 2 ft.
F. Fine sand, top ____ ft. MSL or 2.5 ft.
G. Filter pack, top ____ ft. MSL or 2.5 ft.
H. Screen joint, top ____ ft. MSL or 4.8 ft.
I. Well bottom ____ ft. MSL or 9.8 ft.
J. Filter pack, bottom ____ ft. MSL or 10 ft.
K. Borehole, bottom ____ ft. MSL or 10 ft.
L. Borehole, diameter 8.25 in
M. O.D. well casing 2.25 in
N. I.D. well casing 2 in



1. Cap and Lock? X Yes ____ No
2. Protective cover pipe:
a. Inside diameter: 8 in.
b. Length: 1 ft.
c. Material: Steel X 04; Other ____
d. Additional protection? Yes ____ No X
If yes, describe ____
3. Surface seal: Bentonite ____ 30; Concrete X 01; Other ____
4. Material between well casing and protective pipe: Bentonite X 30; Annular Space Seal ____; Other ____
5. Annular space seal: a. Granular Bentonite X 33
b. ____ Lbs/gal mud weight....Bentonite-sand slurry ____ 35
c. ____ Lbs/gal mud weight.....Bentonite slurry ____ 31
d. ____ % Bentonite.....Bentonite-cement grout ____ 50
e. ____ cubic ft volume added for any of the above
f. How installed: Tremie ____ 01; Tremie pumped ____ 02; Gravity X 08
6. Bentonite seal: a. Bentonite granules ____ 33
b. 1/4in. ____ 3/8in. X 1/2in. ____ Bentonite Pellets ____ 32
c. Bentonite chips ____ Other ____
7. Fine sand material: Manufacturer, product name and mesh size
a. Ohio 40-60
b. Volume Added ____ lbs.
8. Filter pack material: Manufacturer, product name and mesh size
a. Ohio 40-60
b. Volume Added ____ lbs. 20
9. Well casing: Flush threaded PVC schedule 40 X 23; Flush threaded PVC schedule 80 ____ 24; Other ____
10. Screen material: Sch. 40, PVC
a. Screen type: Factory cut ____ 11; Continuous slot X 01; Other ____
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 5 ft.
11. Backfill Material (below filter pack): None ____ 14; Other X
Ohio 40-60

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Jeffrey C. Stumm | Firm: AYRES ASSOCIATES

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147, and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instruction for more information including where the completed form should be sent.

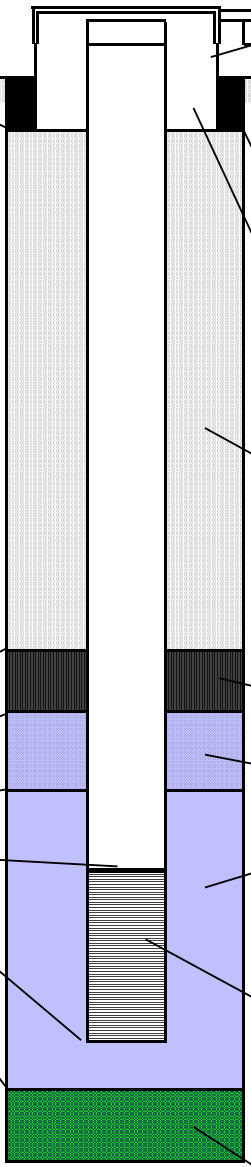
State of Wisconsin | Route to: Solid Waste ____ Haz. Waste ____ Wastewater ____ | MONITORING WELL CONSTRUCTION
Department of Natural Resources | Env. Response & Repair ____ Underground Tanks ____ Other ____ | Form 4400-113A Rev. 4-90

Facility /Project Name WI. Air National Guard - Building 414	Local Grid Location of Well ____ N. ____ E. ____ ft. ____ S. ____ ft. ____ W.	Well Name AA-MW-4
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. ____ Long. ____ or St. Plane ____ ft. N. ____ ft.E.	Wis. Unique Well Number ____ DNR Well Number ____
Type of Well: Water Table Observation Well X 11 Piezometer ____ 12	Section Location of Waste/Source	Date Well Installed: 6/18/2020
Distance Well Is From Waste/Source Boundary ____ ft.		Well Installed By: (Person's Name and Firm) Adam Sweet/Horizon Construction
Is Well A Point of Enforcement Std. Application? X Yes ____ No	Location of Well Relative to Waste/Source u ____ Upgradient s ____ Sidegradient d ____ Downgradient n ____ Not Known	

A. Protective Pipe, top elevation ____ ft. MSL
B. Well casing, top elevation 856.47 ft. MSL
C. Land surface elevaton 856.7 ft. MSL
D. Surface seal, bottom ____ ft. MSL or 1 ft.

12. USCS classification of soil near screen:
GP ____ GM ____ GC ____ GW ____ SW ____ SP X
SM ____ SC ____ ML ____ MH ____ CL ____ CH ____
Bedrock ____
13. Sieve analysis attached? ____ Yes X No
14. Drilling method used: Rotary ____ 50
Hollow Stem Auger X 41
Other ____
15. Drilling fluid used: Air ____ 01 Water ____ 02
Drilling Mud ____ 03 None X 99
16. Drilling additives used? ____ Yes X No
Describe ____
17. Source of water (attach analysis): ____

E. Bentonite seal, top ____ ft. MSL or 2 ft.
F. Fine sand, top ____ ft. MSL or 2.5 ft.
G. Filter pack, top ____ ft. MSL or 2.5 ft.
H. Screen joint, top ____ ft. MSL or 4.9 ft.
I. Well bottom ____ ft. MSL or 9.9 ft.
J. Filter pack, bottom ____ ft. MSL or 10 ft.
K. Borehole, bottom ____ ft. MSL or 10 ft.
L. Borehole, diameter 8.25 in
M. O.D. well casing 2.25 in
N. I.D. well casing 2 in



1. Cap and Lock? X Yes ____ No
2. Protective cover pipe:
a. Inside diameter: 8 in.
b. Length: 1 ft.
c. Material: Steel X 04
Other ____
d. Additional protection? Yes ____ No X
If yes, describe ____
3. Surface seal: Bentonite ____ 30
Concrete X 01
Other ____
4. Material between well casing and protective pipe:
Bentonite X 30
Annular Space Seal ____
Other ____
5. Annular space seal: a. Granular Bentonite X 33
b. ____ Lbs/gal mud weight....Bentonite-sand slurry ____ 35
c. ____ Lbs/gal mud weight.....Bentonite slurry ____ 31
d. ____ % Bentonite.....Bentonite-cement grout ____ 50
e. ____ cubic ft volume added for any of the above
f. How installed: Tremie ____ 01
Tremie pumped ____ 02
Gravity X 08
6. Bentonite seal: a. Bentonite granules ____ 33
b. 1/4in. ____ 3/8in. X 1/2in. ____ Bentonite Pellets ____ 32
c. Bentonite chips Other ____
7. Fine sand material: Manufacturer, product name and mesh size
a. Ohio 40-60
b. Volume Added ____ lbs.
8. Filter pack material: Manufacturer, product name and mesh size
a. Ohio 40-60
b. Volume Added ____ lbs. 20
9. Well casing: Flush threaded PVC schedule 40 X 23
Flush threaded PVC schedule 80 ____ 24
Other ____
10. Screen material: Sch. 40, PVC
a. Screen type: Factory cut ____ 11
Continuous slot X 01
Other ____
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 5 ft.
11. Backfill Material (below filter pack): None ____ 14
Ohio 40-60 Other X

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Jeffrey C. Stumm | Firm: AYRES ASSOCIATES

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147, and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instruction for more information including where the completed form should be sent.

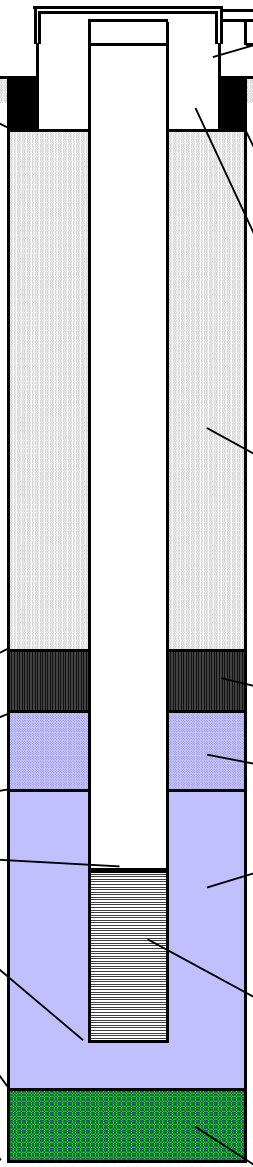
State of Wisconsin | Route to: Solid Waste ____ Haz. Waste ____ Wastewater ____ | MONITORING WELL CONSTRUCTION
Department of Natural Resources | Env. Response & Repair ____ Underground Tanks ____ Other ____ | Form 4400-113A Rev. 4-90

Facility /Project Name: WI. Air National Guard - Building 414	Local Grid Location of Well: ____ ft. N. ____ ft. S. ____ ft. E. ____ ft. W.	Well Name: AA-MW-5
Facility License, Permit or Monitoring Number:	Grid Origin Location: Lat. ____ Long. ____ or St. Plane ____ ft. N. ____ ft.E.	Wis. Unique Well Number: ____ DNR Well Number: ____
Type of Well: Water Table Observation Well X 11; Piezometer ____ 12	Section Location of Waste/Source	Date Well Installed: 6/18/2020
Distance Well Is From Waste/Source Boundary: ____ ft.		Well Installed By: (Person's Name and Firm): Adam Sweet/Horizon Construction
Is Well A Point of Enforcement Std. Application? X Yes ____ No	Location of Well Relative to Waste/Source: u ____ Upgradient s ____ Sidegradient; d ____ Downgradient n ____ Not Known	

A. Protective Pipe, top elevation ____ ft. MSL
B. Well casing, top elevation 856.49 ft. MSL
C. Land surface elevaton 856.9 ft. MSL
D. Surface seal, bottom ____ ft. MSL or 1 ft.

12. USCS classification of soil near screen:
GP ____ GM ____ GC ____ GW ____ SW ____ SP X
SM ____ SC ____ ML ____ MH ____ CL ____ CH ____
Bedrock ____
13. Sieve analysis attached? ____ Yes X No
14. Drilling method used: Rotary ____ 50; Hollow Stem Auger X 41; Other ____
15. Drilling fluid used: Air ____ 01 Water ____ 02; Drilling Mud ____ 03 None X 99
16. Drilling additives used? ____ Yes X No
Describe ____
17. Source of water (attach analysis): ____

E. Bentonite seal, top ____ ft. MSL or 2 ft.
F. Fine sand, top ____ ft. MSL or 2.5 ft.
G. Filter pack, top ____ ft. MSL or 2.5 ft.
H. Screen joint, top ____ ft. MSL or 4.9 ft.
I. Well bottom ____ ft. MSL or 9.9 ft.
J. Filter pack, bottom ____ ft. MSL or 10 ft.
K. Borehole, bottom ____ ft. MSL or 10 ft.
L. Borehole, diameter 8.25 in
M. O.D. well casing 2.25 in
N. I.D. well casing 2 in



1. Cap and Lock? X Yes ____ No
2. Protective cover pipe:
a. Inside diameter: 8 in.
b. Length: 1 ft.
c. Material: Steel X 04; Other ____
d. Additional protection? Yes ____ No X
If yes, describe ____
3. Surface seal: Bentonite ____ 30; Concrete X 01; Other ____
4. Material between well casing and protective pipe: Bentonite X 30; Annular Space Seal ____; Other ____
5. Annular space seal: a. Granular Bentonite X 33
b. ____ Lbs/gal mud weight....Bentonite-sand slurry ____ 35
c. ____ Lbs/gal mud weight.....Bentonite slurry ____ 31
d. ____ % Bentonite.....Bentonite-cement grout ____ 50
e. ____ cubic ft volume added for any of the above
f. How installed: Tremie ____ 01; Tremie pumped ____ 02; Gravity X 08
6. Bentonite seal: a. Bentonite granules ____ 33
b. 1/4in. ____ 3/8in. X 1/2in. ____ Bentonite Pellets ____ 32
c. Bentonite chips ____ Other ____
7. Fine sand material: Manufacturer, product name and mesh size
a. Ohio 40-60
b. Volume Added ____ lbs.
8. Filter pack material: Manufacturer, product name and mesh size
a. Ohio 40-60
b. Volume Added ____ lbs. 20
9. Well casing: Flush threaded PVC schedule 40 X 23; Flush threaded PVC schedule 80 ____ 24; Other ____
10. Screen material: Sch. 40, PVC
a. Screen type: Factory cut ____ 11; Continuous slot X 01; Other ____
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 5 ft.
11. Backfill Material (below filter pack): None ____ 14; Other X
Ohio 40-60

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Jeffrey C. Stumm | Firm: AYRES ASSOCIATES

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Well Development Summary

Project Name:
WIANG - F35 Hangar

Site Name:
WIANG - F35 Hangar

Address:
3200 Pierstorff Street

State:
Wisconsin

City:
Madison

Location:

Well Name:
AA-MW-1

Date:
6/24/2020

Unique Well Number:

Purged Dry:
N

Dev. Method:
Peristaltic Pump

Well Depth (ft):
9.70

Depth to Water (ft):
5.02

Water in Well (ft):
4.68

Start Time:
1:35:00 PM

Stop Time:
1:58:00 PM

Time Spent (min):
00:23:00

Volume Removed (gal):
3

Sediment in Well:
N

Begin Water Clarity:
Turbid , Silt/Clay , Sand , Black

End Water Clarity:
Clear

Odor:
Yes , Hydrocarbon

Comment:
Top of PVC 4.2 inches below ground surface.

Well Development Summary

Project Name:
WIANG - F35 Hangar

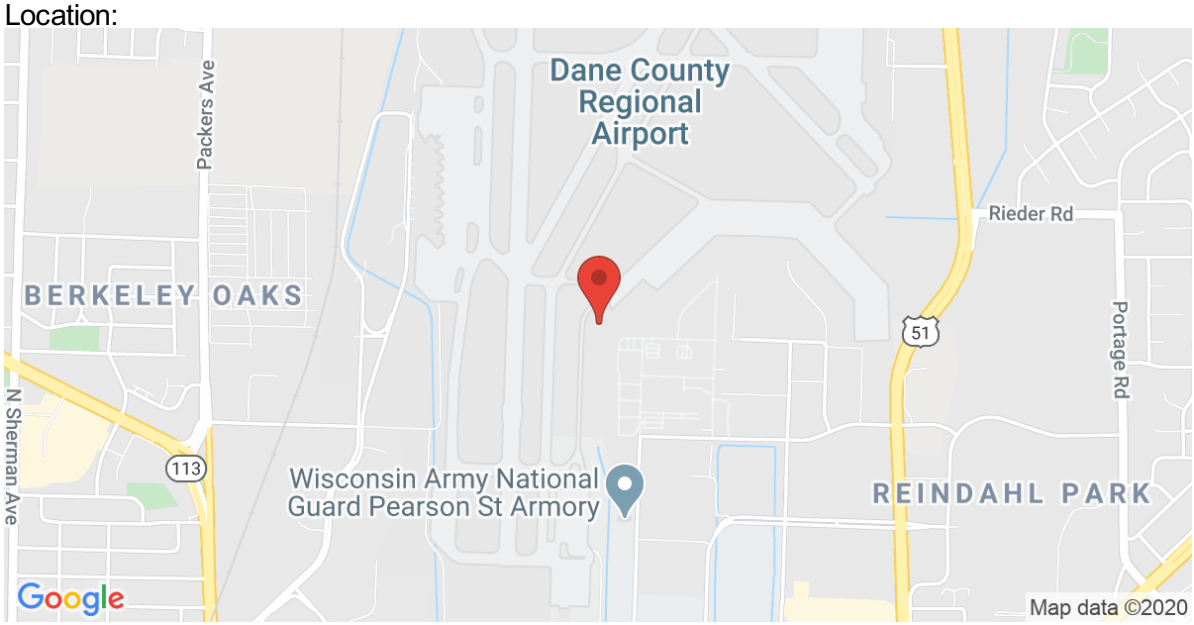
Site Name:
WIANG - F35 Hangar

Address:
3200 Pierstorff Street

State:
Wisconsin

City:
Madison

Location:



Well Name:
AA-MW-2

Date:
6/24/2020

Unique Well Number:

Purged Dry:
N

Dev. Method:
Peristaltic Pump

Well Depth (ft):
9.75

Depth to Water (ft):
3.79

Water in Well (ft):
5.96

Start Time:
1:48:00 PM

Stop Time:
2:15:00 PM

Time Spent (min):
00:27:00

Volume Removed (gal):
5

Sediment in Well:
N

Begin Water Clarity:
Turbid , Silt/Clay , Grey

End Water Clarity:
Clear

Odor:
Yes

Comment:
Slight solvent odor.
Top of PVC 5.2 inches below ground surface.

Well Development Summary

Project Name:
WIANG - F35 Hangar

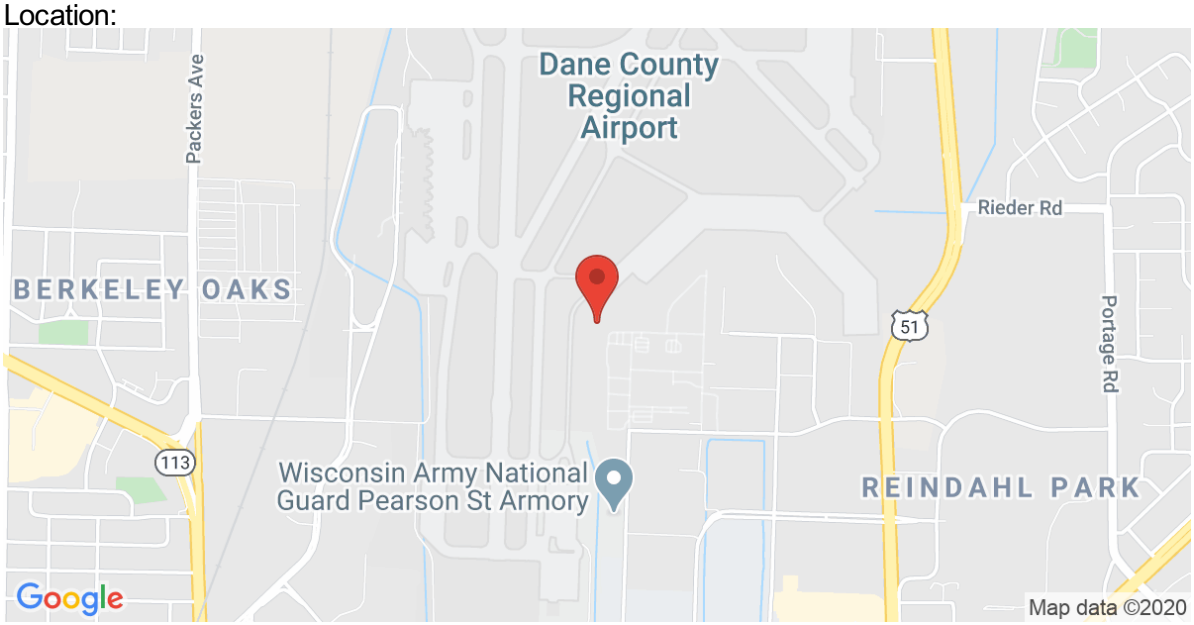
Site Name:
WIANG - F35 Hangar

Address:
3200 Pierstorff Street

State:
Wisconsin

City:
Madison

Location:



Well Name:
AA-MW-3

Date:
6/24/2020

Unique Well Number:

Purged Dry:
N

Dev. Method:
Peristaltic Pump

Well Depth (ft):
9.80

Depth to Water (ft):
4.21

Water in Well (ft):
5.59

Start Time:
12:48:00 PM

Stop Time:
1:05:00 PM

Time Spent (min):
00:17:00

Volume Removed (gal):
4

Sediment in Well:
N

Begin Water Clarity:
Turbid , Silt/Clay , Sand , Brown

End Water Clarity:
Clear

Odor:
No

Comment:
Top of PVC 8 inches below ground surface.

Well Development Summary

Project Name:
WIANG - F35 Hangar

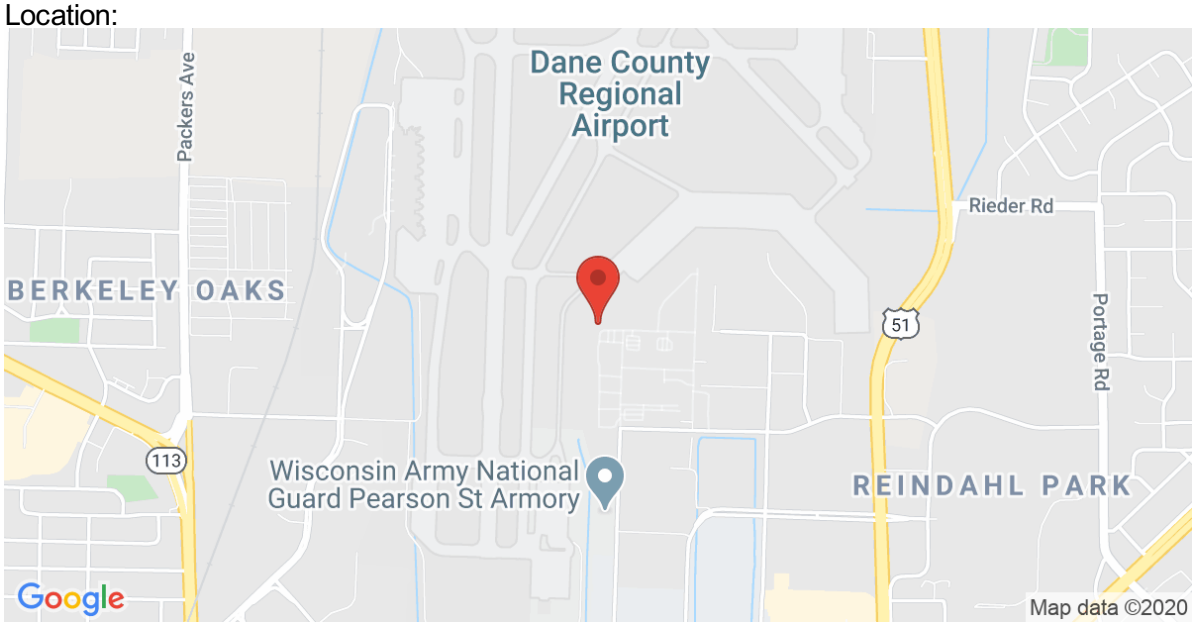
Site Name:
WIANG - F35 Hangar

Address:
3200 Pierstorff Street

State:
Wisconsin

City:
Madison

Location:



Well Name:
AA-MW-4

Date:
6/24/2020

Unique Well Number:

Purged Dry:
N

Dev. Method:
Peristaltic Pump

Well Depth (ft):
9.90

Depth to Water (ft):
4.55

Water in Well (ft):
5.35

Start Time:
3:00:00 PM

Stop Time:
3:17:00 PM

Time Spent (min):
00:17:00

Volume Removed (gal):
4

Sediment in Well:
N

Begin Water Clarity:
Turbid , Sand , Silt , Grey

End Water Clarity:
Clear

Odor:
H2S

Comment:
Top of PVC 3 inches below ground surface.

Well Development Summary

Project Name:
WIANG - F35 Hangar

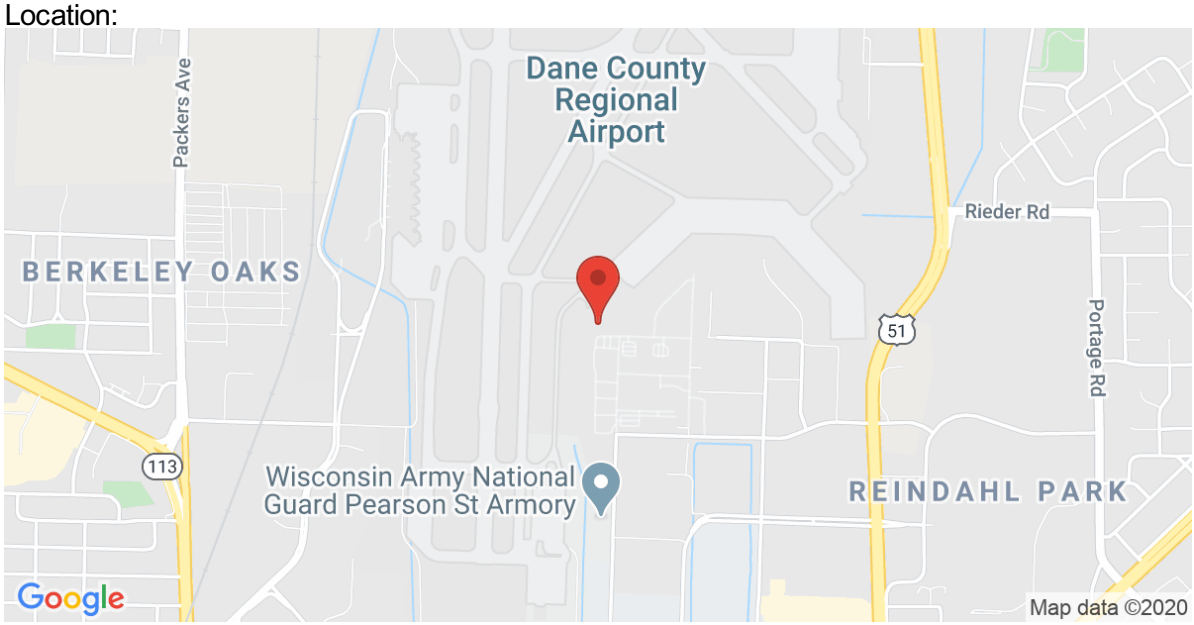
Site Name:
WIANG - F35 Hangar

Address:
3200 Pierstorff Street

State:
Wisconsin

City:
Madison

Location:



Well Name:
AA-MW-5

Date:
6/24/2020

Unique Well Number:

Purged Dry:
N

Dev. Method:
Peristaltic Pump

Well Depth (ft):
9.90

Depth to Water (ft):
4.58

Water in Well (ft):
5.32

Start Time:
3:05:00 PM

Stop Time:
3:25:00 PM

Time Spent (min):
00:20:00

Volume Removed (gal):
3

Sediment in Well:
N

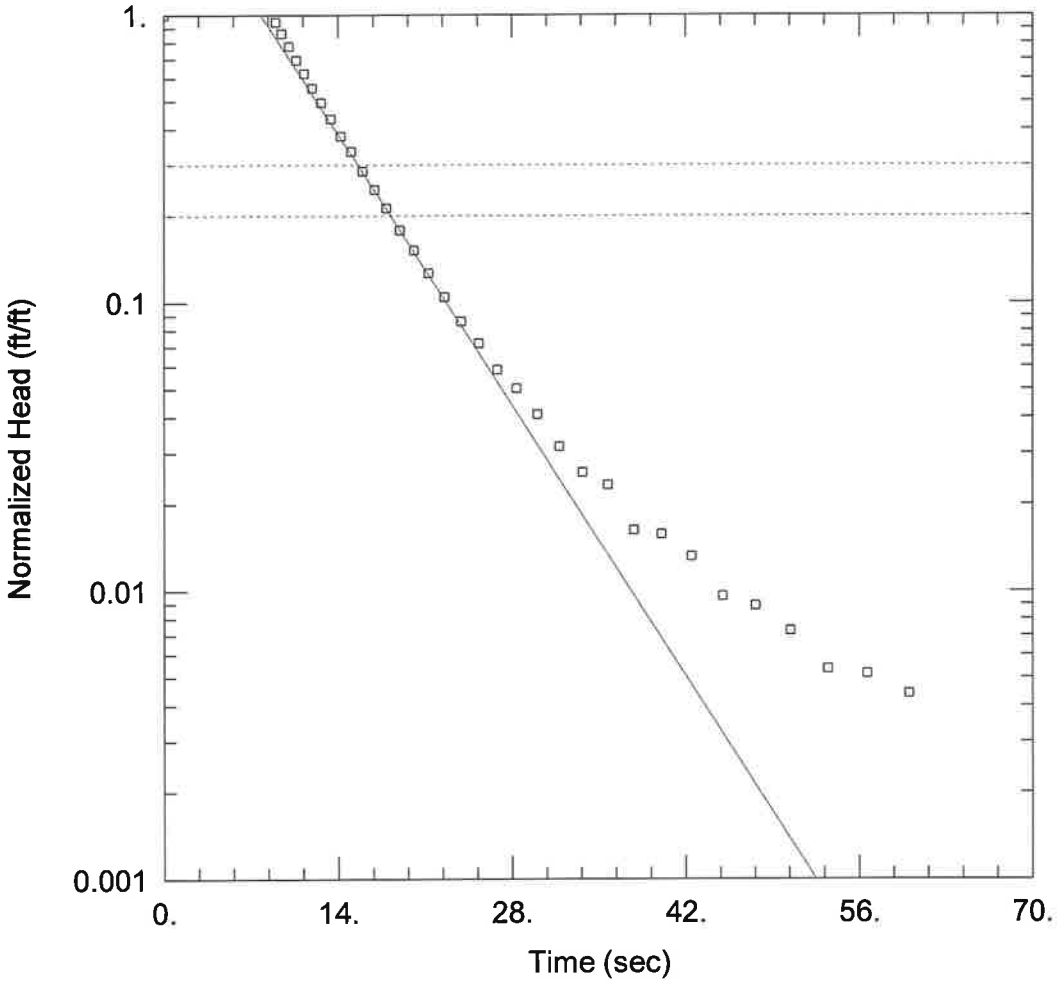
Begin Water Clarity:
Turbid , Sand , Silt , Grey

End Water Clarity:
Clear

Odor:
Hydrocarbon

Comment:
Top of PVC casing 5.4 inches below ground surface.

Appendix B
Hydraulic Conductivity Testing Data



AA-MW-1 SLUG OUT

Data Set: I:\...\AA-MW-1 Slug Out.aqt
Date: 07/28/20 Time: 14:00:26

PROJECT INFORMATION

Company: Ayres Associates
Client: FSB
Project: 51-0444.00
Location: Madison, WI
Test Well: AA-MW-1
Test Date: 06/25/20

AQUIFER DATA

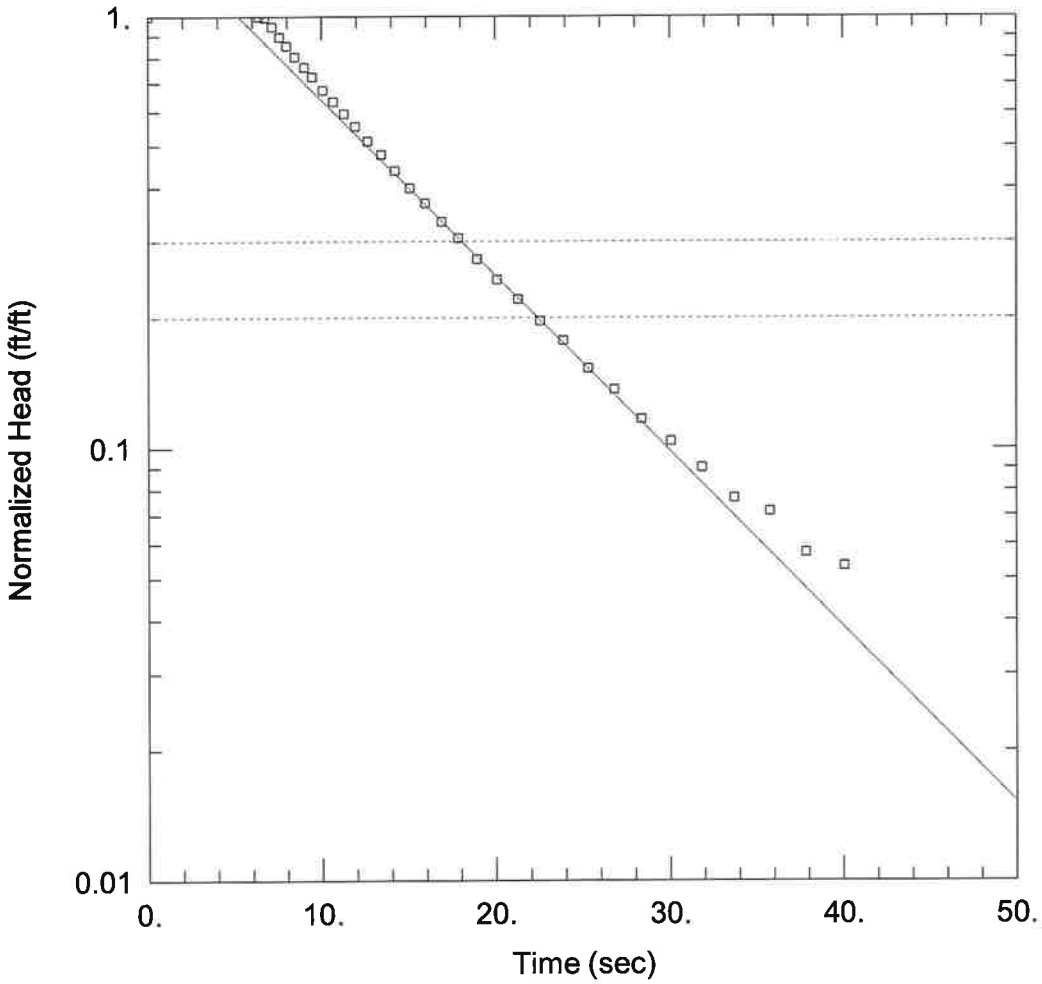
Saturated Thickness: 5. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (AA-MW-1)

Initial Displacement: 1.39 ft
Total Well Penetration Depth: 4.68 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 4.68 ft
Screen Length: 4.68 ft
Well Radius: 0.343 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.03578 cm/sec
y0 = 4.659 ft



AA-MW-2 SLUG OUT

Data Set: I:\...\AA-MW-2 Slug Out.aqt
Date: 07/28/20 Time: 14:00:44

PROJECT INFORMATION

Company: Ayres Associates
Client: FSB
Project: 51-0444.00
Location: Madison, WI
Test Well: AA-MW-2
Test Date: 06/25/20

AQUIFER DATA

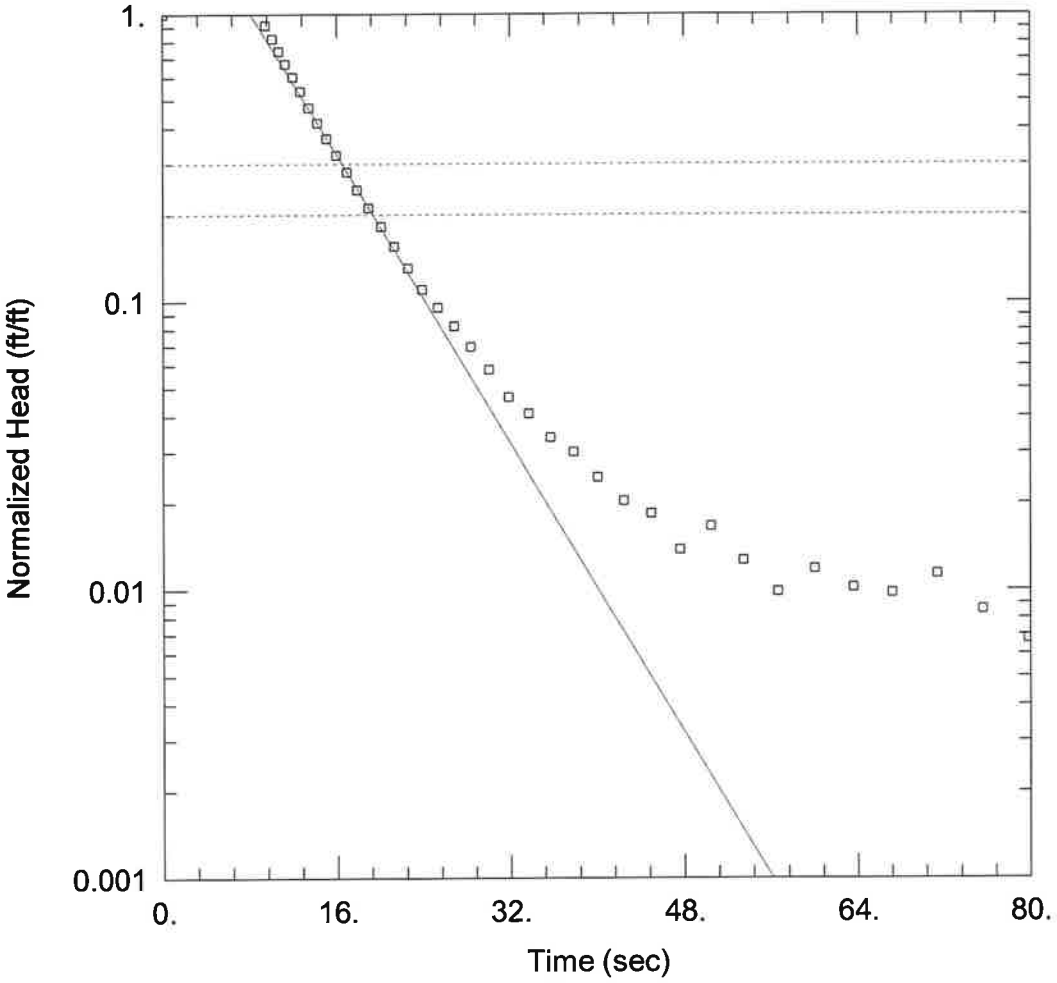
Saturated Thickness: 6. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (AA-MW-2)

Initial Displacement: 1.21 ft
Total Well Penetration Depth: 5.96 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 5.96 ft
Screen Length: 5. ft
Well Radius: 0.343 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.02386 cm/sec
y0 = 1.965 ft



AA-MW-3 SLUG OUT

Data Set: I:\...\AA-MW-3 Slug Out.aqt
Date: 07/28/20 Time: 14:01:03

PROJECT INFORMATION

Company: Ayres Associates
Client: FSB
Project: 51-0444.00
Location: Madison, WI
Test Well: AA-MW-3
Test Date: 06/25/20

AQUIFER DATA

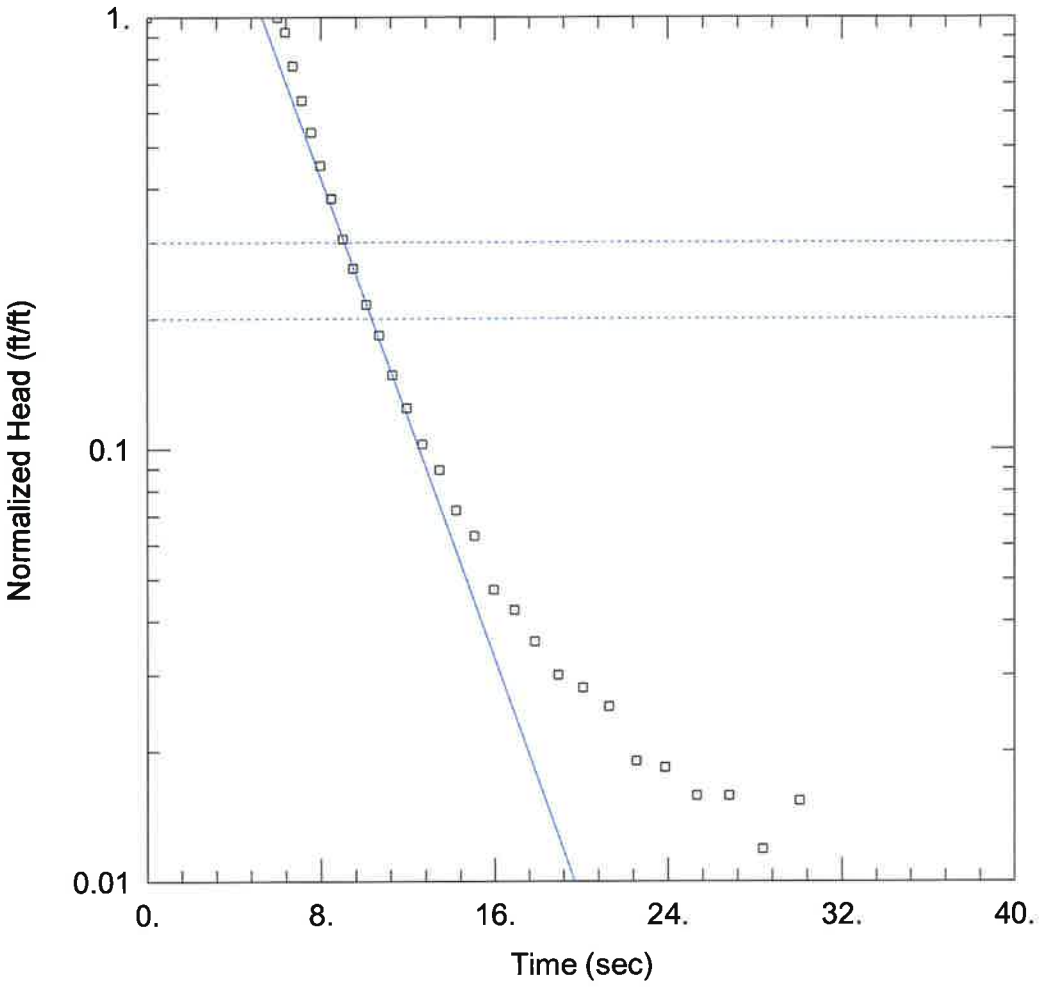
Saturated Thickness: 6. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (AA-MW-3)

Initial Displacement: 1.57 ft
Total Well Penetration Depth: 5.59 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 5.59 ft
Screen Length: 5. ft
Well Radius: 0.343 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.03288 cm/sec
y0 = 5.072 ft



AA-MW-4 SLUG OUT

Data Set: I:\...\AA-MW-4 Slug Out.aqt
Date: 07/28/20 Time: 14:01:24

PROJECT INFORMATION

Company: Ayres Associates
Client: FSB
Project: 51-0444.00
Location: Madison, WI
Test Well: AA-MW-4
Test Date: 06/25/20

AQUIFER DATA

Saturated Thickness: 6. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (AA-MW-4)

Initial Displacement: 0.97 ft
Total Well Penetration Depth: 5.35 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 5.35 ft
Screen Length: 5. ft
Well Radius: 0.343 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.0709 cm/sec y0 = 5.274 ft

Slug Test Log

Picture:

Project Name: WIANG - F35 Hangar

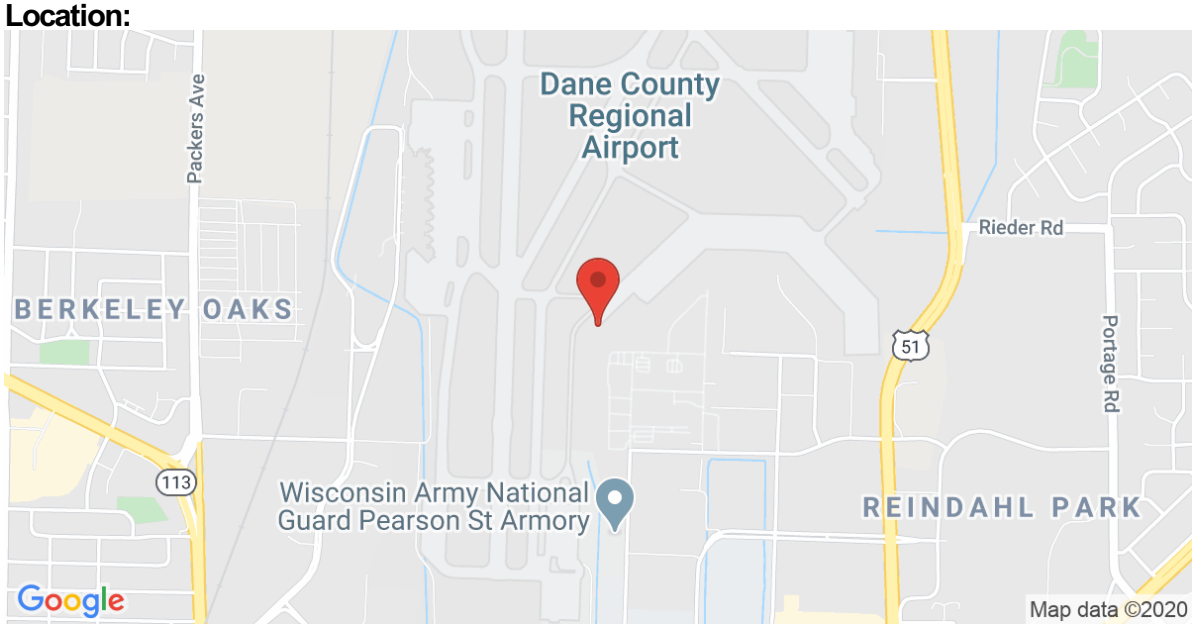
Site Name: WIANG - F35 Hangar

Address: 3200 Pierstorff Street

State: Wisconsin

City: Madison

Location:



Date: 6/25/2020

Performed By: Jeff Steiner

Well/Test Name: AA-MW-1 Slug Out

Test Number: 4

Test Type: Slug Out

Reference (DTW ft.): 5.02

Well Depth (ft): 9.70

Water In Well (ft): 4.68

Transducer Head (ft): 4.76

Start Time: 1:40:00 PM

Stop Time: 1:45:00 PM

Material Screened In: SP

Comment:

Slug Test Log

Picture:

Project Name: WIANG - F35 Hangar

Site Name: WIANG - F35 Hangar

Address: 3200 Pierstorff Street

State: Wisconsin

City: Madison

Location:

Date: 6/25/2020

Performed By: Jeff Steiner

Well/Test Name: AA-MW-2 Slug Out

Test Number: 1

Test Type: Slug Out

Reference (DTW ft.): 3.79

Well Depth (ft): 9.75

Water In Well (ft): 5.96

Transducer Head (ft): 5.94

Start Time: 1:05:00 PM

Stop Time: 1:08:00 PM

Material Screened In: SP

Comment:

Slug Test Log

Picture:

Project Name: WIANG - F35 Hangar

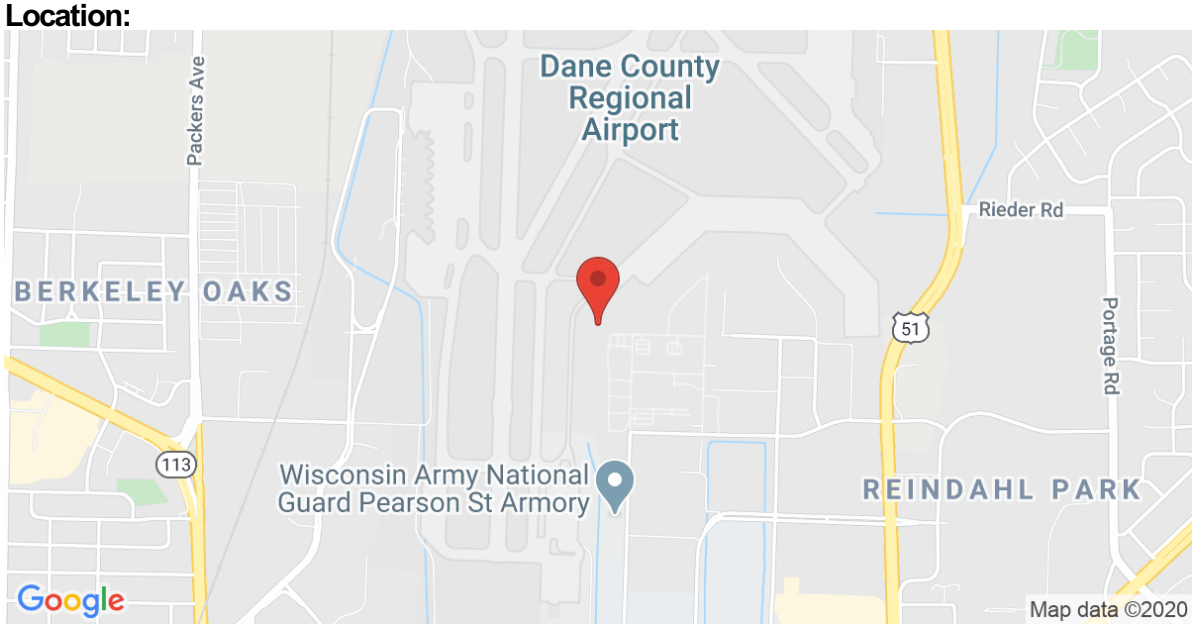
Site Name: WIANG - F35 Hangar

Address: 3200 Pierstorff Street

State: Wisconsin

City: Madison

Location:



Date: 6/25/2020

Performed By: Jeff Steiner

Well/Test Name: AA-MW-3 Slug Out

Test Number: 1

Test Type: Slug Out

Reference (DTW ft.): 4.21

Well Depth (ft): 9.80

Water In Well (ft): 5.59

Transducer Head (ft): 5.36

Start Time: 2:10:10 PM

Stop Time: 2:10:10 PM

Material Screened In: SP

Comment:

Slug Test Log

Picture:

Project Name: WIANG - F35 Hangar

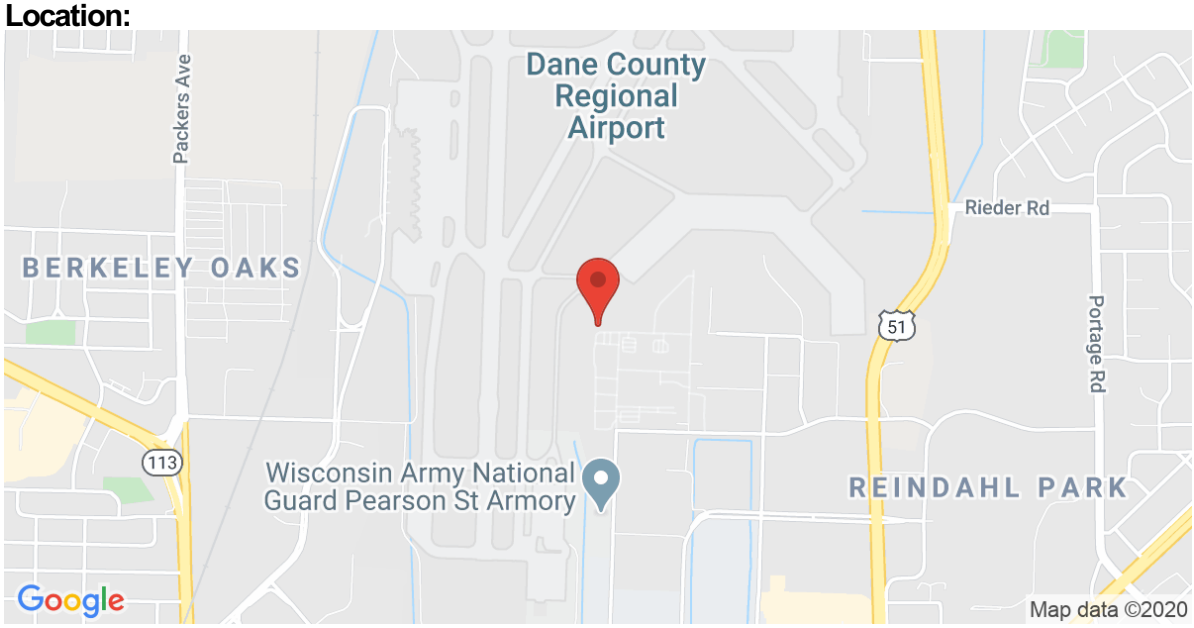
Site Name: WIANG - F35 Hangar

Address: 3200 Pierstorff Street

State: Wisconsin

City: Madison

Location:



Date: 6/25/2020

Performed By: Jeff Steiner

Well/Test Name: AA-MW-4 Slug Out

Test Number: 3

Test Type: Slug Out

Reference (DTW ft.): 4.55

Well Depth (ft): 9.90

Water In Well (ft): 5.35

Transducer Head (ft): 5.04

Start Time: 1:23:00 PM

Stop Time: 1:27:00 PM

Material Screened In: SP

Comment:

Appendix C

Laboratory Analytical Report for Soil Samples

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

ANALYTICAL REPORT

AYRES ASSOCIATES
JEFF STEINER
5201 EAST TERRACE DR
SUITE 200
MADISON, WI 53718

Project Name: WIANG BLD 414
Project Phase:
Contract #: 1452
Project #:
Folder #: 154208
Purchase Order #:

Arrival Temperature: See COC
Report Date: 07/02/2020
Date Received: 06/23/2020
Reprint Date: 07/02/2020

CT LAB Sample#: 436068 Sample Description: AA-MW-2 0-1' Sampled: 06/18/2020 0956

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	**83.1**	%	0.1	0.1	1			06/29/2020 14:20	BMM	EPA 8000C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.068	mg/kg	0.068	0.23	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.024	mg/kg	0.024	0.080	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.014	mg/kg	0.014	0.045	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,1-Dichloroethane	<0.0079	mg/kg	0.0079	0.026	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,1-Dichloroethene	<0.024	mg/kg	0.024	0.080	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	mg/kg	0.030	0.10	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	mg/kg	0.012	0.042	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.045	mg/kg	0.045	0.16	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.019	mg/kg	0.019	0.065	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.012	mg/kg	0.012	0.040	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.079	mg/kg	0.079	0.27	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,2-Dibromoethane	<0.012	mg/kg	0.012	0.043	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436068 Sample Description: AA-MW-2 0-1' Sampled: 06/18/2020 0956

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichlorobenzene	<0.017	mg/kg	0.017	0.055	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,2-Dichloroethane	<0.025	mg/kg	0.025	0.084	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,2-Dichloropropane	<0.029	mg/kg	0.029	0.097	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.015	mg/kg	0.015	0.050	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.016	mg/kg	0.016	0.051	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,3-Dichloropropane	<0.016	mg/kg	0.016	0.054	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	mg/kg	0.017	0.058	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
2,2-Dichloropropane	<0.024	mg/kg	0.024	0.079	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
2-Butanone	<0.45	mg/kg	0.45	1.4	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
2-Chlorotoluene	<0.020	mg/kg	0.020	0.067	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
2-Hexanone	<0.23	mg/kg	0.23	0.79	1	M	06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
4-Chlorotoluene	<0.017	mg/kg	0.017	0.055	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.20	mg/kg	0.20	0.69	1	M	06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Acetone	<0.45	mg/kg	0.45	1.5	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Benzene	<0.012	mg/kg	0.012	0.040	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Bromobenzene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Bromochloromethane	<0.019	mg/kg	0.019	0.065	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Bromodichloromethane	<0.016	mg/kg	0.016	0.052	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Bromoform	<0.068	mg/kg	0.068	0.21	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Bromomethane	<0.10	mg/kg	0.10	0.34	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Carbon disulfide	<0.045	mg/kg	0.045	0.14	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Carbon tetrachloride	<0.016	mg/kg	0.016	0.051	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Chlorobenzene	<0.011	mg/kg	0.011	0.036	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Chloroethane	<0.034	mg/kg	0.034	0.14	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Chloroform	<0.018	mg/kg	0.018	0.060	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436068 Sample Description: AA-MW-2 0-1' Sampled: 06/18/2020 0956

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chloromethane	<0.034	mg/kg	0.034	0.11	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.030	mg/kg	0.030	0.10	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.016	mg/kg	0.016	0.054	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Dibromochloromethane	<0.045	mg/kg	0.045	0.16	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Dibromomethane	<0.024	mg/kg	0.024	0.079	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Dichlorodifluoromethane	<0.056	mg/kg	0.056	0.19	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Diisopropyl ether	<0.020	mg/kg	0.020	0.069	1	M	06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Ethylbenzene	<0.012	mg/kg	0.012	0.040	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Hexachlorobutadiene	<0.026	mg/kg	0.026	0.088	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Isopropylbenzene	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
m & p-Xylene	<0.028	mg/kg	0.028	0.093	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Methyl tert-butyl ether	<0.018	mg/kg	0.018	0.060	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Methylene chloride	<0.068	mg/kg	0.068	0.24	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
n-Butylbenzene	<0.019	mg/kg	0.019	0.062	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
n-Propylbenzene	<0.015	mg/kg	0.015	0.047	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Naphthalene	<0.017	mg/kg	0.017	0.055	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
o-Xylene	<0.0079	mg/kg	0.0079	0.025	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
p-Isopropyltoluene	<0.015	mg/kg	0.015	0.050	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
sec-Butylbenzene	<0.012	mg/kg	0.012	0.040	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Styrene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
tert-Butylbenzene	<0.014	mg/kg	0.014	0.046	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Tetrachloroethene	<0.012	mg/kg	0.012	0.042	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Tetrahydrofuran	<0.28	mg/kg	0.28	0.94	1	M	06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Toluene	<0.018	mg/kg	0.018	0.060	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436068 Sample Description: AA-MW-2 0-1' Sampled: 06/18/2020 0956

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
trans-1,3-Dichloropropene	<0.045	mg/kg	0.045	0.14	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Trichloroethene	<0.021	mg/kg	0.021	0.070	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Trichlorofluoromethane	<0.045	mg/kg	0.045	0.14	1	Z	06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Vinyl acetate	<0.45	mg/kg	0.45	1.5	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C
Vinyl chloride	<0.021	mg/kg	0.021	0.072	1		06/24/2020 12:30	06/25/2020 10:09	RLD	EPA 8260C

CT LAB Sample#: 436069 Sample Description: AA-MW-2 2-3' Sampled: 06/18/2020 1002

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	**87.2**	%	0.1	0.1	1			06/29/2020 14:20	BMM	EPA 8000C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.072	mg/kg	0.072	0.24	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.019	mg/kg	0.019	0.063	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.025	0.086	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.014	mg/kg	0.014	0.048	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,1-Dichloroethane	<0.0085	mg/kg	0.0085	0.028	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,1-Dichloroethene	<0.025	mg/kg	0.025	0.086	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,1-Dichloropropene	<0.033	mg/kg	0.033	0.11	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.013	mg/kg	0.013	0.045	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.048	mg/kg	0.048	0.17	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.021	mg/kg	0.021	0.070	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.085	mg/kg	0.085	0.29	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436069 Sample Description: AA-MW-2 2-3' Sampled: 06/18/2020 1002

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dibromoethane	<0.013	mg/kg	0.013	0.046	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,2-Dichloroethane	<0.027	mg/kg	0.027	0.089	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,2-Dichloropropane	<0.031	mg/kg	0.031	0.10	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.017	mg/kg	0.017	0.054	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,3-Dichloropropane	<0.017	mg/kg	0.017	0.058	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.018	mg/kg	0.018	0.062	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
2,2-Dichloropropane	<0.025	mg/kg	0.025	0.085	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
2-Butanone	<0.48	mg/kg	0.48	1.4	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
2-Chlorotoluene	<0.022	mg/kg	0.022	0.071	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
2-Hexanone	<0.24	mg/kg	0.24	0.85	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
4-Chlorotoluene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	mg/kg	0.22	0.74	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Acetone	<0.48	mg/kg	0.48	1.6	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Benzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Bromobenzene	<0.019	mg/kg	0.019	0.063	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Bromochloromethane	<0.021	mg/kg	0.021	0.070	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Bromodichloromethane	<0.017	mg/kg	0.017	0.056	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Bromoform	<0.072	mg/kg	0.072	0.23	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Bromomethane	<0.11	mg/kg	0.11	0.36	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Carbon disulfide	<0.048	mg/kg	0.048	0.14	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Carbon tetrachloride	<0.017	mg/kg	0.017	0.054	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Chlorobenzene	<0.012	mg/kg	0.012	0.039	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Chloroethane	<0.036	mg/kg	0.036	0.14	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436069 Sample Description: AA-MW-2 2-3' Sampled: 06/18/2020 1002

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chloroform	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Chloromethane	<0.036	mg/kg	0.036	0.12	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.033	mg/kg	0.033	0.11	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.017	mg/kg	0.017	0.058	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Dibromochloromethane	<0.048	mg/kg	0.048	0.17	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Dibromomethane	<0.025	mg/kg	0.025	0.085	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Dichlorodifluoromethane	<0.060	mg/kg	0.060	0.21	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Diisopropyl ether	<0.022	mg/kg	0.022	0.074	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Ethylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Hexachlorobutadiene	<0.028	mg/kg	0.028	0.094	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Isopropylbenzene	<0.016	mg/kg	0.016	0.052	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
m & p-Xylene	<0.030	mg/kg	0.030	0.099	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Methyl tert-butyl ether	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Methylene chloride	<0.072	mg/kg	0.072	0.25	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
n-Butylbenzene	<0.021	mg/kg	0.021	0.066	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
n-Propylbenzene	<0.016	mg/kg	0.016	0.051	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Naphthalene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
o-Xylene	<0.0085	mg/kg	0.0085	0.027	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
p-Isopropyltoluene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
sec-Butylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Styrene	<0.019	mg/kg	0.019	0.063	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
tert-Butylbenzene	<0.014	mg/kg	0.014	0.050	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Tetrachloroethene	<0.013	mg/kg	0.013	0.045	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Tetrahydrofuran	<0.30	mg/kg	0.30	1.0	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Toluene	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436069 Sample Description: AA-MW-2 2-3' Sampled: 06/18/2020 1002

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
trans-1,2-Dichloroethene	<0.017	mg/kg	0.017	0.057	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.048	mg/kg	0.048	0.14	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Trichloroethene	<0.023	mg/kg	0.023	0.075	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Trichlorofluoromethane	<0.048	mg/kg	0.048	0.14	1	Z	06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Vinyl acetate	<0.48	mg/kg	0.48	1.6	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C
Vinyl chloride	<0.023	mg/kg	0.023	0.077	1		06/24/2020 12:30	06/25/2020 10:37	RLD	EPA 8260C

CT LAB Sample#: 436070 Sample Description: AA-MW-1 0-1' Sampled: 06/18/2020 1015

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	**95.0**	%	0.1	0.1	1			06/29/2020 14:20	BMM	EPA 8000C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.056	mg/kg	0.056	0.19	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.020	mg/kg	0.020	0.067	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.011	mg/kg	0.011	0.038	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,1-Dichloroethane	<0.0066	mg/kg	0.0066	0.022	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,1-Dichloroethene	<0.020	mg/kg	0.020	0.067	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,1-Dichloropropene	<0.025	mg/kg	0.025	0.085	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.010	mg/kg	0.010	0.035	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.038	mg/kg	0.038	0.13	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.016	mg/kg	0.016	0.055	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.010	mg/kg	0.010	0.033	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436070 Sample Description: AA-MW-1 0-1' Sampled: 06/18/2020 1015

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dibromo-3-chloropropane	<0.066	mg/kg	0.066	0.23	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,2-Dibromoethane	<0.010	mg/kg	0.010	0.036	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.014	mg/kg	0.014	0.046	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,2-Dichloroethane	<0.021	mg/kg	0.021	0.070	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	mg/kg	0.024	0.081	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.012	mg/kg	0.012	0.041	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,3-Dichloropropane	<0.013	mg/kg	0.013	0.045	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.014	mg/kg	0.014	0.048	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
2,2-Dichloropropane	<0.020	mg/kg	0.020	0.066	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
2-Butanone	<0.38	mg/kg	0.38	1.1	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
2-Chlorotoluene	<0.017	mg/kg	0.017	0.056	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
2-Hexanone	<0.19	mg/kg	0.19	0.66	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
4-Chlorotoluene	<0.014	mg/kg	0.014	0.046	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.17	mg/kg	0.17	0.57	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Acetone	<0.38	mg/kg	0.38	1.2	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Benzene	<0.010	mg/kg	0.010	0.033	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Bromobenzene	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Bromochloromethane	<0.016	mg/kg	0.016	0.055	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Bromodichloromethane	<0.013	mg/kg	0.013	0.043	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Bromoform	<0.056	mg/kg	0.056	0.18	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Bromomethane	<0.085	mg/kg	0.085	0.28	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Carbon disulfide	<0.038	mg/kg	0.038	0.11	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Carbon tetrachloride	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Chlorobenzene	<0.0094	mg/kg	0.0094	0.030	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436070 Sample Description: AA-MW-1 0-1' Sampled: 06/18/2020 1015

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chloroethane	<0.028	mg/kg	0.028	0.11	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Chloroform	<0.015	mg/kg	0.015	0.050	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Chloromethane	<0.028	mg/kg	0.028	0.094	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.025	mg/kg	0.025	0.085	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.013	mg/kg	0.013	0.045	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Dibromochloromethane	<0.038	mg/kg	0.038	0.13	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Dibromomethane	<0.020	mg/kg	0.020	0.066	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Dichlorodifluoromethane	<0.047	mg/kg	0.047	0.16	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Diisopropyl ether	<0.017	mg/kg	0.017	0.057	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Ethylbenzene	<0.010	mg/kg	0.010	0.033	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Hexachlorobutadiene	<0.022	mg/kg	0.022	0.073	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Isopropylbenzene	<0.012	mg/kg	0.012	0.040	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
m & p-Xylene	<0.024	mg/kg	0.024	0.077	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Methyl tert-butyl ether	<0.015	mg/kg	0.015	0.050	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Methylene chloride	<0.056	mg/kg	0.056	0.20	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
n-Butylbenzene	<0.016	mg/kg	0.016	0.052	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
n-Propylbenzene	<0.012	mg/kg	0.012	0.040	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Naphthalene	<0.014	mg/kg	0.014	0.046	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
o-Xylene	<0.0066	mg/kg	0.0066	0.021	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
p-Isopropyltoluene	<0.012	mg/kg	0.012	0.041	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
sec-Butylbenzene	<0.010	mg/kg	0.010	0.033	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Styrene	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
tert-Butylbenzene	<0.011	mg/kg	0.011	0.039	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Tetrachloroethene	<0.010	mg/kg	0.010	0.035	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Tetrahydrofuran	<0.24	mg/kg	0.24	0.78	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436070 Sample Description: AA-MW-1 0-1' Sampled: 06/18/2020 1015

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Toluene	<0.015	mg/kg	0.015	0.050	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.013	mg/kg	0.013	0.044	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.038	mg/kg	0.038	0.11	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Trichloroethene	<0.018	mg/kg	0.018	0.058	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Trichlorofluoromethane	<0.038	mg/kg	0.038	0.11	1	Z	06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Vinyl acetate	<0.38	mg/kg	0.38	1.2	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C
Vinyl chloride	<0.018	mg/kg	0.018	0.060	1		06/24/2020 12:30	06/25/2020 11:05	RLD	EPA 8260C

CT LAB Sample#: 436071 Sample Description: AA-MW-1 3-4' Sampled: 06/18/2020 1024

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	**85.7**	%	0.1	0.1	1			06/29/2020 14:20	BMM	EPA 8000C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.067	mg/kg	0.067	0.22	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	mg/kg	0.018	0.058	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.023	mg/kg	0.023	0.079	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.013	mg/kg	0.013	0.044	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,1-Dichloroethane	<0.0078	mg/kg	0.0078	0.026	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,1-Dichloroethene	<0.023	mg/kg	0.023	0.079	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	mg/kg	0.030	0.10	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	mg/kg	0.012	0.041	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.044	mg/kg	0.044	0.16	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436071 Sample Description: AA-MW-1 3-4' Sampled: 06/18/2020 1024

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2,4-Trimethylbenzene	<0.012	mg/kg	0.012	0.039	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.078	mg/kg	0.078	0.27	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,2-Dibromoethane	<0.012	mg/kg	0.012	0.042	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.017	mg/kg	0.017	0.054	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	mg/kg	0.024	0.082	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,2-Dichloropropane	<0.029	mg/kg	0.029	0.095	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.014	mg/kg	0.014	0.049	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.016	mg/kg	0.016	0.050	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,3-Dichloropropane	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	mg/kg	0.017	0.057	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
2,2-Dichloropropane	<0.023	mg/kg	0.023	0.078	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
2-Butanone	<0.44	mg/kg	0.44	1.3	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
2-Chlorotoluene	<0.020	mg/kg	0.020	0.065	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
2-Hexanone	<0.22	mg/kg	0.22	0.78	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
4-Chlorotoluene	<0.017	mg/kg	0.017	0.054	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.20	mg/kg	0.20	0.68	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Acetone	<0.44	mg/kg	0.44	1.4	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Benzene	<0.012	mg/kg	0.012	0.039	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Bromobenzene	<0.018	mg/kg	0.018	0.058	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Bromochloromethane	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Bromodichloromethane	<0.016	mg/kg	0.016	0.051	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Bromoform	<0.067	mg/kg	0.067	0.21	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Bromomethane	<0.10	mg/kg	0.10	0.33	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Carbon disulfide	<0.044	mg/kg	0.044	0.13	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Carbon tetrachloride	<0.016	mg/kg	0.016	0.050	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436071 Sample Description: AA-MW-1 3-4' Sampled: 06/18/2020 1024

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chlorobenzene	<0.011	mg/kg	0.011	0.035	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Chloroethane	<0.033	mg/kg	0.033	0.13	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Chloroform	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Chloromethane	<0.033	mg/kg	0.033	0.11	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.030	mg/kg	0.030	0.10	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Dibromochloromethane	<0.044	mg/kg	0.044	0.16	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Dibromomethane	<0.023	mg/kg	0.023	0.078	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Dichlorodifluoromethane	<0.055	mg/kg	0.055	0.19	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Diisopropyl ether	<0.020	mg/kg	0.020	0.068	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Ethylbenzene	<0.012	mg/kg	0.012	0.039	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Hexachlorobutadiene	<0.026	mg/kg	0.026	0.087	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Isopropylbenzene	<0.014	mg/kg	0.014	0.048	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
m & p-Xylene	<0.028	mg/kg	0.028	0.091	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Methyl tert-butyl ether	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Methylene chloride	<0.067	mg/kg	0.067	0.23	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
n-Butylbenzene	<0.019	mg/kg	0.019	0.061	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
n-Propylbenzene	<0.014	mg/kg	0.014	0.047	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Naphthalene	<0.017	mg/kg	0.017	0.054	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
o-Xylene	<0.0078	mg/kg	0.0078	0.024	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
p-Isopropyltoluene	<0.014	mg/kg	0.014	0.049	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
sec-Butylbenzene	<0.012	mg/kg	0.012	0.039	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Styrene	<0.018	mg/kg	0.018	0.058	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
tert-Butylbenzene	<0.013	mg/kg	0.013	0.045	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Tetrachloroethene	<0.012	mg/kg	0.012	0.041	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436071 Sample Description: AA-MW-1 3-4' Sampled: 06/18/2020 1024

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Tetrahydrofuran	<0.28	mg/kg	0.28	0.92	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Toluene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.016	mg/kg	0.016	0.052	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.044	mg/kg	0.044	0.13	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Trichloroethene	<0.021	mg/kg	0.021	0.069	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Trichlorofluoromethane	<0.044	mg/kg	0.044	0.13	1	Z	06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Vinyl acetate	<0.44	mg/kg	0.44	1.4	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C
Vinyl chloride	<0.021	mg/kg	0.021	0.071	1		06/24/2020 12:30	06/25/2020 11:33	RLD	EPA 8260C

CT LAB Sample#: 436072 Sample Description: AA-MW-5 0-1' Sampled: 06/18/2020 1049

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	**91.1**	%	0.1	0.1	1			06/29/2020 14:20	BMM	EPA 8000C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.060	mg/kg	0.060	0.20	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.016	mg/kg	0.016	0.052	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.021	mg/kg	0.021	0.071	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.012	mg/kg	0.012	0.040	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,1-Dichloroethane	<0.0070	mg/kg	0.0070	0.023	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,1-Dichloroethene	<0.021	mg/kg	0.021	0.071	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,1-Dichloropropene	<0.027	mg/kg	0.027	0.089	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.011	mg/kg	0.011	0.037	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.040	mg/kg	0.040	0.14	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436072 Sample Description: AA-MW-5 0-1' Sampled: 06/18/2020 1049

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2,4-Trichlorobenzene	<0.017	mg/kg	0.017	0.058	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.011	mg/kg	0.011	0.035	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	mg/kg	0.070	0.24	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,2-Dibromoethane	<0.011	mg/kg	0.011	0.038	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,2-Dichloroethane	<0.022	mg/kg	0.022	0.074	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,2-Dichloropropane	<0.026	mg/kg	0.026	0.085	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.013	mg/kg	0.013	0.044	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.014	mg/kg	0.014	0.045	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,3-Dichloropropane	<0.014	mg/kg	0.014	0.048	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.015	mg/kg	0.015	0.051	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
2,2-Dichloropropane	<0.021	mg/kg	0.021	0.070	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
2-Butanone	<0.40	mg/kg	0.40	1.2	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
2-Chlorotoluene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
2-Hexanone	<0.20	mg/kg	0.20	0.70	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
4-Chlorotoluene	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.18	mg/kg	0.18	0.61	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Acetone	<0.40	mg/kg	0.40	1.3	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Benzene	<0.011	mg/kg	0.011	0.035	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Bromobenzene	<0.016	mg/kg	0.016	0.052	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Bromochloromethane	<0.017	mg/kg	0.017	0.058	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Bromodichloromethane	<0.014	mg/kg	0.014	0.046	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Bromoform	<0.060	mg/kg	0.060	0.19	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Bromomethane	<0.089	mg/kg	0.089	0.30	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Carbon disulfide	<0.040	mg/kg	0.040	0.12	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436072 Sample Description: AA-MW-5 0-1' Sampled: 06/18/2020 1049

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Carbon tetrachloride	<0.014	mg/kg	0.014	0.045	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Chlorobenzene	<0.0099	mg/kg	0.0099	0.032	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Chloroethane	<0.030	mg/kg	0.030	0.12	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Chloroform	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Chloromethane	<0.030	mg/kg	0.030	0.099	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.027	mg/kg	0.027	0.089	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.014	mg/kg	0.014	0.048	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Dibromochloromethane	<0.040	mg/kg	0.040	0.14	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Dibromomethane	<0.021	mg/kg	0.021	0.070	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Dichlorodifluoromethane	<0.050	mg/kg	0.050	0.17	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Diisopropyl ether	<0.018	mg/kg	0.018	0.061	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Ethylbenzene	<0.011	mg/kg	0.011	0.035	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Hexachlorobutadiene	<0.023	mg/kg	0.023	0.078	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Isopropylbenzene	<0.013	mg/kg	0.013	0.043	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
m & p-Xylene	<0.025	mg/kg	0.025	0.082	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Methyl tert-butyl ether	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Methylene chloride	<0.060	mg/kg	0.060	0.21	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
n-Butylbenzene	<0.017	mg/kg	0.017	0.055	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
n-Propylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Naphthalene	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
o-Xylene	**0.00755**	mg/kg	0.0070 *	0.022	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
p-Isopropyltoluene	<0.013	mg/kg	0.013	0.044	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
sec-Butylbenzene	<0.011	mg/kg	0.011	0.035	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Styrene	<0.016	mg/kg	0.016	0.052	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
tert-Butylbenzene	<0.012	mg/kg	0.012	0.041	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436072 Sample Description: AA-MW-5 0-1' Sampled: 06/18/2020 1049

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Tetrachloroethene	<0.011	mg/kg	0.011	0.037	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Tetrahydrofuran	<0.25	mg/kg	0.25	0.82	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Toluene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.014	mg/kg	0.014	0.047	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.040	mg/kg	0.040	0.12	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Trichloroethene	<0.019	mg/kg	0.019	0.062	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Trichlorofluoromethane	<0.040	mg/kg	0.040	0.12	1	Z	06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Vinyl acetate	<0.40	mg/kg	0.40	1.3	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C
Vinyl chloride	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 12:01	RLD	EPA 8260C

CT LAB Sample#: 436073 Sample Description: AA-MW-5 3-4' Sampled: 06/18/2020 1101

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	**94.7**	%	0.1	0.1	1			06/29/2020 14:20	BMM	EPA 8000C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.058	mg/kg	0.058	0.19	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.015	mg/kg	0.015	0.050	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.020	mg/kg	0.020	0.068	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.012	mg/kg	0.012	0.039	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,1-Dichloroethane	<0.0067	mg/kg	0.0067	0.022	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,1-Dichloroethene	<0.020	mg/kg	0.020	0.068	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,1-Dichloropropene	<0.026	mg/kg	0.026	0.087	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.011	mg/kg	0.011	0.036	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436073 Sample Description: AA-MW-5 3-4' Sampled: 06/18/2020 1101

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2,3-Trichloropropane	<0.039	mg/kg	0.039	0.13	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.016	mg/kg	0.016	0.056	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.011	mg/kg	0.011	0.034	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.067	mg/kg	0.067	0.23	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,2-Dibromoethane	<0.011	mg/kg	0.011	0.037	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.014	mg/kg	0.014	0.047	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,2-Dichloroethane	<0.021	mg/kg	0.021	0.071	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,2-Dichloropropane	<0.025	mg/kg	0.025	0.083	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.013	mg/kg	0.013	0.043	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,3-Dichloropropane	<0.013	mg/kg	0.013	0.046	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.014	mg/kg	0.014	0.049	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
2,2-Dichloropropane	<0.020	mg/kg	0.020	0.067	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
2-Butanone	<0.39	mg/kg	0.39	1.2	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
2-Chlorotoluene	<0.017	mg/kg	0.017	0.057	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
2-Hexanone	<0.19	mg/kg	0.19	0.67	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
4-Chlorotoluene	<0.014	mg/kg	0.014	0.047	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.17	mg/kg	0.17	0.59	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Acetone	<0.39	mg/kg	0.39	1.3	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Benzene	<0.011	mg/kg	0.011	0.034	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Bromobenzene	<0.015	mg/kg	0.015	0.050	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Bromochloromethane	<0.016	mg/kg	0.016	0.056	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Bromodichloromethane	<0.013	mg/kg	0.013	0.044	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Bromoform	<0.058	mg/kg	0.058	0.18	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Bromomethane	<0.087	mg/kg	0.087	0.29	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436073 Sample Description: AA-MW-5 3-4' Sampled: 06/18/2020 1101

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Carbon disulfide	<0.039	mg/kg	0.039	0.12	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Carbon tetrachloride	<0.013	mg/kg	0.013	0.043	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Chlorobenzene	<0.0096	mg/kg	0.0096	0.031	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Chloroethane	<0.029	mg/kg	0.029	0.12	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Chloroform	<0.015	mg/kg	0.015	0.051	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Chloromethane	<0.029	mg/kg	0.029	0.096	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.026	mg/kg	0.026	0.087	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.013	mg/kg	0.013	0.046	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Dibromochloromethane	<0.039	mg/kg	0.039	0.13	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Dibromomethane	<0.020	mg/kg	0.020	0.067	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Dichlorodifluoromethane	<0.048	mg/kg	0.048	0.16	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Diisopropyl ether	<0.017	mg/kg	0.017	0.059	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Ethylbenzene	<0.011	mg/kg	0.011	0.034	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Hexachlorobutadiene	<0.022	mg/kg	0.022	0.075	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Isopropylbenzene	<0.013	mg/kg	0.013	0.041	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
m & p-Xylene	<0.024	mg/kg	0.024	0.079	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Methyl tert-butyl ether	<0.015	mg/kg	0.015	0.051	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Methylene chloride	<0.058	mg/kg	0.058	0.20	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
n-Butylbenzene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
n-Propylbenzene	<0.013	mg/kg	0.013	0.040	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Naphthalene	<0.014	mg/kg	0.014	0.047	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
o-Xylene	<0.0067	mg/kg	0.0067	0.021	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
p-Isopropyltoluene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
sec-Butylbenzene	<0.011	mg/kg	0.011	0.034	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Styrene	<0.015	mg/kg	0.015	0.050	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436073 Sample Description: AA-MW-5 3-4' Sampled: 06/18/2020 1101

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
tert-Butylbenzene	<0.012	mg/kg	0.012	0.039	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Tetrachloroethene	<0.011	mg/kg	0.011	0.036	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Tetrahydrofuran	<0.24	mg/kg	0.24	0.80	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Toluene	<0.015	mg/kg	0.015	0.051	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.013	mg/kg	0.013	0.045	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.039	mg/kg	0.039	0.12	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Trichloroethene	<0.018	mg/kg	0.018	0.060	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Trichlorofluoromethane	<0.039	mg/kg	0.039	0.12	1	Z	06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Vinyl acetate	<0.39	mg/kg	0.39	1.3	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C
Vinyl chloride	<0.018	mg/kg	0.018	0.062	1		06/24/2020 12:30	06/25/2020 12:29	RLD	EPA 8260C

CT LAB Sample#: 436074 Sample Description: AA-MW-4 0-1' Sampled: 06/18/2020 1115

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	**87.1**	%	0.1	0.1	1			06/29/2020 14:20	BMM	EPA 8000C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.066	mg/kg	0.066	0.22	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	mg/kg	0.018	0.057	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.023	mg/kg	0.023	0.078	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.013	mg/kg	0.013	0.044	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,1-Dichloroethane	<0.0077	mg/kg	0.0077	0.025	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,1-Dichloroethene	<0.023	mg/kg	0.023	0.078	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	mg/kg	0.030	0.099	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436074 Sample Description: AA-MW-4 0-1' Sampled: 06/18/2020 1115

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2,3-Trichlorobenzene	<0.012	mg/kg	0.012	0.041	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.044	mg/kg	0.044	0.15	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.012	mg/kg	0.012	0.038	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.077	mg/kg	0.077	0.26	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,2-Dibromoethane	<0.012	mg/kg	0.012	0.042	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.016	mg/kg	0.016	0.054	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	mg/kg	0.024	0.081	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,2-Dichloropropane	<0.028	mg/kg	0.028	0.094	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.014	mg/kg	0.014	0.048	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,3-Dichloropropane	<0.015	mg/kg	0.015	0.053	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.016	mg/kg	0.016	0.056	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
2,2-Dichloropropane	<0.023	mg/kg	0.023	0.077	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
2-Butanone	<0.44	mg/kg	0.44	1.3	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
2-Chlorotoluene	<0.020	mg/kg	0.020	0.065	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
2-Hexanone	<0.22	mg/kg	0.22	0.77	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
4-Chlorotoluene	<0.016	mg/kg	0.016	0.054	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.20	mg/kg	0.20	0.67	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Acetone	<0.44	mg/kg	0.44	1.4	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Benzene	<0.012	mg/kg	0.012	0.038	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Bromobenzene	<0.018	mg/kg	0.018	0.057	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Bromochloromethane	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Bromodichloromethane	<0.015	mg/kg	0.015	0.050	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Bromoform	<0.066	mg/kg	0.066	0.21	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436074 Sample Description: AA-MW-4 0-1' Sampled: 06/18/2020 1115

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Bromomethane	<0.099	mg/kg	0.099	0.33	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Carbon disulfide	<0.044	mg/kg	0.044	0.13	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Carbon tetrachloride	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Chlorobenzene	<0.011	mg/kg	0.011	0.035	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Chloroethane	<0.033	mg/kg	0.033	0.13	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Chloroform	<0.018	mg/kg	0.018	0.058	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Chloromethane	<0.033	mg/kg	0.033	0.11	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.030	mg/kg	0.030	0.099	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.015	mg/kg	0.015	0.053	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Dibromochloromethane	<0.044	mg/kg	0.044	0.15	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Dibromomethane	<0.023	mg/kg	0.023	0.077	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Dichlorodifluoromethane	<0.055	mg/kg	0.055	0.19	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Diisopropyl ether	<0.020	mg/kg	0.020	0.067	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Ethylbenzene	<0.012	mg/kg	0.012	0.038	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Hexachlorobutadiene	<0.025	mg/kg	0.025	0.085	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Isopropylbenzene	<0.014	mg/kg	0.014	0.047	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
m & p-Xylene	<0.027	mg/kg	0.027	0.090	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Methyl tert-butyl ether	<0.018	mg/kg	0.018	0.058	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Methylene chloride	<0.066	mg/kg	0.066	0.23	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
n-Butylbenzene	<0.019	mg/kg	0.019	0.060	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
n-Propylbenzene	<0.014	mg/kg	0.014	0.046	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Naphthalene	<0.016	mg/kg	0.016	0.054	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
o-Xylene	<0.0077	mg/kg	0.0077	0.024	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
p-Isopropyltoluene	<0.014	mg/kg	0.014	0.048	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
sec-Butylbenzene	<0.012	mg/kg	0.012	0.038	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436074 Sample Description: AA-MW-4 0-1' Sampled: 06/18/2020 1115

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Styrene	<0.018	mg/kg	0.018	0.057	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
tert-Butylbenzene	<0.013	mg/kg	0.013	0.045	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Tetrachloroethene	<0.012	mg/kg	0.012	0.041	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Tetrahydrofuran	<0.27	mg/kg	0.27	0.91	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Toluene	<0.018	mg/kg	0.018	0.058	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.015	mg/kg	0.015	0.051	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.044	mg/kg	0.044	0.13	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Trichloroethene	<0.021	mg/kg	0.021	0.068	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Trichlorofluoromethane	<0.044	mg/kg	0.044	0.13	1	Z	06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Vinyl acetate	<0.44	mg/kg	0.44	1.4	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C
Vinyl chloride	<0.021	mg/kg	0.021	0.070	1		06/24/2020 12:30	06/25/2020 12:56	RLD	EPA 8260C

CT LAB Sample#: 436075 Sample Description: AA-MW-4 3-4' Sampled: 06/18/2020 1124

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	**81.3**	%	0.1	0.1	1			06/29/2020 14:20	BMM	EPA 8000C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.073	mg/kg	0.073	0.24	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.019	mg/kg	0.019	0.063	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.025	0.086	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.015	mg/kg	0.015	0.048	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,1-Dichloroethane	<0.0085	mg/kg	0.0085	0.028	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,1-Dichloroethene	<0.025	mg/kg	0.025	0.086	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436075 Sample Description: AA-MW-4 3-4' Sampled: 06/18/2020 1124

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,1-Dichloropropene	<0.033	mg/kg	0.033	0.11	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.013	mg/kg	0.013	0.045	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.048	mg/kg	0.048	0.17	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.021	mg/kg	0.021	0.070	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.085	mg/kg	0.085	0.29	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,2-Dibromoethane	<0.013	mg/kg	0.013	0.046	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,2-Dichloroethane	<0.027	mg/kg	0.027	0.090	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,2-Dichloropropane	<0.031	mg/kg	0.031	0.10	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.017	mg/kg	0.017	0.054	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,3-Dichloropropane	<0.017	mg/kg	0.017	0.058	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.018	mg/kg	0.018	0.062	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
2,2-Dichloropropane	<0.025	mg/kg	0.025	0.085	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
2-Butanone	<0.48	mg/kg	0.48	1.5	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
2-Chlorotoluene	<0.022	mg/kg	0.022	0.071	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
2-Hexanone	<0.24	mg/kg	0.24	0.85	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
4-Chlorotoluene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	mg/kg	0.22	0.74	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Acetone	<0.48	mg/kg	0.48	1.6	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Benzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Bromobenzene	<0.019	mg/kg	0.019	0.063	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Bromochloromethane	<0.021	mg/kg	0.021	0.070	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Bromodichloromethane	<0.017	mg/kg	0.017	0.056	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436075 Sample Description: AA-MW-4 3-4' Sampled: 06/18/2020 1124

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Bromoform	<0.073	mg/kg	0.073	0.23	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Bromomethane	<0.11	mg/kg	0.11	0.36	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Carbon disulfide	<0.048	mg/kg	0.048	0.15	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Carbon tetrachloride	<0.017	mg/kg	0.017	0.054	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Chlorobenzene	<0.012	mg/kg	0.012	0.039	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Chloroethane	<0.036	mg/kg	0.036	0.15	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Chloroform	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Chloromethane	<0.036	mg/kg	0.036	0.12	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.033	mg/kg	0.033	0.11	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.017	mg/kg	0.017	0.058	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Dibromochloromethane	<0.048	mg/kg	0.048	0.17	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Dibromomethane	<0.025	mg/kg	0.025	0.085	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Dichlorodifluoromethane	<0.061	mg/kg	0.061	0.21	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Diisopropyl ether	<0.022	mg/kg	0.022	0.074	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Ethylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Hexachlorobutadiene	<0.028	mg/kg	0.028	0.094	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Isopropylbenzene	<0.016	mg/kg	0.016	0.052	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
m & p-Xylene	<0.030	mg/kg	0.030	0.099	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Methyl tert-butyl ether	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Methylene chloride	<0.073	mg/kg	0.073	0.25	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
n-Butylbenzene	<0.021	mg/kg	0.021	0.067	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
n-Propylbenzene	<0.016	mg/kg	0.016	0.051	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Naphthalene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
o-Xylene	<0.0085	mg/kg	0.0085	0.027	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
p-Isopropyltoluene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436075 Sample Description: AA-MW-4 3-4' Sampled: 06/18/2020 1124

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
sec-Butylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Styrene	<0.019	mg/kg	0.019	0.063	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
tert-Butylbenzene	<0.015	mg/kg	0.015	0.050	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Tetrachloroethene	<0.013	mg/kg	0.013	0.045	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Tetrahydrofuran	<0.30	mg/kg	0.30	1.0	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Toluene	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.017	mg/kg	0.017	0.057	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.048	mg/kg	0.048	0.15	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Trichloroethene	<0.023	mg/kg	0.023	0.075	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Trichlorofluoromethane	<0.048	mg/kg	0.048	0.15	1	Z	06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Vinyl acetate	<0.48	mg/kg	0.48	1.6	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C
Vinyl chloride	<0.023	mg/kg	0.023	0.077	1		06/24/2020 12:30	06/25/2020 13:24	RLD	EPA 8260C

CT LAB Sample#: 436076 Sample Description: AA-MW-3 0-1' Sampled: 06/18/2020 1203

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	**94.4**	%	0.1	0.1	1			06/29/2020 14:20	BMM	EPA 8000C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.055	mg/kg	0.055	0.18	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.015	mg/kg	0.015	0.048	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.019	mg/kg	0.019	0.065	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.011	mg/kg	0.011	0.037	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,1-Dichloroethane	<0.0064	mg/kg	0.0064	0.021	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436076 Sample Description: AA-MW-3 0-1' Sampled: 06/18/2020 1203

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,1-Dichloroethene	<0.019	mg/kg	0.019	0.065	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,1-Dichloropropene	<0.025	mg/kg	0.025	0.083	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.010	mg/kg	0.010	0.034	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.037	mg/kg	0.037	0.13	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.010	mg/kg	0.010	0.032	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.064	mg/kg	0.064	0.22	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,2-Dibromoethane	<0.010	mg/kg	0.010	0.035	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.014	mg/kg	0.014	0.045	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,2-Dichloroethane	<0.020	mg/kg	0.020	0.068	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	mg/kg	0.024	0.079	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.012	mg/kg	0.012	0.040	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.013	mg/kg	0.013	0.041	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,3-Dichloropropane	<0.013	mg/kg	0.013	0.044	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.014	mg/kg	0.014	0.047	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
2,2-Dichloropropane	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
2-Butanone	<0.37	mg/kg	0.37	1.1	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
2-Chlorotoluene	<0.017	mg/kg	0.017	0.054	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
2-Hexanone	<0.18	mg/kg	0.18	0.64	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
4-Chlorotoluene	<0.014	mg/kg	0.014	0.045	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.17	mg/kg	0.17	0.56	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Acetone	<0.37	mg/kg	0.37	1.2	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Benzene	<0.010	mg/kg	0.010	0.032	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Bromobenzene	<0.015	mg/kg	0.015	0.048	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Bromochloromethane	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436076 Sample Description: AA-MW-3 0-1' Sampled: 06/18/2020 1203

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Bromodichloromethane	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Bromoform	<0.055	mg/kg	0.055	0.17	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Bromomethane	<0.083	mg/kg	0.083	0.28	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Carbon disulfide	<0.037	mg/kg	0.037	0.11	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Carbon tetrachloride	<0.013	mg/kg	0.013	0.041	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Chlorobenzene	<0.0092	mg/kg	0.0092	0.029	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Chloroethane	<0.028	mg/kg	0.028	0.11	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Chloroform	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Chloromethane	<0.028	mg/kg	0.028	0.092	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.025	mg/kg	0.025	0.083	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.013	mg/kg	0.013	0.044	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Dibromochloromethane	<0.037	mg/kg	0.037	0.13	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Dibromomethane	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Dichlorodifluoromethane	<0.046	mg/kg	0.046	0.16	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Diisopropyl ether	<0.017	mg/kg	0.017	0.056	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Ethylbenzene	<0.010	mg/kg	0.010	0.032	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Hexachlorobutadiene	<0.021	mg/kg	0.021	0.072	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Isopropylbenzene	<0.012	mg/kg	0.012	0.039	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
m & p-Xylene	<0.023	mg/kg	0.023	0.075	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Methyl tert-butyl ether	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Methylene chloride	<0.055	mg/kg	0.055	0.19	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
n-Butylbenzene	<0.016	mg/kg	0.016	0.051	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
n-Propylbenzene	<0.012	mg/kg	0.012	0.039	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Naphthalene	<0.014	mg/kg	0.014	0.045	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
o-Xylene	<0.0064	mg/kg	0.0064	0.020	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436076 Sample Description: AA-MW-3 0-1' Sampled: 06/18/2020 1203

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
p-Isopropyltoluene	<0.012	mg/kg	0.012	0.040	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
sec-Butylbenzene	<0.010	mg/kg	0.010	0.032	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Styrene	<0.015	mg/kg	0.015	0.048	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
tert-Butylbenzene	<0.011	mg/kg	0.011	0.038	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Tetrachloroethene	<0.010	mg/kg	0.010	0.034	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Tetrahydrofuran	<0.23	mg/kg	0.23	0.76	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Toluene	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.013	mg/kg	0.013	0.043	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.037	mg/kg	0.037	0.11	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Trichloroethene	<0.017	mg/kg	0.017	0.057	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Trichlorofluoromethane	<0.037	mg/kg	0.037	0.11	1	Z	06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Vinyl acetate	<0.37	mg/kg	0.37	1.2	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C
Vinyl chloride	<0.017	mg/kg	0.017	0.059	1		06/24/2020 12:30	06/25/2020 13:52	RLD	EPA 8260C

CT LAB Sample#: 436077 Sample Description: AA-MW-3 3-4' Sampled: 06/18/2020 1229

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	**80.2**	%	0.1	0.1	1			06/29/2020 14:20	BMM	EPA 8000C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.072	mg/kg	0.072	0.24	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.019	mg/kg	0.019	0.062	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.025	0.085	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.014	mg/kg	0.014	0.048	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436077 Sample Description: AA-MW-3 3-4' Sampled: 06/18/2020 1229

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,1-Dichloroethane	<0.0084	mg/kg	0.0084	0.028	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,1-Dichloroethene	<0.025	mg/kg	0.025	0.085	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,1-Dichloropropene	<0.032	mg/kg	0.032	0.11	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.013	mg/kg	0.013	0.044	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.048	mg/kg	0.048	0.17	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.020	mg/kg	0.020	0.069	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.084	mg/kg	0.084	0.29	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,2-Dibromoethane	<0.013	mg/kg	0.013	0.045	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,2-Dichloroethane	<0.026	mg/kg	0.026	0.089	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,2-Dichloropropane	<0.031	mg/kg	0.031	0.10	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.017	mg/kg	0.017	0.054	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,3-Dichloropropane	<0.017	mg/kg	0.017	0.057	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.018	mg/kg	0.018	0.061	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
2,2-Dichloropropane	<0.025	mg/kg	0.025	0.084	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
2-Butanone	<0.48	mg/kg	0.48	1.4	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
2-Chlorotoluene	<0.022	mg/kg	0.022	0.071	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
2-Hexanone	<0.24	mg/kg	0.24	0.84	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
4-Chlorotoluene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	mg/kg	0.22	0.73	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Acetone	<0.48	mg/kg	0.48	1.6	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Benzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Bromobenzene	<0.019	mg/kg	0.019	0.062	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436077 Sample Description: AA-MW-3 3-4' Sampled: 06/18/2020 1229

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Bromochloromethane	<0.020	mg/kg	0.020	0.069	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Bromodichloromethane	<0.017	mg/kg	0.017	0.055	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Bromoform	<0.072	mg/kg	0.072	0.23	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Bromomethane	<0.11	mg/kg	0.11	0.36	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Carbon disulfide	<0.048	mg/kg	0.048	0.14	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Carbon tetrachloride	<0.017	mg/kg	0.017	0.054	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Chlorobenzene	<0.012	mg/kg	0.012	0.038	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Chloroethane	<0.036	mg/kg	0.036	0.14	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Chloroform	<0.019	mg/kg	0.019	0.063	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Chloromethane	<0.036	mg/kg	0.036	0.12	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.032	mg/kg	0.032	0.11	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.017	mg/kg	0.017	0.057	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Dibromochloromethane	<0.048	mg/kg	0.048	0.17	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Dibromomethane	<0.025	mg/kg	0.025	0.084	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Dichlorodifluoromethane	<0.060	mg/kg	0.060	0.20	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Diisopropyl ether	<0.022	mg/kg	0.022	0.073	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Ethylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Hexachlorobutadiene	<0.028	mg/kg	0.028	0.093	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Isopropylbenzene	<0.016	mg/kg	0.016	0.051	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
m & p-Xylene	<0.030	mg/kg	0.030	0.098	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Methyl tert-butyl ether	<0.019	mg/kg	0.019	0.063	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Methylene chloride	<0.072	mg/kg	0.072	0.25	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
n-Butylbenzene	<0.020	mg/kg	0.020	0.066	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
n-Propylbenzene	<0.016	mg/kg	0.016	0.050	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Naphthalene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436077 Sample Description: AA-MW-3 3-4' Sampled: 06/18/2020 1229

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
o-Xylene	<0.0084	mg/kg	0.0084	0.026	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
p-Isopropyltoluene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
sec-Butylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Styrene	<0.019	mg/kg	0.019	0.062	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
tert-Butylbenzene	<0.014	mg/kg	0.014	0.049	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Tetrachloroethene	<0.013	mg/kg	0.013	0.044	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Tetrahydrofuran	<0.30	mg/kg	0.30	0.99	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Toluene	<0.019	mg/kg	0.019	0.063	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.017	mg/kg	0.017	0.056	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.048	mg/kg	0.048	0.14	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Trichloroethene	<0.023	mg/kg	0.023	0.074	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Trichlorofluoromethane	<0.048	mg/kg	0.048	0.14	1	Z	06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Vinyl acetate	<0.48	mg/kg	0.48	1.6	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C
Vinyl chloride	<0.023	mg/kg	0.023	0.077	1		06/24/2020 12:30	06/25/2020 14:19	RLD	EPA 8260C

CT LAB Sample#: 436078 Sample Description: MEOH BLANK Sampled: 06/18/2020 1221

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Organic Results										
1,1,1,2-Tetrachloroethane	<0.060	mg/kg	0.060	0.20	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.016	mg/kg	0.016	0.052	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.021	mg/kg	0.021	0.071	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.012	mg/kg	0.012	0.040	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,1-Dichloroethane	<0.0070	mg/kg	0.0070	0.023	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436078 Sample Description: MEOH BLANK Sampled: 06/18/2020 1221

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,1-Dichloroethene	<0.021	mg/kg	0.021	0.071	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,1-Dichloropropene	<0.027	mg/kg	0.027	0.090	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.011	mg/kg	0.011	0.037	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.040	mg/kg	0.040	0.14	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.017	mg/kg	0.017	0.058	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.011	mg/kg	0.011	0.035	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	mg/kg	0.070	0.24	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,2-Dibromoethane	<0.011	mg/kg	0.011	0.038	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,2-Dichloroethane	<0.022	mg/kg	0.022	0.074	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,2-Dichloropropane	<0.026	mg/kg	0.026	0.086	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.013	mg/kg	0.013	0.044	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.014	mg/kg	0.014	0.045	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,3-Dichloropropane	<0.014	mg/kg	0.014	0.048	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.015	mg/kg	0.015	0.051	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
2,2-Dichloropropane	<0.021	mg/kg	0.021	0.070	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
2-Butanone	<0.40	mg/kg	0.40	1.2	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
2-Chlorotoluene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
2-Hexanone	<0.20	mg/kg	0.20	0.70	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
4-Chlorotoluene	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.18	mg/kg	0.18	0.61	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Acetone	<0.40	mg/kg	0.40	1.3	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Benzene	<0.011	mg/kg	0.011	0.035	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Bromobenzene	<0.016	mg/kg	0.016	0.052	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Bromochloromethane	<0.017	mg/kg	0.017	0.058	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436078 Sample Description: MEOH BLANK Sampled: 06/18/2020 1221

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Bromodichloromethane	<0.014	mg/kg	0.014	0.046	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Bromoform	<0.060	mg/kg	0.060	0.19	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Bromomethane	<0.090	mg/kg	0.090	0.30	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Carbon disulfide	<0.040	mg/kg	0.040	0.12	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Carbon tetrachloride	<0.014	mg/kg	0.014	0.045	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Chlorobenzene	<0.010	mg/kg	0.010	0.032	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Chloroethane	<0.030	mg/kg	0.030	0.12	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Chloroform	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Chloromethane	<0.030	mg/kg	0.030	0.10	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.027	mg/kg	0.027	0.090	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.014	mg/kg	0.014	0.048	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Dibromochloromethane	<0.040	mg/kg	0.040	0.14	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Dibromomethane	<0.021	mg/kg	0.021	0.070	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Dichlorodifluoromethane	<0.050	mg/kg	0.050	0.17	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Diisopropyl ether	<0.018	mg/kg	0.018	0.061	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Ethylbenzene	<0.011	mg/kg	0.011	0.035	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Hexachlorobutadiene	<0.023	mg/kg	0.023	0.078	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Isopropylbenzene	<0.013	mg/kg	0.013	0.043	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
m & p-Xylene	<0.025	mg/kg	0.025	0.082	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Methyl tert-butyl ether	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Methylene chloride	<0.060	mg/kg	0.060	0.21	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
n-Butylbenzene	<0.017	mg/kg	0.017	0.055	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
n-Propylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Naphthalene	<0.015	mg/kg	0.015	0.049	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
o-Xylene	<0.0070	mg/kg	0.0070	0.022	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436078 Sample Description: MEOH BLANK Sampled: 06/18/2020 1221

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
p-Isopropyltoluene	<0.013	mg/kg	0.013	0.044	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
sec-Butylbenzene	<0.011	mg/kg	0.011	0.035	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Styrene	<0.016	mg/kg	0.016	0.052	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
tert-Butylbenzene	<0.012	mg/kg	0.012	0.041	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Tetrachloroethene	<0.011	mg/kg	0.011	0.037	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Tetrahydrofuran	<0.25	mg/kg	0.25	0.83	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Toluene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.014	mg/kg	0.014	0.047	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.040	mg/kg	0.040	0.12	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Trichloroethene	<0.019	mg/kg	0.019	0.062	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Trichlorofluoromethane	<0.040	mg/kg	0.040	0.12	1	Z	06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Vinyl acetate	<0.40	mg/kg	0.40	1.3	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C
Vinyl chloride	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 09:41	RLD	EPA 8260C

CT LAB Sample#: 436079 Sample Description: AA-MW-5 0-1 DUP Sampled: 06/18/2020 1049

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	**85.3**	%	0.1	0.1	1			06/29/2020 14:20	BMM	EPA 8000C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.073	mg/kg	0.073	0.24	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.019	mg/kg	0.019	0.063	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.025	0.086	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.015	mg/kg	0.015	0.048	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436079 Sample Description: AA-MW-5 0-1 DUP Sampled: 06/18/2020 1049

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,1-Dichloroethane	<0.0085	mg/kg	0.0085	0.028	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,1-Dichloroethene	<0.025	mg/kg	0.025	0.086	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,1-Dichloropropene	<0.033	mg/kg	0.033	0.11	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.013	mg/kg	0.013	0.045	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.048	mg/kg	0.048	0.17	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.021	mg/kg	0.021	0.070	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.085	mg/kg	0.085	0.29	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,2-Dibromoethane	<0.013	mg/kg	0.013	0.046	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,2-Dichloroethane	<0.027	mg/kg	0.027	0.089	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,2-Dichloropropane	<0.031	mg/kg	0.031	0.10	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.017	mg/kg	0.017	0.054	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,3-Dichloropropane	<0.017	mg/kg	0.017	0.058	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.018	mg/kg	0.018	0.062	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
2,2-Dichloropropane	<0.025	mg/kg	0.025	0.085	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
2-Butanone	<0.48	mg/kg	0.48	1.5	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
2-Chlorotoluene	<0.022	mg/kg	0.022	0.071	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
2-Hexanone	<0.24	mg/kg	0.24	0.85	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
4-Chlorotoluene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	mg/kg	0.22	0.74	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Acetone	<0.48	mg/kg	0.48	1.6	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Benzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Bromobenzene	<0.019	mg/kg	0.019	0.063	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436079 Sample Description: AA-MW-5 0-1 DUP Sampled: 06/18/2020 1049

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Bromochloromethane	<0.021	mg/kg	0.021	0.070	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Bromodichloromethane	<0.017	mg/kg	0.017	0.056	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Bromoform	<0.073	mg/kg	0.073	0.23	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Bromomethane	<0.11	mg/kg	0.11	0.36	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Carbon disulfide	<0.048	mg/kg	0.048	0.15	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Carbon tetrachloride	<0.017	mg/kg	0.017	0.054	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Chlorobenzene	<0.012	mg/kg	0.012	0.039	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Chloroethane	<0.036	mg/kg	0.036	0.15	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Chloroform	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Chloromethane	<0.036	mg/kg	0.036	0.12	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.033	mg/kg	0.033	0.11	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.017	mg/kg	0.017	0.058	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Dibromochloromethane	<0.048	mg/kg	0.048	0.17	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Dibromomethane	<0.025	mg/kg	0.025	0.085	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Dichlorodifluoromethane	<0.060	mg/kg	0.060	0.21	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Diisopropyl ether	<0.022	mg/kg	0.022	0.074	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Ethylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Hexachlorobutadiene	<0.028	mg/kg	0.028	0.094	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Isopropylbenzene	<0.016	mg/kg	0.016	0.052	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
m & p-Xylene	<0.030	mg/kg	0.030	0.099	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Methyl tert-butyl ether	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Methylene chloride	<0.073	mg/kg	0.073	0.25	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
n-Butylbenzene	<0.021	mg/kg	0.021	0.066	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
n-Propylbenzene	<0.016	mg/kg	0.016	0.051	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Naphthalene	<0.018	mg/kg	0.018	0.059	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 436079 Sample Description: AA-MW-5 0-1 DUP Sampled: 06/18/2020 1049

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
o-Xylene	<0.0085	mg/kg	0.0085	0.027	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
p-Isopropyltoluene	<0.016	mg/kg	0.016	0.053	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
sec-Butylbenzene	<0.013	mg/kg	0.013	0.042	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Styrene	<0.019	mg/kg	0.019	0.063	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
tert-Butylbenzene	<0.015	mg/kg	0.015	0.050	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Tetrachloroethene	<0.013	mg/kg	0.013	0.045	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Tetrahydrofuran	<0.30	mg/kg	0.30	1.0	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Toluene	<0.019	mg/kg	0.019	0.064	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.017	mg/kg	0.017	0.057	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.048	mg/kg	0.048	0.15	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Trichloroethene	<0.023	mg/kg	0.023	0.075	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Trichlorofluoromethane	<0.048	mg/kg	0.048	0.15	1	Z	06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Vinyl acetate	<0.48	mg/kg	0.48	1.6	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C
Vinyl chloride	<0.023	mg/kg	0.023	0.077	1		06/24/2020 12:30	06/25/2020 14:47	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes regarding entire Chain of Custody:

Notes: * Indicates a value in between the LOD (limit of detection) and the LOQ (limit of quantitation). All LOD/LOQs are adjusted to reflect dilution and also any differences in the sample weight / volume as compared to standard amounts.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 289
Louisiana NELAP (primary) ID# ACC20190002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20190002

Rev. 02/2017

CHAIN OF CUSTODY

Page 1 of 1

Company: Ayres Associates
Project Contact: Jeff Steiner
Telephone: 608 443-1200
Project Name: WIANG Bldg 414
Project #:
Location: Truax Field, Madison WI
Sampled By: Thomas Barick/Emily Thompson

CT LABO

1230 Lange Court, Baraboo, WI 53913
2760 Fax 608-356-2766
www.ctlaboratories.com

Folder #: 154208
Company: AYRES ASSOCIATES
Project: WIANG BLD 414
Logged By: EKB PM: ET

SDWA NPDES
Other

Report To:
EMAIL: steinerj@ayresassociates.com
Company: Ayres Associates
Address: 5801 E. Terrace Dr #200 Madison WI 53718
Invoice To:*
EMAIL: Same as
Company: Above
Address:

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

Matrix:
GW – groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

Turnaround Time
Normal RUSH*
Date Needed: _____
Rush analysis requires prior CT Laboratories' approval
Surcharges:
24 hr 200%
2-3 days 100%
4-9 days 50%

Collection Date	Collection Time	Matrix	Grab/ Comp	Sample #	Sample ID Description	Filtered? Y/N	ANALYSES REQUESTED: VOC	ANALYSES REQUESTED: %Solids	Total # Containers	Designated MS/MSD	CT Lab ID # (Lab use only)
					Fill in Spaces with Bottles per Test						
6/18/20	956	S			AA-MW-2 0-1'		1	1			436068
	1002	S			AA-MW-2 2-3'		1	1			436069
	1015	S			AA-MW-1 0-1'		1	1			436070
	1024	S			AA-MW-1 3-4'		1	1			436071
	1049	S			AA-MW-5 0-1'		1	1			436072
	1101	S			AA-MW-5 3-4'		1	1			436073
	1115	S			AA-MW-4 0-1'		1	1			436074
	1124	S			AA-MW-4 3-4'		1	1			436075
	1203	S			AA-MW-3 0-1'		1	1			436076
	1229	S			AA-MW-3 3-4'		1	1			436077
	1221				MeOH Blank		1	1			436078
	1049	S			AA-MW-5 0-1' Dup		1	1			436079

Relinquished By:	Date/Time	Received By:	Date/Time
Thomas Barick	6/22/2020 10:30	ellb 6-23-20	11:15
Received by:	Date/Time	Received for Laboratory by:	Date/Time
		ellb	6-23-2020 12:00

Lab Use Only
Ice Present (Yes) No
Temp 4.3 IR Gun 24
Cooler # 5626

August 13, 2020

Vista Work Order No. 2001346

Mr. Dennis Linley
C T Laboratories
1230 Lange Court
Baraboo, WI 53913-3109

Dear Mr. Linley,

Enclosed are the amended results for the sample set received at Vista Analytical Laboratory on June 23, 2020 under your Project Name 'WIANG Bldg 414'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier
Laboratory Director

Vista Work Order No. 2001346
Case Narrative

Sample Condition on Receipt:

Ten soil samples and three water samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology. This report was amended to revise the reporting format.

Analytical Notes:

PFAS Isotope Dilution Method

The samples were extracted and analyzed for a selected list of PFAS using Vista's PFAS Isotope Dilution Method. The results for PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Results for all other analytes include the linear isomers only.

Holding Times

The samples were extracted and analyzed within the EPA-recommended hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with each preparation batch. No analytes were detected in the Method Blanks above the Reporting Limit. The recovery of PFODA was less than 50% in the OPR associated with preparation batch B0F0279. The reported soil results for this analyte may be biased low. The recoveries of all other analytes were within the method acceptance criteria.

The internal standard recoveries outside the acceptance criteria are listed in the table below.

QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
2001346-06	AA-MW-5 3-4'	PFAS Isotope Dilution Method	13C2-PFHxDA	H	20.8
2001346-09	AA-MW-3 0-1'	PFAS Isotope Dilution Method	13C2-PFHxDA	H	12.7
2001346-10	AA-MW-3 3-4'	PFAS Isotope Dilution Method	13C2-PFHxDA	H	16.9
B0F0279-BLK1	B0F0279-BLK1	PFAS Isotope Dilution Method	d3-MeFOSA	H	5.60
B0F0279-BLK1	B0F0279-BLK1	PFAS Isotope Dilution Method	d5-EtFOSA	H	4.40
B0F0279-BLK1	B0F0279-BLK1	PFAS Isotope Dilution Method	13C2-PFHxDA	H	10.3
B0F0279-BS1	B0F0279-BS1	PFAS Isotope Dilution Method	d3-MeFOSA	H	6.10
B0F0279-BS1	B0F0279-BS1	PFAS Isotope Dilution Method	d5-EtFOSA	H	5.20

H = Recovery was outside laboratory acceptance criteria.

TABLE OF CONTENTS

Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
2001346-01	AA-MW-2 0-1'	18-Jun-20 09:56	23-Jun-20 10:05	HDPE Bottle, 250 mL
2001346-02	AA-MW-2 2-3'	18-Jun-20 10:02	23-Jun-20 10:05	HDPE Bottle, 250 mL
2001346-03	AA-MW-1 0-1'	18-Jun-20 10:15	23-Jun-20 10:05	HDPE Bottle, 250 mL
2001346-04	AA-MW-1 3-4'	18-Jun-20 10:24	23-Jun-20 10:05	HDPE Bottle, 250 mL
2001346-05	AA-MW-5 0-1'	18-Jun-20 10:49	23-Jun-20 10:05	HDPE Bottle, 250 mL
2001346-06	AA-MW-5 3-4'	18-Jun-20 11:01	23-Jun-20 10:05	HDPE Bottle, 250 mL
2001346-07	AA-MW-4 0-1'	18-Jun-20 11:15	23-Jun-20 10:05	HDPE Bottle, 250 mL
2001346-08	AA-MW-4 3-4'	18-Jun-20 11:24	23-Jun-20 10:05	HDPE Bottle, 250 mL
2001346-09	AA-MW-3 0-1'	18-Jun-20 12:03	23-Jun-20 10:05	HDPE Bottle, 250 mL
2001346-10	AA-MW-3 3-4'	18-Jun-20 12:29	23-Jun-20 10:05	HDPE Bottle, 250 mL
2001346-11	AA-MW-3-EB-S	18-Jun-20 14:41	23-Jun-20 10:05	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
2001346-12	Field Blank	18-Jun-20 13:00	23-Jun-20 10:05	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
2001346-13	Decon Water	18-Jun-20 16:15	23-Jun-20 10:05	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL

ANALYTICAL RESULTS

Sample ID: Method Blank

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Solid

Laboratory Data

Lab Sample: B0F0279-BLK1
Column: BEH C18

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.346	0.346	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFPeA	2706-90-3	<0.398	0.398	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFBS	375-73-5	<0.304	0.304	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
4:2 FTS	757124-72-4	<0.360	0.360	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFHxA	307-24-4	<0.216	0.216	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFPeS	2706-91-4	<0.658	0.658	1.00		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
HFPO-DA	13252-13-6	<1.18	1.18	1.50		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFHpA	375-85-9	<0.478	0.478	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
ADONA	919005-14-4	<0.340	0.340	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFHxS	355-46-4	<0.390	0.390	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
6:2 FTS	27619-97-2	<0.654	0.654	1.00		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFOA	335-67-1	<0.470	0.470	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFHpS	375-92-8	<0.738	0.738	1.00		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFNA	375-95-1	<0.312	0.312	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFOSA	754-91-6	<1.01	1.01	1.50		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFOS	1763-23-1	<0.430	0.430	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
9Cl-PF3ONS	756426-58-1	<0.370	0.370	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFDA	335-76-2	<0.452	0.452	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
8:2 FTS	39108-34-4	<0.722	0.722	1.00		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFNS	68259-12-1	<1.15	1.15	1.50		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
MeFOSAA	2355-31-9	<0.736	0.736	1.00		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
EtFOSAA	2991-50-6	<0.688	0.688	1.00		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFUnA	2058-94-8	<0.258	0.258	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFDS	335-77-3	<0.690	0.690	1.00		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
11Cl-PF3OUdS	763051-92-9	<0.722	0.722	1.00		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
10:2 FTS	120226-60-0	<1.02	1.02	1.50		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFDoA	307-55-1	<0.404	0.404	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
MeFOSA	31506-32-8	<5.78	5.78	10.0		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFTrDA	72629-94-8	<0.402	0.402	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFDoS	79780-39-5	<0.600	0.600	1.00		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFTeDA	376-06-7	<0.264	0.264	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
EtFOSA	4151-50-2	<3.84	3.84	10.0		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFHxDA	67905-19-5	<0.170	0.170	0.500		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
PFODA	16517-11-6	<0.500	0.500	1.00		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
MeFOSE	24448-09-7	<4.96	4.96	10.0		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
EtFOSE	1691-99-2	<5.38	5.38	10.0		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	101	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1

Sample ID: Method Blank

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Solid

Laboratory Data

Lab Sample: B0F0279-BLK1
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	85.7	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C3-PFBS	IS	96.4	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C3-HFPO-DA	IS	82.3	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C2-4:2 FTS	IS	97.1	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C2-PFHxA	IS	79.9	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C4-PFHpA	IS	82.6	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C3-PFHxS	IS	90.1	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C2-6:2 FTS	IS	89.6	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C5-PFNA	IS	84.3	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C8-PFOSA	IS	37.2	10 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C2-PFOA	IS	80.5	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C8-PFOS	IS	88.2	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C2-PFDA	IS	67.6	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C2-8:2 FTS	IS	80.4	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
d3-MeFOSAA	IS	52.1	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C2-PFUnA	IS	45.1	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
d5-EtFOSAA	IS	50.9	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C2-10:2 FTS	IS	74.8	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C2-PFDoA	IS	49.9	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
d3-MeFOSA	IS	5.60	10 - 150	H	B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C2-PFTeDA	IS	38.5	25 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
d5-EtFOSA	IS	4.40	10 - 150	H	B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
13C2-PFHxDA	IS	10.3	25 - 150	H	B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
d7-MeFOSE	IS	18.5	10 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1
d9-EtFOSE	IS	15.6	10 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:31	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: OPR **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Solid

Laboratory Data

Lab Sample: B0F0279-BS1
Column: BEH C18

Analyte	CAS Number	Amt Found (ng/g)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	1.81	2.00	90.4	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFPeA	2706-90-3	1.66	2.00	82.9	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFBS	375-73-5	1.93	2.00	96.5	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
4:2 FTS	757124-72-4	1.82	2.00	91.2	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFHxA	307-24-4	1.92	2.00	96.0	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFPeS	2706-91-4	1.60	2.00	79.9	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
HFPO-DA	13252-13-6	1.74	2.00	86.8	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFHpA	375-85-9	1.97	2.00	98.4	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
ADONA	919005-14-4	1.68	2.00	83.8	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFHxS	355-46-4	1.87	2.00	93.3	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
6:2 FTS	27619-97-2	2.05	2.00	103	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFOA	335-67-1	1.95	2.00	97.4	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFHpS	375-92-8	1.86	2.00	93.2	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFNA	375-95-1	1.95	2.00	97.6	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFOSA	754-91-6	1.99	2.00	99.5	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFOS	1763-23-1	1.68	2.00	84.0	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
9Cl-PF3ONS	756426-58-1	1.60	2.00	80.1	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFDA	335-76-2	1.92	2.00	95.9	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
8:2 FTS	39108-34-4	2.06	2.00	103	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFNS	68259-12-1	1.71	2.00	85.7	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
MeFOSAA	2355-31-9	1.45	2.00	72.3	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
EtFOSAA	2991-50-6	1.67	2.00	83.3	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFUnA	2058-94-8	2.05	2.00	102	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFDS	335-77-3	1.52	2.00	75.9	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
11Cl-PF3OUdS	763051-92-9	2.03	2.00	102	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
10:2 FTS	120226-60-0	1.94	2.00	96.8	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFDoA	307-55-1	1.84	2.00	92.1	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
MeFOSA	31506-32-8	8.84	10.0	88.4	50 - 150	J	B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFTrDA	72629-94-8	1.76	2.00	87.9	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFDoS	79780-39-5	1.83	2.00	91.3	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFTeDA	376-06-7	1.67	2.00	83.4	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
EtFOSA	4151-50-2	13.3	10.0	133	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFHxDA	67905-19-5	1.99	2.00	99.7	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
PFODA	16517-11-6	0.507	2.00	25.3	50 - 150	J, H	B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1

Sample ID: OPR **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Solid

Laboratory Data

Lab Sample: B0F0279-BS1
Column: BEH C18

Analyte	CAS Number	Amt Found (ng/g)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
MeFOSE	24448-09-7	9.92	10.0	99.2	50 - 150	J	B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
EtFOSE	1691-99-2	10.1	10.0	101	50 - 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
Labeled Standards		**Type**		**% Rec**	**Limits**	**Qualifiers**	**Batch**	**Extracted**	**Samp Size**	**Analyzed**	**Dilution**
13C3-PFBA		IS		96.3	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C3-PFPeA		IS		83.5	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C3-PFBS		IS		86.5	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C3-HFPO-DA		IS		81.0	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C2-4:2 FTS		IS		90.2	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C2-PFHxA		IS		78.6	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C4-PFHpA		IS		84.1	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C3-PFHxS		IS		81.8	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C2-6:2 FTS		IS		84.9	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C5-PFNA		IS		82.2	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C8-PFOSA		IS		33.3	10- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C2-PFOA		IS		82.6	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C8-PFOS		IS		85.0	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C2-PFDA		IS		65.5	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C2-8:2 FTS		IS		75.2	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
d3-MeFOSAA		IS		54.0	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C2-PFUnA		IS		52.4	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
d5-EtFOSAA		IS		46.6	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C2-10:2 FTS		IS		64.2	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C2-PFDoA		IS		55.5	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
d3-MeFOSA		IS		6.10	10- 150	H	B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C2-PFTeDA		IS		59.7	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
d5-EtFOSA		IS		5.20	10- 150	H	B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
13C2-PFHxDA		IS		45.5	25- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
d7-MeFOSE		IS		15.9	10- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1
d9-EtFOSE		IS		14.9	10- 150		B0F0279	08-Jul-20	1.00 g	11-Jul-20 01:42	1

Sample ID: Method Blank — **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Solid

Laboratory Data

Lab Sample: B0G0121-BLK1
Column: BEH C18

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFODA	16517-11-6	<0.500	0.500	1.00		B0G0121	15-Jul-20	1.00 g	17-Jul-20 22:28	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C2-PFHxDA	IS	53.6	25 - 150		B0G0121	15-Jul-20	1.00 g	17-Jul-20 22:28	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: OPR — **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Solid

Laboratory Data

Lab Sample: B0G0121-BS1
Column: BEH C18

Analyte	CAS Number	Amt Found (ng/g)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFODA	16517-11-6	1.04	1.00	104	50 - 150		B0G0121	15-Jul-20	1.00 g	17-Jul-20 22:39	1
Labeled Standards		**Type**		**% Rec**	**Limits**	**Qualifiers**	**Batch**	**Extracted**	**Samp Size**	**Analyzed**	**Dilution**
13C2-PFHxDA		IS		64.7	25 - 150		B0G0121	15-Jul-20	1.00 g	17-Jul-20 22:39	1

Sample ID: AA-MW-2 0-1'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 09:56

Laboratory Data

Lab Sample: 2001346-01
Date Received: 23-Jun-20 10:05
% Solids: 82.7
Column: BEH C18

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	0.438	0.332	0.480	J	B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFPeA	2706-90-3	1.10	0.382	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFBS	375-73-5	<0.292	0.292	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
4:2 FTS	757124-72-4	<0.345	0.345	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFHxA	307-24-4	0.842	0.207	0.480	Q	B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFPeS	2706-91-4	<0.631	0.631	0.959		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
HFPO-DA	13252-13-6	<1.13	1.13	1.44		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFHpA	375-85-9	<0.459	0.459	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
ADONA	919005-14-4	<0.326	0.326	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFHxS	355-46-4	6.45	0.374	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
6:2 FTS	27619-97-2	<0.627	0.627	0.959		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFOA	335-67-1	0.929	0.451	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFHpS	375-92-8	<0.708	0.708	0.959		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFNA	375-95-1	1.16	0.299	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFOSA	754-91-6	<0.967	0.967	1.44		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFOS	1763-23-1	97.2	0.413	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
9Cl-PF3ONS	756426-58-1	<0.355	0.355	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFDA	335-76-2	<0.434	0.434	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
8:2 FTS	39108-34-4	<0.693	0.693	0.959		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFNS	68259-12-1	<1.10	1.10	1.44		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
MeFOSAA	2355-31-9	<0.706	0.706	0.959		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
EtFOSAA	2991-50-6	<0.660	0.660	0.959		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFUnA	2058-94-8	<0.248	0.248	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFDS	335-77-3	<0.662	0.662	0.959		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
11Cl-PF3OUdS	763051-92-9	<0.693	0.693	0.959		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
10:2 FTS	120226-60-0	<0.975	0.975	1.44		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFDoA	307-55-1	<0.388	0.388	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
MeFOSA	31506-32-8	<5.54	5.54	9.59		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFTrDA	72629-94-8	<0.386	0.386	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFDoS	79780-39-5	<0.576	0.576	0.959		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFTeDA	376-06-7	<0.253	0.253	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
EtFOSA	4151-50-2	<3.68	3.68	9.59		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFHxDA	67905-19-5	<0.163	0.163	0.480		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
PFODA	16517-11-6	<0.480	0.480	0.959		B0G0121	15-Jul-20	1.26 g	17-Jul-20 22:50	1
MeFOSE	24448-09-7	<4.76	4.76	9.59		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
EtFOSE	1691-99-2	<5.16	5.16	9.59		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	75.7	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1

Sample ID: AA-MW-2 0-1'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 09:56

Laboratory Data

Lab Sample: 2001346-01
Date Received: 23-Jun-20 10:05
% Solids: 82.7
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	63.2	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C3-PFBS	IS	90.2	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C3-HFPO-DA	IS	64.6	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C2-4:2 FTS	IS	118	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C2-PFHxA	IS	68.5	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C4-PFHpA	IS	71.3	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C3-PFHxS	IS	95.0	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C2-6:2 FTS	IS	105	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C5-PFNA	IS	77.9	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C8-PFOSA	IS	52.9	10 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C2-PFOA	IS	66.6	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C8-PFOS	IS	81.3	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C2-PFDA	IS	69.6	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C2-8:2 FTS	IS	89.8	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
d3-MeFOSAA	IS	73.9	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C2-PFUnA	IS	63.8	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
d5-EtFOSAA	IS	64.9	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C2-10:2 FTS	IS	95.1	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C2-PFDoA	IS	65.9	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
d3-MeFOSA	IS	19.6	10 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C2-PFTeDA	IS	65.2	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
d5-EtFOSA	IS	22.0	10 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
13C2-PFHxDA	IS	46.3	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
d7-MeFOSE	IS	42.3	10 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1
d9-EtFOSE	IS	41.7	10 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 01:52	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: AA-MW-2 2-3'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 10:02

Laboratory Data

Lab Sample: 2001346-02
Date Received: 23-Jun-20 10:05
% Solids: 83.3
Column: BEH C18

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.346	0.346	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFPeA	2706-90-3	<0.398	0.398	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFBS	375-73-5	<0.304	0.304	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
4:2 FTS	757124-72-4	<0.360	0.360	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFHxA	307-24-4	<0.216	0.216	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFPeS	2706-91-4	<0.658	0.658	1.00		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
HFPO-DA	13252-13-6	<1.18	1.18	1.50		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFHpA	375-85-9	<0.478	0.478	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
ADONA	919005-14-4	<0.340	0.340	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFHxS	355-46-4	1.29	0.390	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
6:2 FTS	27619-97-2	<0.654	0.654	1.00		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFOA	335-67-1	<0.470	0.470	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFHpS	375-92-8	<0.738	0.738	1.00		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFNA	375-95-1	<0.312	0.312	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFOSA	754-91-6	<1.01	1.01	1.50		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFOS	1763-23-1	0.837	0.430	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
9Cl-PF3ONS	756426-58-1	<0.370	0.370	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFDA	335-76-2	<0.452	0.452	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
8:2 FTS	39108-34-4	<0.722	0.722	1.00		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFNS	68259-12-1	<1.15	1.15	1.50		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
MeFOSAA	2355-31-9	<0.736	0.736	1.00		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
EtFOSAA	2991-50-6	<0.688	0.688	1.00		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFUnA	2058-94-8	<0.258	0.258	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFDS	335-77-3	<0.690	0.690	1.00		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
11Cl-PF3OUdS	763051-92-9	<0.722	0.722	1.00		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
10:2 FTS	120226-60-0	<1.02	1.02	1.50		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFDoA	307-55-1	<0.404	0.404	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
MeFOSA	31506-32-8	<5.78	5.78	10.0		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFTrDA	72629-94-8	<0.402	0.402	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFDoS	79780-39-5	<0.600	0.600	1.00		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFTeDA	376-06-7	<0.264	0.264	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
EtFOSA	4151-50-2	<3.84	3.84	10.0		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFHxDA	67905-19-5	<0.170	0.170	0.500		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
PFODA	16517-11-6	<0.496	0.496	0.992		B0G0121	15-Jul-20	1.21 g	17-Jul-20 23:00	1
MeFOSE	24448-09-7	<4.96	4.96	10.0		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
EtFOSE	1691-99-2	<5.38	5.38	10.0		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	92.6	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1

Sample ID: AA-MW-2 2-3'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 10:02

Laboratory Data

Lab Sample: 2001346-02
Date Received: 23-Jun-20 10:05
% Solids: 83.3
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	82.3	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C3-PFBS	IS	94.6	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C3-HFPO-DA	IS	87.9	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C2-4:2 FTS	IS	102	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C2-PFHxA	IS	77.4	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C4-PFHpA	IS	80.2	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C3-PFHxS	IS	93.1	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C2-6:2 FTS	IS	94.5	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C5-PFNA	IS	75.2	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C8-PFOSA	IS	45.8	10 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C2-PFOA	IS	75.3	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C8-PFOS	IS	93.8	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C2-PFDA	IS	61.1	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C2-8:2 FTS	IS	83.6	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
d3-MeFOSAA	IS	68.9	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C2-PFUnA	IS	61.3	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
d5-EtFOSAA	IS	71.2	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C2-10:2 FTS	IS	88.9	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C2-PFDoA	IS	66.7	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
d3-MeFOSA	IS	19.0	10 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C2-PFTeDA	IS	66.6	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
d5-EtFOSA	IS	18.9	10 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
13C2-PFHxDA	IS	53.7	25 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
d7-MeFOSE	IS	35.6	10 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1
d9-EtFOSE	IS	32.7	10 - 150		B0F0279	08-Jul-20	1.20 g	11-Jul-20 02:02	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: AA-MW-1 0-1'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 10:15

Laboratory Data

Lab Sample: 2001346-03
Date Received: 23-Jun-20 10:05
% Solids: 92.4
Column: BEH C18

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.347	0.347	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFPeA	2706-90-3	<0.399	0.399	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFBS	375-73-5	<0.305	0.305	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
4:2 FTS	757124-72-4	<0.361	0.361	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFHxA	307-24-4	<0.217	0.217	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFPeS	2706-91-4	<0.660	0.660	1.00		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
HFPO-DA	13252-13-6	<1.18	1.18	1.50		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFHpA	375-85-9	<0.479	0.479	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
ADONA	919005-14-4	<0.341	0.341	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFHxS	355-46-4	1.71	0.391	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
6:2 FTS	27619-97-2	<0.656	0.656	1.00		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFOA	335-67-1	<0.471	0.471	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFHpS	375-92-8	<0.740	0.740	1.00		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFNA	375-95-1	<0.313	0.313	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFOSA	754-91-6	<1.01	1.01	1.50		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFOS	1763-23-1	11.2	0.431	0.501	Q	B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
9Cl-PF3ONS	756426-58-1	<0.371	0.371	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFDA	335-76-2	<0.453	0.453	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
8:2 FTS	39108-34-4	<0.724	0.724	1.00		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFNS	68259-12-1	<1.15	1.15	1.50		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
MeFOSAA	2355-31-9	<0.738	0.738	1.00		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
EtFOSAA	2991-50-6	<0.690	0.690	1.00		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFUnA	2058-94-8	<0.259	0.259	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFDS	335-77-3	<0.692	0.692	1.00		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
11Cl-PF3OUdS	763051-92-9	<0.724	0.724	1.00		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
10:2 FTS	120226-60-0	<1.02	1.02	1.50		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFDoA	307-55-1	<0.405	0.405	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
MeFOSA	31506-32-8	<5.79	5.79	10.0		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFTrDA	72629-94-8	<0.403	0.403	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFDoS	79780-39-5	<0.601	0.601	1.00		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFTeDA	376-06-7	<0.265	0.265	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
EtFOSA	4151-50-2	<3.85	3.85	10.0		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFHxDA	67905-19-5	<0.170	0.170	0.501		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
PFODA	16517-11-6	<0.488	0.488	0.975		B0G0121	15-Jul-20	1.11 g	17-Jul-20 23:11	1
MeFOSE	24448-09-7	<4.97	4.97	10.0		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
EtFOSE	1691-99-2	<5.39	5.39	10.0		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	95.0	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1

Sample ID: AA-MW-1 0-1'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 10:15

Laboratory Data

Lab Sample: 2001346-03
Date Received: 23-Jun-20 10:05
% Solids: 92.4
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	80.1	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C3-PFBS	IS	97.0	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C3-HFPO-DA	IS	90.1	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C2-4:2 FTS	IS	98.1	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C2-PFHxA	IS	81.3	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C4-PFHpA	IS	84.2	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C3-PFHxS	IS	99.7	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C2-6:2 FTS	IS	83.5	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C5-PFNA	IS	92.3	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C8-PFOSA	IS	55.4	10 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C2-PFOA	IS	81.3	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C8-PFOS	IS	93.2	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C2-PFDA	IS	78.0	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C2-8:2 FTS	IS	86.2	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
d3-MeFOSAA	IS	71.3	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C2-PFUnA	IS	66.0	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
d5-EtFOSAA	IS	63.8	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C2-10:2 FTS	IS	81.9	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C2-PFDoA	IS	69.3	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
d3-MeFOSA	IS	26.1	10 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C2-PFTeDA	IS	59.9	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
d5-EtFOSA	IS	26.6	10 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
13C2-PFHxDA	IS	41.4	25 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
d7-MeFOSE	IS	37.5	10 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1
d9-EtFOSE	IS	37.9	10 - 150		B0F0279	08-Jul-20	1.08 g	11-Jul-20 02:13	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: AA-MW-1 3-4'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 10:24

Laboratory Data

Lab Sample: 2001346-04
Date Received: 23-Jun-20 10:05
% Solids: 81.2
Column: BEH C18

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.338	0.338	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFPeA	2706-90-3	0.442	0.389	0.489	J	B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFBS	375-73-5	<0.297	0.297	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
4:2 FTS	757124-72-4	<0.352	0.352	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFHxA	307-24-4	0.476	0.211	0.489	J, Q	B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFPeS	2706-91-4	<0.643	0.643	0.977		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
HFPO-DA	13252-13-6	<1.15	1.15	1.47		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFHpA	375-85-9	<0.467	0.467	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
ADONA	919005-14-4	<0.332	0.332	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFHxS	355-46-4	3.26	0.381	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
6:2 FTS	27619-97-2	1.64	0.639	0.977		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFOA	335-67-1	<0.459	0.459	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFHpS	375-92-8	<0.721	0.721	0.977		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFNA	375-95-1	0.566	0.305	0.489	Q	B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFOSA	754-91-6	3.42	0.985	1.47		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFOS	1763-23-1	111	0.420	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
9Cl-PF3ONS	756426-58-1	<0.362	0.362	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFDA	335-76-2	<0.442	0.442	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
8:2 FTS	39108-34-4	2.31	0.706	0.977		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFNS	68259-12-1	<1.12	1.12	1.47		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
MeFOSAA	2355-31-9	<0.719	0.719	0.977		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
EtFOSAA	2991-50-6	<0.672	0.672	0.977		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFUnA	2058-94-8	<0.252	0.252	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFDS	335-77-3	<0.674	0.674	0.977		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
11Cl-PF3OUdS	763051-92-9	<0.706	0.706	0.977		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
10:2 FTS	120226-60-0	<0.993	0.993	1.47		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFDoA	307-55-1	<0.395	0.395	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
MeFOSA	31506-32-8	<5.65	5.65	9.77		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFTrDA	72629-94-8	<0.393	0.393	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFDoS	79780-39-5	<0.586	0.586	0.977		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFTeDA	376-06-7	<0.258	0.258	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
EtFOSA	4151-50-2	<3.75	3.75	9.77		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFHxDA	67905-19-5	<0.166	0.166	0.489		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
PFODA	16517-11-6	<0.501	0.501	1.00		B0G0121	15-Jul-20	1.23 g	17-Jul-20 23:53	1
MeFOSE	24448-09-7	<4.85	4.85	9.77		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
EtFOSE	1691-99-2	<5.26	5.26	9.77		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	88.6	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1

Sample ID: AA-MW-1 3-4'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 10:24

Laboratory Data

Lab Sample: 2001346-04
Date Received: 23-Jun-20 10:05
% Solids: 81.2
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	80.3	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C3-PFBS	IS	88.8	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C3-HFPO-DA	IS	74.8	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C2-4:2 FTS	IS	107	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C2-PFHxA	IS	76.8	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C4-PFHpA	IS	77.8	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C3-PFHxS	IS	92.6	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C2-6:2 FTS	IS	84.1	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C5-PFNA	IS	86.6	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C8-PFOSA	IS	55.4	10 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C2-PFOA	IS	76.2	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C8-PFOS	IS	75.9	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C2-PFDA	IS	71.7	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C2-8:2 FTS	IS	83.7	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
d3-MeFOSAA	IS	65.7	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C2-PFUnA	IS	66.5	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
d5-EtFOSAA	IS	64.7	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C2-10:2 FTS	IS	80.5	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C2-PFDoA	IS	67.6	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
d3-MeFOSA	IS	23.2	10 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C2-PFTeDA	IS	65.4	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
d5-EtFOSA	IS	24.1	10 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
13C2-PFHxDA	IS	42.4	25 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
d7-MeFOSE	IS	43.2	10 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1
d9-EtFOSE	IS	39.9	10 - 150		B0F0279	08-Jul-20	1.26 g	11-Jul-20 02:23	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: AA-MW-5 0-1'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 10:49

Laboratory Data

Lab Sample: 2001346-05
Date Received: 23-Jun-20 10:05
% Solids: 92.0
Column: BEH C18

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.333	0.333	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFPeA	2706-90-3	<0.383	0.383	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFBS	375-73-5	<0.292	0.292	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
4:2 FTS	757124-72-4	<0.346	0.346	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFHxA	307-24-4	<0.208	0.208	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFPeS	2706-91-4	<0.633	0.633	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
HFPO-DA	13252-13-6	<1.13	1.13	1.44		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFHpA	375-85-9	<0.460	0.460	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
ADONA	919005-14-4	<0.327	0.327	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFHxS	355-46-4	1.58	0.375	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
6:2 FTS	27619-97-2	<0.629	0.629	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFOA	335-67-1	<0.452	0.452	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFHpS	375-92-8	<0.710	0.710	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFNA	375-95-1	0.896	0.300	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFOSA	754-91-6	<0.969	0.969	1.44		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFOS	1763-23-1	47.3	0.414	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
9Cl-PF3ONS	756426-58-1	<0.356	0.356	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFDA	335-76-2	<0.435	0.435	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
8:2 FTS	39108-34-4	<0.694	0.694	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFNS	68259-12-1	<1.11	1.11	1.44		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
MeFOSAA	2355-31-9	<0.708	0.708	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
EtFOSAA	2991-50-6	<0.662	0.662	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFUnA	2058-94-8	<0.248	0.248	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFDS	335-77-3	<0.664	0.664	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
11Cl-PF3OUdS	763051-92-9	<0.694	0.694	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
10:2 FTS	120226-60-0	<0.977	0.977	1.44		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFDoA	307-55-1	<0.389	0.389	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
MeFOSA	31506-32-8	<5.56	5.56	9.62		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFTrDA	72629-94-8	<0.387	0.387	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFDoS	79780-39-5	<0.577	0.577	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFTeDA	376-06-7	<0.254	0.254	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
EtFOSA	4151-50-2	<3.69	3.69	9.62		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFHxDA	67905-19-5	<0.164	0.164	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
PFODA	16517-11-6	<0.494	0.494	0.988		B0G0121	15-Jul-20	1.10 g	18-Jul-20 00:04	1
MeFOSE	24448-09-7	<4.77	4.77	9.62		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
EtFOSE	1691-99-2	<5.17	5.17	9.62		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	84.2	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1

Sample ID: AA-MW-5 0-1'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 10:49

Laboratory Data

Lab Sample: 2001346-05
Date Received: 23-Jun-20 10:05
% Solids: 92.0
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	76.9	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C3-PFBS	IS	88.5	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C3-HFPO-DA	IS	76.6	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C2-4:2 FTS	IS	100	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C2-PFHxA	IS	75.2	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C4-PFHpA	IS	75.9	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C3-PFHxS	IS	90.4	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C2-6:2 FTS	IS	82.4	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C5-PFNA	IS	76.0	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C8-PFOSA	IS	47.6	10 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C2-PFOA	IS	73.6	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C8-PFOS	IS	88.2	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C2-PFDA	IS	69.5	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C2-8:2 FTS	IS	90.0	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
d3-MeFOSAA	IS	70.3	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C2-PFUnA	IS	66.2	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
d5-EtFOSAA	IS	71.5	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C2-10:2 FTS	IS	80.8	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C2-PFDoA	IS	65.7	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
d3-MeFOSA	IS	15.3	10 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C2-PFTeDA	IS	67.4	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
d5-EtFOSA	IS	15.3	10 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
13C2-PFHxDA	IS	56.7	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
d7-MeFOSE	IS	35.2	10 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1
d9-EtFOSE	IS	38.1	10 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:34	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: AA-MW-5 3-4'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 11:01

Laboratory Data

Lab Sample: 2001346-06
Date Received: 23-Jun-20 10:05
% Solids: 92.0
Column: BEH C18

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.333	0.333	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFPeA	2706-90-3	<0.383	0.383	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFBS	375-73-5	<0.292	0.292	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
4:2 FTS	757124-72-4	<0.346	0.346	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFHxA	307-24-4	<0.208	0.208	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFPeS	2706-91-4	<0.633	0.633	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
HFPO-DA	13252-13-6	<1.14	1.14	1.44		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFHpA	375-85-9	<0.460	0.460	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
ADONA	919005-14-4	<0.327	0.327	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFHxS	355-46-4	2.89	0.375	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
6:2 FTS	27619-97-2	<0.629	0.629	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFOA	335-67-1	<0.452	0.452	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFHpS	375-92-8	<0.710	0.710	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFNA	375-95-1	1.10	0.300	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFOSA	754-91-6	<0.970	0.970	1.44		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFOS	1763-23-1	82.9	0.414	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
9Cl-PF3ONS	756426-58-1	<0.356	0.356	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFDA	335-76-2	<0.435	0.435	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
8:2 FTS	39108-34-4	<0.694	0.694	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFNS	68259-12-1	<1.11	1.11	1.44		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
MeFOSAA	2355-31-9	<0.708	0.708	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
EtFOSAA	2991-50-6	<0.662	0.662	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFUnA	2058-94-8	<0.248	0.248	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFDS	335-77-3	<0.664	0.664	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
11Cl-PF3OUdS	763051-92-9	<0.694	0.694	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
10:2 FTS	120226-60-0	<0.977	0.977	1.44		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFDoA	307-55-1	<0.389	0.389	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
MeFOSA	31506-32-8	<5.56	5.56	9.62		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFTrDA	72629-94-8	<0.387	0.387	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFDoS	79780-39-5	<0.577	0.577	0.962		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFTeDA	376-06-7	<0.254	0.254	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
EtFOSA	4151-50-2	<3.69	3.69	9.62		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFHxDA	67905-19-5	<0.164	0.164	0.481		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
PFODA	16517-11-6	<0.499	0.499	0.997		B0G0121	15-Jul-20	1.09 g	18-Jul-20 00:14	1
MeFOSE	24448-09-7	<4.77	4.77	9.62		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
EtFOSE	1691-99-2	<5.18	5.18	9.62		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	95.3	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1

Sample ID: AA-MW-5 3-4'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 11:01

Laboratory Data

Lab Sample: 2001346-06
Date Received: 23-Jun-20 10:05
% Solids: 92.0
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	85.8	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C3-PFBS	IS	93.4	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C3-HFPO-DA	IS	74.2	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C2-4:2 FTS	IS	103	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C2-PFHxA	IS	82.3	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C4-PFHpA	IS	84.9	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C3-PFHxS	IS	90.2	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C2-6:2 FTS	IS	94.5	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C5-PFNA	IS	76.5	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C8-PFOSA	IS	43.5	10 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C2-PFOA	IS	76.4	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C8-PFOS	IS	81.1	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C2-PFDA	IS	66.7	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C2-8:2 FTS	IS	80.0	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
d3-MeFOSAA	IS	60.6	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C2-PFUnA	IS	59.3	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
d5-EtFOSAA	IS	60.1	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C2-10:2 FTS	IS	73.1	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C2-PFDoA	IS	58.9	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
d3-MeFOSA	IS	14.9	10 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C2-PFTeDA	IS	43.9	25 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
d5-EtFOSA	IS	14.5	10 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
13C2-PFHxDA	IS	20.8	25 - 150	H	B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
d7-MeFOSE	IS	30.0	10 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1
d9-EtFOSE	IS	31.5	10 - 150		B0F0279	08-Jul-20	1.13 g	11-Jul-20 02:44	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: AA-MW-4 0-1'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 11:15

Laboratory Data

Lab Sample: 2001346-07
Date Received: 23-Jun-20 10:05
% Solids: 87.4
Column: BEH C18

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.347	0.347	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFPeA	2706-90-3	0.495	0.400	0.502	J	B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFBS	375-73-5	<0.305	0.305	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
4:2 FTS	757124-72-4	<0.362	0.362	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFHxA	307-24-4	0.333	0.217	0.502	J, Q	B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFPeS	2706-91-4	<0.661	0.661	1.00		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
HFPO-DA	13252-13-6	<1.18	1.18	1.51		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFHpA	375-85-9	<0.480	0.480	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
ADONA	919005-14-4	<0.341	0.341	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFHxS	355-46-4	0.965	0.392	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
6:2 FTS	27619-97-2	0.881	0.657	1.00	J	B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFOA	335-67-1	<0.472	0.472	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFHpS	375-92-8	<0.741	0.741	1.00		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFNA	375-95-1	<0.313	0.313	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFOSA	754-91-6	2.37	1.01	1.51		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFOS	1763-23-1	28.8	0.432	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
9Cl-PF3ONS	756426-58-1	<0.372	0.372	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFDA	335-76-2	<0.454	0.454	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
8:2 FTS	39108-34-4	0.737	0.725	1.00	J	B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFNS	68259-12-1	<1.15	1.15	1.51		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
MeFOSAA	2355-31-9	<0.739	0.739	1.00		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
EtFOSAA	2991-50-6	<0.691	0.691	1.00		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFUnA	2058-94-8	<0.259	0.259	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFDS	335-77-3	<0.693	0.693	1.00		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
11Cl-PF3OUdS	763051-92-9	<0.725	0.725	1.00		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
10:2 FTS	120226-60-0	<1.02	1.02	1.51		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFDoA	307-55-1	<0.406	0.406	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
MeFOSA	31506-32-8	<5.80	5.80	10.0		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFTrDA	72629-94-8	<0.404	0.404	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFDoS	79780-39-5	<0.603	0.603	1.00		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFTeDA	376-06-7	<0.265	0.265	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
EtFOSA	4151-50-2	<3.86	3.86	10.0		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFHxDA	67905-19-5	<0.171	0.171	0.502		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
PFODA	16517-11-6	<0.498	0.498	0.995		B0G0121	15-Jul-20	1.15 g	18-Jul-20 00:25	1
MeFOSE	24448-09-7	<4.98	4.98	10.0		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
EtFOSE	1691-99-2	<5.40	5.40	10.0		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	102	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1

Sample ID: AA-MW-4 0-1'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 11:15

Laboratory Data

Lab Sample: 2001346-07
Date Received: 23-Jun-20 10:05
% Solids: 87.4
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	89.8	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C3-PFBS	IS	94.7	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C3-HFPO-DA	IS	86.8	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C2-4:2 FTS	IS	112	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C2-PFHxA	IS	83.2	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C4-PFHpA	IS	89.2	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C3-PFHxS	IS	85.0	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C2-6:2 FTS	IS	89.0	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C5-PFNA	IS	86.2	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C8-PFOSA	IS	54.3	10 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C2-PFOA	IS	85.4	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C8-PFOS	IS	89.7	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C2-PFDA	IS	77.4	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C2-8:2 FTS	IS	68.7	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
d3-MeFOSAA	IS	75.5	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C2-PFUnA	IS	69.8	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
d5-EtFOSAA	IS	70.1	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C2-10:2 FTS	IS	87.0	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C2-PFDoA	IS	83.1	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
d3-MeFOSA	IS	26.1	10 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C2-PFTeDA	IS	76.6	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
d5-EtFOSA	IS	29.1	10 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
13C2-PFHxDA	IS	53.8	25 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
d7-MeFOSE	IS	39.7	10 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1
d9-EtFOSE	IS	39.2	10 - 150		B0F0279	08-Jul-20	1.14 g	11-Jul-20 02:54	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: AA-MW-4 3-4'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 11:24

Laboratory Data

Lab Sample: 2001346-08
Date Received: 23-Jun-20 10:05
% Solids: 78.0
Column: BEH C18

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.341	0.341	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFPeA	2706-90-3	0.621	0.392	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFBS	375-73-5	<0.300	0.300	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
4:2 FTS	757124-72-4	<0.355	0.355	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFHxA	307-24-4	0.382	0.213	0.493	J, Q	B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFPeS	2706-91-4	<0.649	0.649	0.986		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
HFPO-DA	13252-13-6	<1.16	1.16	1.48		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFHpA	375-85-9	<0.471	0.471	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
ADONA	919005-14-4	<0.335	0.335	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFHxS	355-46-4	3.05	0.385	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
6:2 FTS	27619-97-2	<0.645	0.645	0.986		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFOA	335-67-1	<0.463	0.463	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFHpS	375-92-8	<0.728	0.728	0.986		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFNA	375-95-1	0.338	0.308	0.493	J	B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFOSA	754-91-6	<0.994	0.994	1.48		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFOS	1763-23-1	65.8	0.424	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
9Cl-PF3ONS	756426-58-1	<0.365	0.365	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFDA	335-76-2	0.534	0.446	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
8:2 FTS	39108-34-4	<0.712	0.712	0.986		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFNS	68259-12-1	<1.13	1.13	1.48		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
MeFOSAA	2355-31-9	<0.726	0.726	0.986		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
EtFOSAA	2991-50-6	<0.678	0.678	0.986		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFUnA	2058-94-8	<0.254	0.254	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFDS	335-77-3	<0.680	0.680	0.986		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
11Cl-PF3OUdS	763051-92-9	<0.712	0.712	0.986		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
10:2 FTS	120226-60-0	<1.00	1.00	1.48		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFDoA	307-55-1	<0.398	0.398	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
MeFOSA	31506-32-8	<5.70	5.70	9.86		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFTrDA	72629-94-8	<0.396	0.396	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFDoS	79780-39-5	<0.592	0.592	0.986		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFTeDA	376-06-7	<0.260	0.260	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
EtFOSA	4151-50-2	<3.79	3.79	9.86		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFHxDA	67905-19-5	<0.168	0.168	0.493		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
PFODA	16517-11-6	<0.486	0.486	0.971		B0G0121	15-Jul-20	1.32 g	18-Jul-20 00:35	1
MeFOSE	24448-09-7	<4.89	4.89	9.86		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
EtFOSE	1691-99-2	<5.30	5.30	9.86		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	83.9	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1

Sample ID: AA-MW-4 3-4'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 11:24

Laboratory Data

Lab Sample: 2001346-08
Date Received: 23-Jun-20 10:05
% Solids: 78.0
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	76.6	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C3-PFBS	IS	93.5	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C3-HFPO-DA	IS	70.5	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C2-4:2 FTS	IS	116	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C2-PFHxA	IS	67.3	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C4-PFHpA	IS	80.4	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C3-PFHxS	IS	87.8	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C2-6:2 FTS	IS	96.1	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C5-PFNA	IS	76.4	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C8-PFOSA	IS	47.0	10 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C2-PFOA	IS	74.3	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C8-PFOS	IS	78.6	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C2-PFDA	IS	72.1	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C2-8:2 FTS	IS	88.4	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
d3-MeFOSAA	IS	72.4	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C2-PFUnA	IS	59.4	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
d5-EtFOSAA	IS	66.5	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C2-10:2 FTS	IS	73.5	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C2-PFDoA	IS	66.0	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
d3-MeFOSA	IS	21.1	10 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C2-PFTeDA	IS	60.6	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
d5-EtFOSA	IS	24.3	10 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
13C2-PFHxDA	IS	55.6	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
d7-MeFOSE	IS	38.3	10 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1
d9-EtFOSE	IS	41.8	10 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:26	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: AA-MW-3 0-1'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 12:03

Laboratory Data

Lab Sample: 2001346-09
Date Received: 23-Jun-20 10:05
% Solids: 90.6
Column: BEH C18

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.347	0.347	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFPeA	2706-90-3	<0.399	0.399	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFBS	375-73-5	<0.305	0.305	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
4:2 FTS	757124-72-4	<0.361	0.361	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFHxA	307-24-4	<0.217	0.217	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFPeS	2706-91-4	<0.660	0.660	1.00		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
HFPO-DA	13252-13-6	<1.18	1.18	1.51		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFHpA	375-85-9	<0.480	0.480	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
ADONA	919005-14-4	<0.341	0.341	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFHxS	355-46-4	1.08	0.391	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
6:2 FTS	27619-97-2	<0.656	0.656	1.00		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFOA	335-67-1	<0.472	0.472	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFHpS	375-92-8	<0.741	0.741	1.00		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFNA	375-95-1	<0.313	0.313	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFOSA	754-91-6	<1.01	1.01	1.51		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFOS	1763-23-1	9.67	0.431	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
9Cl-PF3ONS	756426-58-1	<0.371	0.371	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFDA	335-76-2	<0.454	0.454	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
8:2 FTS	39108-34-4	<0.724	0.724	1.00		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFNS	68259-12-1	<1.15	1.15	1.51		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
MeFOSAA	2355-31-9	<0.739	0.739	1.00		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
EtFOSAA	2991-50-6	<0.690	0.690	1.00		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFUnA	2058-94-8	<0.259	0.259	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFDS	335-77-3	<0.692	0.692	1.00		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
11Cl-PF3OUdS	763051-92-9	<0.724	0.724	1.00		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
10:2 FTS	120226-60-0	<1.02	1.02	1.51		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFDoA	307-55-1	<0.405	0.405	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
MeFOSA	31506-32-8	<5.80	5.80	10.0		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFTrDA	72629-94-8	<0.403	0.403	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFDoS	79780-39-5	<0.602	0.602	1.00		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFTeDA	376-06-7	<0.265	0.265	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
EtFOSA	4151-50-2	<3.85	3.85	10.0		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFHxDA	67905-19-5	<0.171	0.171	0.502		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
PFODA	16517-11-6	<0.480	0.480	0.960		B0G0121	15-Jul-20	1.15 g	18-Jul-20 00:46	1
MeFOSE	24448-09-7	<4.98	4.98	10.0		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
EtFOSE	1691-99-2	<5.40	5.40	10.0		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	104	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1

Sample ID: AA-MW-3 0-1'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 12:03

Laboratory Data

Lab Sample: 2001346-09
Date Received: 23-Jun-20 10:05
% Solids: 90.6
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	90.3	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C3-PFBS	IS	97.9	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C3-HFPO-DA	IS	83.0	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C2-4:2 FTS	IS	121	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C2-PFHxA	IS	84.0	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C4-PFHpA	IS	83.8	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C3-PFHxS	IS	102	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C2-6:2 FTS	IS	96.4	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C5-PFNA	IS	93.6	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C8-PFOSA	IS	55.7	10 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C2-PFOA	IS	85.4	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C8-PFOS	IS	94.9	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C2-PFDA	IS	80.7	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C2-8:2 FTS	IS	93.3	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
d3-MeFOSAA	IS	71.7	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C2-PFUnA	IS	71.1	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
d5-EtFOSAA	IS	70.6	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C2-10:2 FTS	IS	84.4	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C2-PFDoA	IS	66.9	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
d3-MeFOSA	IS	24.5	10 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C2-PFTeDA	IS	48.4	25 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
d5-EtFOSA	IS	25.5	10 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
13C2-PFHxDA	IS	12.7	25 - 150	H	B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
d7-MeFOSE	IS	38.0	10 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1
d9-EtFOSE	IS	35.9	10 - 150		B0F0279	08-Jul-20	1.10 g	11-Jul-20 03:36	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: AA-MW-3 3-4'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 12:29

Laboratory Data

Lab Sample: 2001346-10
Date Received: 23-Jun-20 10:05
% Solids: 77.4
Column: BEH C18

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.344	0.344	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFPeA	2706-90-3	<0.396	0.396	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFBS	375-73-5	<0.302	0.302	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
4:2 FTS	757124-72-4	<0.358	0.358	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFHxA	307-24-4	<0.215	0.215	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFPeS	2706-91-4	<0.654	0.654	0.994		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
HFPO-DA	13252-13-6	<1.17	1.17	1.49		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFHpA	375-85-9	<0.475	0.475	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
ADONA	919005-14-4	<0.338	0.338	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFHxS	355-46-4	2.86	0.388	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
6:2 FTS	27619-97-2	<0.650	0.650	0.994		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFOA	335-67-1	<0.467	0.467	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFHpS	375-92-8	<0.733	0.733	0.994		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFNA	375-95-1	<0.310	0.310	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFOSA	754-91-6	<1.00	1.00	1.49		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFOS	1763-23-1	7.16	0.427	0.497	Q	B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
9Cl-PF3ONS	756426-58-1	<0.368	0.368	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFDA	335-76-2	<0.449	0.449	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
8:2 FTS	39108-34-4	<0.718	0.718	0.994		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFNS	68259-12-1	<1.14	1.14	1.49		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
MeFOSAA	2355-31-9	<0.732	0.732	0.994		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
EtFOSAA	2991-50-6	<0.684	0.684	0.994		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFUnA	2058-94-8	<0.256	0.256	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFDS	335-77-3	<0.686	0.686	0.994		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
11Cl-PF3OUdS	763051-92-9	<0.718	0.718	0.994		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
10:2 FTS	120226-60-0	<1.01	1.01	1.49		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFDoA	307-55-1	<0.402	0.402	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
MeFOSA	31506-32-8	<5.74	5.74	9.94		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFTrDA	72629-94-8	<0.400	0.400	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFDoS	79780-39-5	<0.596	0.596	0.994		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFTeDA	376-06-7	<0.262	0.262	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
EtFOSA	4151-50-2	<3.82	3.82	9.94		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFHxDA	67905-19-5	<0.169	0.169	0.497		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
PFODA	16517-11-6	<0.493	0.493	0.986		B0G0121	15-Jul-20	1.31 g	18-Jul-20 00:56	1
MeFOSE	24448-09-7	<4.93	4.93	9.94		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
EtFOSE	1691-99-2	<5.35	5.35	9.94		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	99.9	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1

Sample ID: AA-MW-3 3-4'

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Soil
Date Collected: 18-Jun-20 12:29

Laboratory Data

Lab Sample: 2001346-10
Date Received: 23-Jun-20 10:05
% Solids: 77.4
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	89.7	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C3-PFBS	IS	103	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C3-HFPO-DA	IS	83.2	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C2-4:2 FTS	IS	105	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C2-PFHxA	IS	88.5	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C4-PFHpA	IS	93.6	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C3-PFHxS	IS	104	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C2-6:2 FTS	IS	98.5	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C5-PFNA	IS	86.9	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C8-PFOSA	IS	55.6	10 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C2-PFOA	IS	90.8	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C8-PFOS	IS	103	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C2-PFDA	IS	76.5	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C2-8:2 FTS	IS	92.5	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
d3-MeFOSAA	IS	71.5	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C2-PFUnA	IS	63.7	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
d5-EtFOSAA	IS	64.6	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C2-10:2 FTS	IS	77.1	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C2-PFDoA	IS	63.2	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
d3-MeFOSA	IS	20.4	10 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C2-PFTeDA	IS	37.9	25 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
d5-EtFOSA	IS	20.1	10 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
13C2-PFHxDA	IS	16.9	25 - 150	H	B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
d7-MeFOSE	IS	37.8	10 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1
d9-EtFOSE	IS	36.9	10 - 150		B0F0279	08-Jul-20	1.30 g	11-Jul-20 03:46	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: Method Blank

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Aqueous

Laboratory Data

Lab Sample: B0F0250-BLK1
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.365	0.365	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFPeA	2706-90-3	<0.640	0.640	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFBS	375-73-5	<0.895	0.895	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
4:2 FTS	757124-72-4	<0.695	0.695	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFHxA	307-24-4	<1.09	1.09	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFPeS	2706-91-4	<1.21	1.21	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
HFPO-DA	13252-13-6	<2.41	2.41	2.50		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFHpA	375-85-9	<0.296	0.296	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
ADONA	919005-14-4	<0.361	0.361	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFHxS	355-46-4	<0.474	0.474	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
6:2 FTS	27619-97-2	<1.00	1.00	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFOA	335-67-1	<0.326	0.326	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFHpS	375-92-8	<0.469	0.469	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFNA	375-95-1	<0.405	0.405	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFOSA	754-91-6	<0.885	0.885	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFOS	1763-23-1	<0.404	0.404	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
9Cl-PF3ONS	756426-58-1	<0.725	0.725	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFDA	335-76-2	<0.745	0.745	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
8:2 FTS	39108-34-4	<1.03	1.03	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFNS	68259-12-1	<1.94	1.94	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
MeFOSAA	2355-31-9	<0.825	0.825	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
EtFOSAA	2991-50-6	<0.685	0.685	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFUnA	2058-94-8	<0.525	0.525	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFDS	335-77-3	<0.615	0.615	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
11Cl-PF3OUdS	763051-92-9	<1.21	1.21	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
10:2 FTS	120226-60-0	<1.57	1.57	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFDoA	307-55-1	<0.396	0.396	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
MeFOSA	31506-32-8	<1.92	1.92	10.0		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFTrDA	72629-94-8	<0.247	0.247	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFDoS	79780-39-5	<2.09	2.09	2.50		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFTeDA	376-06-7	<0.378	0.378	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
EtFOSA	4151-50-2	<2.56	2.56	10.0		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFHxDA	67905-19-5	<0.147	0.147	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFODA	16517-11-6	<3.07	3.07	3.50		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
MeFOSE	24448-09-7	<3.04	3.04	10.0		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
EtFOSE	1691-99-2	<4.72	4.72	10.0		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	89.4	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1

Sample ID: Method Blank

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Aqueous

Laboratory Data

Lab Sample: B0F0250-BLK1
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	81.2	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C3-PFBS	IS	82.2	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C3-HFPO-DA	IS	75.9	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-4:2 FTS	IS	86.2	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFHxA	IS	79.0	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C4-PFHpA	IS	82.2	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C3-PFHxS	IS	86.9	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-6:2 FTS	IS	85.2	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C5-PFNA	IS	82.6	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C8-PFOSA	IS	36.0	10 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFOA	IS	85.9	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C8-PFOS	IS	79.6	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFDA	IS	79.8	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-8:2 FTS	IS	80.9	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
d3-MeFOSAA	IS	72.1	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFUnA	IS	80.6	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
d5-EtFOSAA	IS	65.7	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-10:2 FTS	IS	74.4	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFDoA	IS	76.3	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
d3-MeFOSA	IS	17.4	10 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFTeDA	IS	66.1	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
d5-EtFOSA	IS	16.8	10 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFHxDA	IS	57.2	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
d7-MeFOSE	IS	27.0	10 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
d9-EtFOSE	IS	26.6	10 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1

MDL - Method Detection Limit RL - Reporting limit Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: OPR **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414

Matrix: Aqueous

Laboratory Data

Lab Sample: B0F0250-BS1 Column: BEH C18

Analyte	CAS Number	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	8.28	8.00	104	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFPeA	2706-90-3	8.04	8.00	100	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFBS	375-73-5	8.50	8.00	106	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
4:2 FTS	757124-72-4	8.23	8.00	103	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFHxA	307-24-4	7.97	8.00	99.7	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFPeS	2706-91-4	7.44	8.00	93.0	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
HFPO-DA	13252-13-6	9.42	8.00	118	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFHpA	375-85-9	8.00	8.00	100	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
ADONA	919005-14-4	8.47	8.00	106	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFHxS	355-46-4	7.85	8.00	98.1	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
6:2 FTS	27619-97-2	7.84	8.00	98.0	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFOA	335-67-1	7.63	8.00	95.4	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFHpS	375-92-8	7.69	8.00	96.1	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFNA	375-95-1	7.68	8.00	96.1	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFOSA	754-91-6	7.97	8.00	99.6	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFOS	1763-23-1	8.02	8.00	100	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
9Cl-PF3ONS	756426-58-1	8.55	8.00	107	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFDA	335-76-2	7.86	8.00	98.2	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
8:2 FTS	39108-34-4	7.17	8.00	89.7	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFNS	68259-12-1	7.97	8.00	99.6	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
MeFOSAA	2355-31-9	7.17	8.00	89.6	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
EtFOSAA	2991-50-6	8.41	8.00	105	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFUnA	2058-94-8	8.14	8.00	102	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFDS	335-77-3	7.59	8.00	94.9	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
11Cl-PF3OUdS	763051-92-9	8.12	8.00	102	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
10:2 FTS	120226-60-0	8.95	8.00	112	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFDoA	307-55-1	7.83	8.00	97.8	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
MeFOSA	31506-32-8	42.6	40.0	106	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFTrDA	72629-94-8	7.74	8.00	96.8	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFDoS	79780-39-5	8.97	8.00	112	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFTeDA	376-06-7	7.84	8.00	97.9	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
EtFOSA	4151-50-2	44.0	40.0	110	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFHxDA	67905-19-5	7.89	8.00	98.6	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFODA	16517-11-6	6.38	8.00	79.8	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1

Sample ID: OPR **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414

Matrix: Aqueous

Laboratory Data

Lab Sample: B0F0250-BS1 Column: BEH C18

Analyte	CAS Number	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
MeFOSE	24448-09-7	40.2	40.0	100	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
EtFOSE	1691-99-2	33.6	40.0	84.1	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
Labeled Standards		**Type**		**% Rec**	**Limits**	**Qualifiers**	**Batch**	**Extracted**	**Samp Size**	**Analyzed**	**Dilution**
13C3-PFBA		IS		88.4	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C3-PFPeA		IS		83.8	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C3-PFBS		IS		89.3	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C3-HFPO-DA		IS		77.0	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-4:2 FTS		IS		88.3	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFHxA		IS		84.6	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C4-PFHpA		IS		87.0	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C3-PFHxS		IS		94.4	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-6:2 FTS		IS		92.6	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C5-PFNA		IS		92.2	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C8-PFOSA		IS		34.7	10- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFOA		IS		92.6	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C8-PFOS		IS		83.0	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFDA		IS		82.1	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-8:2 FTS		IS		82.9	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
d3-MeFOSAA		IS		80.6	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFUnA		IS		80.3	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
d5-EtFOSAA		IS		71.4	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-10:2 FTS		IS		73.2	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFDoA		IS		76.2	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
d3-MeFOSA		IS		15.8	10- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFTeDA		IS		69.8	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
d5-EtFOSA		IS		14.4	10- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFHxDA		IS		64.1	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
d7-MeFOSE		IS		24.3	10- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
d9-EtFOSE		IS		26.6	10- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1

Sample ID: AA-MW-3-EB-S

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Water
Date Collected: 18-Jun-20 14:41

Laboratory Data

Lab Sample: 2001346-11
Date Received: 23-Jun-20 10:05
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.371	0.371	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFPeA	2706-90-3	<0.651	0.651	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFBS	375-73-5	<0.910	0.910	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
4:2 FTS	757124-72-4	<0.707	0.707	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFHxA	307-24-4	<1.11	1.11	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFPeS	2706-91-4	<1.23	1.23	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
HFPO-DA	13252-13-6	<2.45	2.45	2.54		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFHpA	375-85-9	<0.301	0.301	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
ADONA	919005-14-4	<0.367	0.367	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFHxS	355-46-4	<0.482	0.482	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
6:2 FTS	27619-97-2	<1.02	1.02	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFOA	335-67-1	<0.331	0.331	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFHpS	375-92-8	<0.477	0.477	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFNA	375-95-1	<0.412	0.412	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFOSA	754-91-6	<0.900	0.900	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFOS	1763-23-1	0.768	0.410	2.03	J	B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
9Cl-PF3ONS	756426-58-1	<0.738	0.738	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFDA	335-76-2	<0.758	0.758	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
8:2 FTS	39108-34-4	<1.05	1.05	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFNS	68259-12-1	<1.97	1.97	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
MeFOSAA	2355-31-9	<0.839	0.839	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
EtFOSAA	2991-50-6	<0.697	0.697	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFUnA	2058-94-8	<0.534	0.534	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFDS	335-77-3	<0.626	0.626	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
11Cl-PF3OUdS	763051-92-9	<1.23	1.23	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
10:2 FTS	120226-60-0	<1.59	1.59	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFDoA	307-55-1	<0.403	0.403	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
MeFOSA	31506-32-8	<1.95	1.95	10.2		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFTrDA	72629-94-8	<0.251	0.251	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFDoS	79780-39-5	<2.12	2.12	2.54		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFTeDA	376-06-7	<0.384	0.384	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
EtFOSA	4151-50-2	<2.60	2.60	10.2		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFHxDA	67905-19-5	<0.150	0.150	2.03		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
PFODA	16517-11-6	<3.12	3.12	3.56		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
MeFOSE	24448-09-7	<3.09	3.09	10.2		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
EtFOSE	1691-99-2	<4.80	4.80	10.2		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	81.5	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1

Sample ID: AA-MW-3-EB-S

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Water
Date Collected: 18-Jun-20 14:41

Laboratory Data

Lab Sample: 2001346-11
Date Received: 23-Jun-20 10:05
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	80.9	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C3-PFBS	IS	82.1	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C3-HFPO-DA	IS	72.6	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C2-4:2 FTS	IS	83.9	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C2-PFHxA	IS	78.2	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C4-PFHpA	IS	80.3	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C3-PFHxS	IS	84.7	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C2-6:2 FTS	IS	79.8	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C5-PFNA	IS	82.1	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C8-PFOSA	IS	35.3	10 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C2-PFOA	IS	83.9	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C8-PFOS	IS	80.2	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C2-PFDA	IS	78.7	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C2-8:2 FTS	IS	74.5	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
d3-MeFOSAA	IS	76.9	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C2-PFUnA	IS	74.7	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
d5-EtFOSAA	IS	61.0	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C2-10:2 FTS	IS	69.4	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C2-PFDoA	IS	70.6	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
d3-MeFOSA	IS	11.1	10 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C2-PFTeDA	IS	64.7	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
d5-EtFOSA	IS	10.6	10 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
13C2-PFHxDA	IS	59.7	25 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
d7-MeFOSE	IS	30.7	10 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1
d9-EtFOSE	IS	30.7	10 - 150		B0F0250	11-Jul-20	0.246 L	13-Jul-20 23:07	1

MDL - Method Detection Limit RL - Reporting limit Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: Field Blank

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Water
Date Collected: 18-Jun-20 13:00

Laboratory Data

Lab Sample: 2001346-12
Date Received: 23-Jun-20 10:05
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.373	0.373	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFPeA	2706-90-3	<0.654	0.654	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFBS	375-73-5	<0.915	0.915	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
4:2 FTS	757124-72-4	<0.710	0.710	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFHxA	307-24-4	<1.11	1.11	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFPeS	2706-91-4	<1.24	1.24	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
HFPO-DA	13252-13-6	<2.46	2.46	2.56		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFHpA	375-85-9	<0.302	0.302	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
ADONA	919005-14-4	<0.369	0.369	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFHxS	355-46-4	<0.484	0.484	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
6:2 FTS	27619-97-2	<1.02	1.02	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFOA	335-67-1	<0.333	0.333	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFHpS	375-92-8	<0.479	0.479	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFNA	375-95-1	<0.414	0.414	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFOSA	754-91-6	<0.905	0.905	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFOS	1763-23-1	<0.412	0.412	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
9Cl-PF3ONS	756426-58-1	<0.741	0.741	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFDA	335-76-2	<0.761	0.761	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
8:2 FTS	39108-34-4	<1.05	1.05	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFNS	68259-12-1	<1.98	1.98	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
MeFOSAA	2355-31-9	<0.843	0.843	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
EtFOSAA	2991-50-6	<0.700	0.700	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFUnA	2058-94-8	<0.537	0.537	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFDS	335-77-3	<0.629	0.629	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
11Cl-PF3OUdS	763051-92-9	<1.23	1.23	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
10:2 FTS	120226-60-0	<1.60	1.60	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFDoA	307-55-1	<0.405	0.405	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
MeFOSA	31506-32-8	<1.96	1.96	10.2		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFTrDA	72629-94-8	<0.252	0.252	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFDoS	79780-39-5	<2.13	2.13	2.56		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFTeDA	376-06-7	<0.386	0.386	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
EtFOSA	4151-50-2	<2.61	2.61	10.2		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFHxDA	67905-19-5	<0.150	0.150	2.04		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
PFODA	16517-11-6	<3.14	3.14	3.58		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
MeFOSE	24448-09-7	<3.10	3.10	10.2		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
EtFOSE	1691-99-2	<4.82	4.82	10.2		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	93.8	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1

Sample ID: Field Blank

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Water
Date Collected: 18-Jun-20 13:00

Laboratory Data

Lab Sample: 2001346-12
Date Received: 23-Jun-20 10:05
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	83.5	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C3-PFBS	IS	86.8	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C3-HFPO-DA	IS	81.3	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C2-4:2 FTS	IS	83.3	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C2-PFHxA	IS	82.2	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C4-PFHpA	IS	87.5	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C3-PFHxS	IS	93.0	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C2-6:2 FTS	IS	82.8	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C5-PFNA	IS	93.6	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C8-PFOSA	IS	43.5	10 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C2-PFOA	IS	90.3	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C8-PFOS	IS	86.8	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C2-PFDA	IS	86.1	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C2-8:2 FTS	IS	86.1	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
d3-MeFOSAA	IS	74.7	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C2-PFUnA	IS	86.1	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
d5-EtFOSAA	IS	69.6	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C2-10:2 FTS	IS	75.9	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C2-PFDoA	IS	75.5	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
d3-MeFOSA	IS	23.5	10 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C2-PFTeDA	IS	70.2	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
d5-EtFOSA	IS	21.6	10 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
13C2-PFHxDA	IS	56.7	25 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
d7-MeFOSE	IS	36.1	10 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1
d9-EtFOSE	IS	36.1	10 - 150		B0F0250	11-Jul-20	0.245 L	13-Jul-20 23:17	1

MDL - Method Detection Limit RL - Reporting limit Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: Decon Water

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Water
Date Collected: 18-Jun-20 16:15

Laboratory Data

Lab Sample: 2001346-13
Date Received: 23-Jun-20 10:05
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.354	0.354	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFPeA	2706-90-3	<0.621	0.621	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFBS	375-73-5	<0.869	0.869	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
4:2 FTS	757124-72-4	<0.675	0.675	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFHxA	307-24-4	<1.06	1.06	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFPeS	2706-91-4	<1.17	1.17	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
HFPO-DA	13252-13-6	<2.34	2.34	2.43		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFHpA	375-85-9	<0.287	0.287	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
ADONA	919005-14-4	<0.350	0.350	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFHxS	355-46-4	<0.460	0.460	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
6:2 FTS	27619-97-2	<0.971	0.971	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFOA	335-67-1	1.23	0.316	1.94	J, Q	B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFHpS	375-92-8	<0.455	0.455	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFNA	375-95-1	<0.393	0.393	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFOSA	754-91-6	14.9	0.859	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFOS	1763-23-1	0.864	0.392	1.94	J	B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
9Cl-PF3ONS	756426-58-1	<0.704	0.704	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFDA	335-76-2	<0.723	0.723	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
8:2 FTS	39108-34-4	<1.00	1.00	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFNS	68259-12-1	<1.88	1.88	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
MeFOSAA	2355-31-9	<0.801	0.801	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
EtFOSAA	2991-50-6	<0.665	0.665	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFUnA	2058-94-8	<0.510	0.510	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFDS	335-77-3	<0.597	0.597	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
11Cl-PF3OUdS	763051-92-9	<1.17	1.17	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
10:2 FTS	120226-60-0	<1.52	1.52	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFDoA	307-55-1	<0.384	0.384	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
MeFOSA	31506-32-8	<1.86	1.86	9.71		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFTrDA	72629-94-8	<0.240	0.240	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFDoS	79780-39-5	<2.02	2.02	2.43		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFTeDA	376-06-7	<0.366	0.366	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
EtFOSA	4151-50-2	<2.48	2.48	9.71		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFHxDA	67905-19-5	<0.143	0.143	1.94		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
PFODA	16517-11-6	<2.98	2.98	3.40		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
MeFOSE	24448-09-7	<2.95	2.95	9.71		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
EtFOSE	1691-99-2	<4.58	4.58	9.71		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	67.5	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1

Sample ID: Decon Water

PFAS Isotope Dilution Method

Client Data

Name: C T Laboratories
Project: WIANG Bldg 414
Matrix: Water
Date Collected: 18-Jun-20 16:15

Laboratory Data

Lab Sample: 2001346-13
Date Received: 23-Jun-20 10:05
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	78.1	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C3-PFBS	IS	78.6	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C3-HFPO-DA	IS	70.2	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C2-4:2 FTS	IS	79.8	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C2-PFHxA	IS	76.7	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C4-PFHpA	IS	81.7	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C3-PFHxS	IS	79.4	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C2-6:2 FTS	IS	82.9	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C5-PFNA	IS	81.3	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C8-PFOSA	IS	47.4	10 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C2-PFOA	IS	83.8	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C8-PFOS	IS	80.9	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C2-PFDA	IS	77.9	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C2-8:2 FTS	IS	81.9	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
d3-MeFOSAA	IS	69.9	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C2-PFUnA	IS	73.5	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
d5-EtFOSAA	IS	65.4	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C2-10:2 FTS	IS	66.5	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C2-PFDoA	IS	64.8	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
d3-MeFOSA	IS	25.7	10 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C2-PFTeDA	IS	66.0	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
d5-EtFOSA	IS	24.2	10 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
13C2-PFHxDA	IS	52.1	25 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
d7-MeFOSE	IS	41.5	10 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1
d9-EtFOSE	IS	41.1	10 - 150		B0F0250	11-Jul-20	0.258 L	13-Jul-20 23:28	1

MDL - Method Detection Limit RL - Reporting limit Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank
Conc.	Concentration
CRS	Cleanup Recovery Standard
D	Dilution
DL	Detection Limit
E	The associated compound concentration exceeded the calibration range of the instrument
H	Recovery and/or RPD was outside laboratory acceptance limits
I	Chemical Interference
IS	Internal Standard
J	The amount detected is below the Reporting Limit/LOQ
LOD	Limit of Detection
LOQ	Limit of Quantitation
M	Estimated Maximum Possible Concentration (CA Region 2 projects only)
MDL	Method Detection Limit
NA	Not applicable
ND	Not Detected
OPR	Ongoing Precision and Recovery sample
P	The reported concentration may include contribution from chlorinated diphenyl ether(s).
Q	The ion transition ratio is outside of the acceptance criteria.
RL	Reporting Limit
TEQ	Toxic Equivalency
U	Not Detected (specific projects only)
*	See Cover Letter

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

Vista Analytical Laboratory Certifications

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
Arkansas Department of Environmental Quality	19-013-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-23
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2018017
Massachusetts Department of Environmental Protection	N/A
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	1521520
New Hampshire Environmental Accreditation Program	207718-B
New Jersey Department of Environmental Protection	190001
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-010
Pennsylvania Department of Environmental Protection	016
Texas Commission on Environmental Quality	T104704189-19-10
Vermont Department of Health	VT-4042
Virginia Department of General Services	10272
Washington Department of Ecology	C584-19
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	**Method**
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA TO-9A

MATRIX: Biological Tissue	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	**Method**
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613/1613B
1,4-Dioxane (1,4-Diethyleneoxide) analysis by GC/HRMS	EPA 522
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	ISO 25101 2009

MATRIX: Non-Potable Water	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	**Method**
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

Rev. 02/2017

CHAIN OF CUSTODY

2001346 3.1°C

Page _____ of _____

Company: Ayres Associates
Project Contact: Jeff Steiner
Telephone: 608 443 1200
Project Name: WIANG Bldg 414
Project #:
Location: Truax Field/Madison, WI
Sampled By: Thomas Gaieck, Emily Thompson

CT LABORATORIES

1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Lab Use Only
Place Header Sticker Here:

Program:
QSM RCRA SDWA NPDES
Solid Waste Other _____

PO #

Report To:
EMAIL: steinerj@ayresassociates.com
Company: Ayres Associates
Address: 5301 E. Terrace Dr #200 Madison WI 53718

Invoice To:*
EMAIL:
Company: Same As Above
Address:

**Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions*

Client Special Instructions

Matrix:
GW – groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

Turnaround Time
Normal RUSH*
Date Needed: _____
Rush analysis requires prior CT Laboratories' approval
Surcharges:
24 hr 200%
2-3 days 100%
4-9 days 50%

Collection Date	Collection Time	Matrix	Grab/ Comp	Sample #	Sample ID Description	Filtered? Y/N	PFAS	Total # Containers	Designated MS/MSD	CT Lab ID # (Lab use only)
							Fill in Spaces with Bottles per Test			
6/18/20	956	S			AA-MW-2 0-1'		1			
	1002	S			AA-MW-2 2-3'		1			
	1015	S			AA-MW-1 0-1'		1			
	1024	S			AA-MW-1 3-4'		1			
	1049	S			AA-MW-5 0-1'		1			
	1101	S			AA-MW-5 3-4'		1			
	1115	S			AA-MW-4 0-1'		1			
	1124	S			AA-MW-4 3-4'		1			
	1203	S			AA-MW-3 0-1'		1			
	1229	S			AA-MW-3 3-4'		1			
	1441	Water			AA-MW-3-EB-S		2			
	1300	Water			Field Blank		2			
	1615	Water			Deep Water		2			

Relinquished By: Thomas Gaieck
Date/Time: 6/22/20 3:30
Received by:
Date/Time

Received By:
Date/Time: 06/23/20 1005
Received for Laboratory by:
Date/Time

Lab Use Only
Ice Present Yes No
Temp _____ IR Gun _____
Cooler # _____

Vista Analytical Laboratory

Sample Log-In Checklist

Page # 1 of 1

Vista Work Order #: 2001346 TAT std

Samples Arrival:	**Date/Time** 06/23/20 1005		**Initials:** WS			**Location:** WR-2 **Shelf/Rack:** N/a	
Delivered By:	FedEx	UPS	On Trac	GSO	DHL	Hand Delivered	Other
Preservation:	Ice		Blue Ice		Dry Ice		None
Temp °C: 3.1 (uncorrected) **Temp °C:** 3.1 (corrected)			**Probe used: Y / N**			**Thermometer ID:** IR-4	

	YES	NO	NA
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Airbill — Trk # 3941 1531 3256	✓		
Shipping Documentation Present?	✓		
Shipping Container: Vista / Client / Retain / Return / Dispose			
Chain of Custody / Sample Documentation Present?	✓		
Chain of Custody / Sample Documentation Complete?	✓		
Holding Time Acceptable?	✓		

Logged In:	**Date/Time** 06/23/20 1409	**Initials:** WS	**Location:** R-13, WR-2 **Shelf/Rack:** a-3, a-3, a-4		
COC Anomaly/Sample Acceptance Form completed?				✓	✓

Comments:

CoC/Label Reconciliation Report WO# 2001346

LabNumber	CoC Sample ID		SampleAlias	Sample Date/Time		Container	BaseMatrix	Sample Comments
2001346-01	A AA-MW-2 0-1'	☑		18-Jun-20 09:56	☑	HDPE Bottle, 250 mL	Solid	
2001346-02	A AA-MW-2 2-3'	☑		18-Jun-20 10:02	☑	HDPE Bottle, 250 mL	Solid	
2001346-03	A AA-MW-1 0-1'	☑		18-Jun-20 10:15	☑	HDPE Bottle, 250 mL	Solid	
2001346-04	A AA-MW-1 3-4'	☑		18-Jun-20 10:24	☑	HDPE Bottle, 250 mL	Solid	
2001346-05	A AA-MW-5 0-1'	☑		18-Jun-20 10:49	☑	HDPE Bottle, 250 mL	Solid	
2001346-06	A AA-MW-5 3-4'	☑		18-Jun-20 11:01	☑	HDPE Bottle, 250 mL	Solid	
2001346-07	A AA-MW-4 0-1'	☑		18-Jun-20 11:15	☑	HDPE Bottle, 250 mL	Solid	
2001346-08	A AA-MW-4 3-4'	☑		18-Jun-20 11:24	☐	HDPE Bottle, 250 mL	Solid	
2001346-09	A AA-MW-3 0-1'	☑		18-Jun-20 12:03	☑	HDPE Bottle, 250 mL	Solid	
2001346-10	A AA-MW-3 3-4'	☑		18-Jun-20 12:29	☑	HDPE Bottle, 250 mL	Solid	
2001346-11	A AA-MW-3-EB-S	☐ *		18-Jun-20 14:41	☐ *1	HDPE Bottle, 250 mL	Aqueous	
2001346-11	B AA-MW-3-EB-S	☐		18-Jun-20 14:41	☐	HDPE Bottle, 250 mL	Aqueous	
2001346-12	A Field Blank	☑		18-Jun-20 13:00	☑	HDPE Bottle, 250 mL	Aqueous	
2001346-12	B Field Blank	☑		18-Jun-20 13:00	☑	HDPE Bottle, 250 mL	Aqueous	
2001346-13	A Decon Water	☑		18-Jun-20 16:15	☑	HDPE Bottle, 250 mL	Aqueous	
2001346-13	B Decon Water	☑		18-Jun-20 16:15	☑	HDPE Bottle, 250 mL	Aqueous	

Checkmarks indicate that information on the COC reconciled with the sample label.
Any discrepancies are noted in the following columns.

	Yes	No	NA
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Adequate Sample Volume?	✓		
Container Type Appropriate for Analysis(es)	✓		
Preservation Documented: Na2S2O3 Trizma (None) Other		✓	✓
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

Comments: * COC ID: AA-MW-3-EB-S
Label ID: MW-3-EB-S

*1 COC Time: 14:41
label Time: 11:41

Verifed by/Date: KA 06/23/2020

Appendix D

Low Flow Sampling Stabilization Logs

Low-Flow Test Report:

Test Date / Time: 6/25/2020 9:39:11 AM
Project: WIANG - Truax
Operator Name: Jeff Steiner

Location Name: AA-MW-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 4.7 ft** **Total Depth: 9.7 ft** **Initial Depth to Water: 5.09 ft**	**Pump Type: Peristaltic** **Tubing Type: HDPE** **Pump Intake From TOC: 2 ft** **Estimated Total Volume Pumped: 4295 ml** **Flow Cell Volume: 130 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 600** **Serial Number: 746952**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10	+/- 10	+/- 6	
6/25/2020 9:39 AM	00:00	7.16 pH	60.74 °F	830.19 µS/cm	0.20 mg/L	26.71 NTU	-72.5 mV	61.08 in	100.00 ml/min
6/25/2020 9:42 AM	03:00	7.21 pH	58.85 °F	837.81 µS/cm	0.17 mg/L	24.67 NTU	-94.1 mV	61.08 in	100.00 ml/min
6/25/2020 10:10 AM	30:57	6.89 pH	58.04 °F	843.55 µS/cm	2.70 mg/L	12.97 NTU	-65.9 mV	61.08 in	100.00 ml/min
6/25/2020 10:13 AM	33:57	6.86 pH	57.79 °F	843.66 µS/cm	0.17 mg/L	0.00 NTU	-79.1 mV	61.08 in	100.00 ml/min
6/25/2020 10:16 AM	36:57	6.85 pH	57.89 °F	845.46 µS/cm	0.12 mg/L	0.00 NTU	-84.0 mV	61.08 in	100.00 ml/min
6/25/2020 10:19 AM	39:57	6.83 pH	57.88 °F	849.71 µS/cm	0.11 mg/L	0.00 NTU	-85.8 mV	61.08 in	100.00 ml/min
6/25/2020 10:22 AM	42:57	6.83 pH	58.23 °F	846.70 µS/cm	0.07 mg/L	0.00 NTU	-85.8 mV	61.08 in	100.00 ml/min

Samples

Sample ID:	Description:
AA-MW-1	PFAS, VOC

Low-Flow Test Report:

Test Date / Time: 6/25/2020 8:31:44 AM
Project: WIANG - Truax (2)
Operator Name: Jeff Steiner

Location Name: AA-MW-2 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 4.75 ft** **Total Depth: 9.75 ft** **Initial Depth to Water: 3.89 ft**	**Pump Type: Peristaltic** **Tubing Type: HDPE** **Pump Intake From TOC: 2 ft** **Estimated Total Volume Pumped: 2946.667 ml** **Flow Cell Volume: 130 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 600** **Serial Number: 746952**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10	+/- 10	+/- 6	
6/25/2020 8:31 AM	00:00	6.62 pH	60.19 °F	784.69 µS/cm	0.48 mg/L	87.48 NTU	-14.7 mV	46.68 in	100.00 ml/min
6/25/2020 8:34 AM	03:00	6.64 pH	59.14 °F	772.18 µS/cm	0.21 mg/L	60.77 NTU	-22.3 mV	46.68 in	100.00 ml/min
6/25/2020 8:37 AM	06:00	6.65 pH	59.67 °F	768.61 µS/cm	0.37 mg/L	56.25 NTU	-40.6 mV	46.68 in	100.00 ml/min
6/25/2020 8:40 AM	08:28	6.65 pH	59.76 °F	772.96 µS/cm	0.43 mg/L	50.74 NTU	-47.6 mV	46.68 in	100.00 ml/min
6/25/2020 8:43 AM	11:28	6.63 pH	59.94 °F	770.89 µS/cm	0.29 mg/L	41.60 NTU	-56.7 mV	46.68 in	100.00 ml/min
6/25/2020 8:46 AM	14:28	6.62 pH	60.05 °F	767.85 µS/cm	0.33 mg/L	34.70 NTU	-58.7 mV	46.68 in	100.00 ml/min
6/25/2020 8:49 AM	17:28	6.62 pH	59.93 °F	767.91 µS/cm	0.26 mg/L	29.08 NTU	-61.4 mV	46.68 in	100.00 ml/min
6/25/2020 8:52 AM	20:28	6.62 pH	59.92 °F	766.23 µS/cm	0.31 mg/L	23.81 NTU	-63.3 mV	46.68 in	100.00 ml/min
6/25/2020 8:55 AM	23:28	6.62 pH	60.41 °F	764.73 µS/cm	0.25 mg/L	17.95 NTU	-58.9 mV	46.68 in	100.00 ml/min
6/25/2020 8:58 AM	26:28	6.62 pH	60.86 °F	768.28 µS/cm	0.25 mg/L	11.43 NTU	-56.0 mV	46.68 in	100.00 ml/min
6/25/2020 9:01 AM	29:28	6.64 pH	60.76 °F	768.30 µS/cm	0.23 mg/L	11.11 NTU	-57.0 mV	46.68 in	100.00 ml/min

Samples

Sample ID:	Description:
AA-MW-2	PFAS, VOC

Low-Flow Test Report:

Test Date / Time: 6/25/2020 7:59:28 AM
Project: WIANG - Truax (3)
Operator Name: Jeff Steiner

Location Name: AA-MW-3 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 5 ft** **Total Depth: 10 ft** **Initial Depth to Water: 4.31 ft**	**Pump Type: Peristaltic** **Tubing Type: HDPE** **Pump Intake From TOC: 2 ft** **Estimated Total Volume Pumped: 2206.667 ml** **Flow Cell Volume: 130 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 600** **Serial Number: 746952**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10	+/- 10	+/- 0.5	
6/25/2020 7:59 AM	00:00	6.94 pH	65.03 °F	556.87 µS/cm	0.39 mg/L	36.33 NTU	-78.0 mV	4.31 ft	100.00 ml/min
6/25/2020 8:02 AM	03:00	6.90 pH	64.53 °F	549.89 µS/cm	0.23 mg/L	32.16 NTU	-70.5 mV	4.31 ft	100.00 ml/min
6/25/2020 8:05 AM	06:00	6.86 pH	64.18 °F	573.50 µS/cm	0.17 mg/L	11.65 NTU	-61.3 mV	4.31 ft	100.00 ml/min
6/25/2020 8:08 AM	09:00	6.84 pH	64.29 °F	544.08 µS/cm	0.09 mg/L	12.23 NTU	-57.2 mV	4.31 ft	100.00 ml/min
6/25/2020 8:11 AM	12:00	6.83 pH	64.45 °F	542.79 µS/cm	0.08 mg/L	6.12 NTU	-55.9 mV	4.31 ft	100.00 ml/min
6/25/2020 8:14 AM	15:00	6.81 pH	64.67 °F	546.35 µS/cm	0.08 mg/L	5.02 NTU	-53.6 mV	4.31 ft	100.00 ml/min
6/25/2020 8:15 AM	16:04	6.81 pH	64.66 °F	544.95 µS/cm	0.08 mg/L	5.00 NTU	-52.5 mV	4.31 ft	100.00 ml/min
6/25/2020 8:18 AM	19:04	6.80 pH	64.65 °F	545.15 µS/cm	0.07 mg/L	4.24 NTU	-52.6 mV	4.31 ft	100.00 ml/min
6/25/2020 8:21 AM	22:04	6.81 pH	64.72 °F	543.28 µS/cm	0.07 mg/L	4.76 NTU	-53.3 mV	4.31 ft	100.00 ml/min

Samples

Sample ID:	Description:
AA-MW-3	PFAS , VOC

Low-Flow Test Report:

Test Date / Time: 6/25/2020 9:12:41 AM
Project: WIANG - Truax (4)
Operator Name: Jeff Steiner

Location Name: AA-MW-4 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 4.9 ft** **Total Depth: 9.9 ft** **Initial Depth to Water: 4.62 ft**	**Pump Type: Peristaltic** **Tubing Type: HDPE** **Pump Intake From TOC: 2 ft** **Estimated Total Volume Pumped: 1403.333 ml** **Flow Cell Volume: 130 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 600** **Serial Number: 746952**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10	+/- 10	+/- 6	
6/25/2020 9:12 AM	00:00	6.77 pH	62.48 °F	648.82 µS/cm	0.31 mg/L	2.68 NTU	-27.4 mV	55.44 in	100.00 ml/min
6/25/2020 9:15 AM	03:00	6.79 pH	62.63 °F	649.00 µS/cm	0.24 mg/L	1.16 NTU	-33.9 mV	55.44 in	100.00 ml/min
6/25/2020 9:18 AM	06:00	6.81 pH	62.47 °F	652.48 µS/cm	0.19 mg/L	0.00 NTU	-44.0 mV	55.44 in	100.00 ml/min
6/25/2020 9:21 AM	09:00	6.83 pH	62.91 °F	654.86 µS/cm	0.18 mg/L	0.00 NTU	-45.8 mV	55.44 in	100.00 ml/min
6/25/2020 9:22 AM	10:17	6.83 pH	63.10 °F	654.28 µS/cm	0.13 mg/L	0.00 NTU	-46.4 mV	55.44 in	100.00 ml/min
6/25/2020 9:23 AM	11:02	6.84 pH	62.80 °F	655.39 µS/cm	0.23 mg/L	0.00 NTU	-49.2 mV	55.44 in	100.00 ml/min
6/25/2020 9:26 AM	14:02	6.86 pH	62.89 °F	657.03 µS/cm	0.16 mg/L	0.00 NTU	-50.3 mV	55.44 in	100.00 ml/min

Samples

Sample ID:	Description:
AA-MW-4	PFAS, VOC

Low-Flow Test Report:

Test Date / Time: 6/25/2020 10:40:54 AM
Project: WIANG - Truax (5)
Operator Name: Jeff Steiner

Location Name: AA-MW-5 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 4.9 ft** **Total Depth: 9.9 ft** **Initial Depth to Water: 4.66 ft**	**Pump Type: Peristaltic** **Tubing Type: HDPE** **Pump Intake From TOC: 2 ft** **Estimated Total Volume Pumped: 1500 ml** **Flow Cell Volume: 130 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 600** **Serial Number: 746952**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10	+/- 10	+/- 6	
6/25/2020 10:40 AM	00:00	6.81 pH	60.85 °F	727.53 µS/cm	0.51 mg/L	9.41 NTU	-43.2 mV	55.92 in	100.00 ml/min
6/25/2020 10:43 AM	03:00	6.86 pH	60.17 °F	724.57 µS/cm	0.21 mg/L	5.14 NTU	-52.6 mV	55.92 in	100.00 ml/min
6/25/2020 10:46 AM	06:00	6.90 pH	60.01 °F	723.90 µS/cm	0.17 mg/L	6.49 NTU	-60.0 mV	55.92 in	100.00 ml/min
6/25/2020 10:49 AM	09:00	6.94 pH	59.75 °F	721.05 µS/cm	0.13 mg/L	6.50 NTU	-66.1 mV	55.92 in	100.00 ml/min
6/25/2020 10:52 AM	12:00	6.97 pH	59.78 °F	726.12 µS/cm	0.11 mg/L	4.62 NTU	-70.3 mV	55.92 in	100.00 ml/min
6/25/2020 10:55 AM	15:00	7.01 pH	59.69 °F	730.56 µS/cm	0.10 mg/L	5.12 NTU	-73.1 mV	55.92 in	100.00 ml/min

Samples

Sample ID:	Description:
AA-MW-5	PFAS, VOC

Calibration Report

Instrument	Aqua TROLL 600
Serial Number	746952
Created	6/25/2020

Sensor	**Conductivity**
Serial Number	678395
Last Calibrated	6/25/2020

Calibration Details

TDS Conversion Factor (ppm)	0.65
Cell Constant	0.955
Reference Temperature	25.00 °C

Pre Measurement

Actual Conductivity	7,262.4 µS/cm
Specific Conductivity	7,605.3 µS/cm

Post Measurement

Actual Conductivity	7,639.3 µS/cm
Specific Conductivity	8,000.0 µS/cm

Sensor	**pH/ORP**
Serial Number	723343
Last Calibrated	6/25/2020

Calibration Details

Calibration Point 1

pH of Buffer	7.00 pH
pH mV	-4.6 mV
Temperature	22.64 °C

Pre Measurement

pH	7.04 pH
pH mV	-4.6 mV

Post Measurement

pH	7.00 pH
pH mV	-4.6 mV

Slope and Offset 1

Slope	-58.69 mV/pH
Offset	-4.6 mV

ORP

ORP Solution	Quick-Cal
Offset	10.0 mV
Temperature	22.64 °C
Pre Measurement	217.1 mV
Post Measurement	227.1 mV

Sensor	**RDO**
Serial Number	682829
Last Calibrated	5/20/2020

Calibration Details

Slope	1.029031
Offset	0.00 mg/L

Calibration point 100%

Concentration	6.63 mg/L
Temperature	24.57 °C
Barometric Pressure	835.89 mbar

Sensor	**Turbidity**
Serial Number	696723
Last Calibrated	Factory Defaults

Sensor	**Barometric Pressure**
Serial Number	746952
Last Calibrated	Factory Defaults

Appendix E
Laboratory Analytical Reports for Groundwater Samples

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

ANALYTICAL REPORT

AYRES ASSOCIATES
JEFF STEINER
5201 EAST TERRACE DR
SUITE 200
MADISON, WI 53718

Project Name: TRUAX BLDG 414
Project Phase: WI ANG MADISON, WI
Contract #: 1452
Project #: 51-0444.10
Folder #: 154334
Purchase Order #:

Arrival Temperature: See COC
Report Date: 07/10/2020
Date Received: 06/26/2020
Reprint Date: 07/10/2020

CT LAB Sample#: 438628 Sample Description: AA-MW-3 Sampled: 06/25/2020 0930

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Organic Results										
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1			07/08/2020 11:33	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1			07/08/2020 11:33	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1			07/08/2020 11:33	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1			07/08/2020 11:33	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1			07/08/2020 11:33	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1			07/08/2020 11:33	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1			07/08/2020 11:33	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1			07/08/2020 11:33	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1			07/08/2020 11:33	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1			07/08/2020 11:33	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1			07/08/2020 11:33	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438628 Sample Description: AA-MW-3 Sampled: 06/25/2020 0930

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1			07/08/2020 11:33	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1			07/08/2020 11:33	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1			07/08/2020 11:33	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1			07/08/2020 11:33	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1			07/08/2020 11:33	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1			07/08/2020 11:33	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1			07/08/2020 11:33	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1			07/08/2020 11:33	RLD	EPA 8260C
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1			07/08/2020 11:33	RLD	EPA 8260C
Acetone	<4.0	ug/L	4.0	12	1			07/08/2020 11:33	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1			07/08/2020 11:33	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1			07/08/2020 11:33	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1			07/08/2020 11:33	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1			07/08/2020 11:33	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1			07/08/2020 11:33	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1			07/08/2020 11:33	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1			07/08/2020 11:33	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1			07/08/2020 11:33	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1			07/08/2020 11:33	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1			07/08/2020 11:33	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438628 Sample Description: AA-MW-3 Sampled: 06/25/2020 0930

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1			07/08/2020 11:33	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1			07/08/2020 11:33	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.3	1			07/08/2020 11:33	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1			07/08/2020 11:33	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1			07/08/2020 11:33	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1			07/08/2020 11:33	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	1.5	1			07/08/2020 11:33	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1			07/08/2020 11:33	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1			07/08/2020 11:33	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1			07/08/2020 11:33	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1			07/08/2020 11:33	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1			07/08/2020 11:33	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1			07/08/2020 11:33	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1			07/08/2020 11:33	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1			07/08/2020 11:33	RLD	EPA 8260C
Toluene	<0.21	ug/L	0.21	0.69	1			07/08/2020 11:33	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1			07/08/2020 11:33	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1			07/08/2020 11:33	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1			07/08/2020 11:33	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438628 Sample Description: AA-MW-3 Sampled: 06/25/2020 0930

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1			07/08/2020 11:33	RLD	EPA 8260C
Vinyl acetate	<5.0	ug/L	5.0	17	1			07/08/2020 11:33	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1			07/08/2020 11:33	RLD	EPA 8260C

CT LAB Sample#: 438629 Sample Description: AA-MW-2 Sampled: 06/25/2020 1015

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Organic Results										
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1			07/08/2020 12:03	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1			07/08/2020 12:03	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1			07/08/2020 12:03	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1			07/08/2020 12:03	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1			07/08/2020 12:03	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1			07/08/2020 12:03	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1			07/08/2020 12:03	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1			07/08/2020 12:03	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1			07/08/2020 12:03	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1			07/08/2020 12:03	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1			07/08/2020 12:03	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1			07/08/2020 12:03	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438629 Sample Description: AA-MW-2 Sampled: 06/25/2020 1015

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1			07/08/2020 12:03	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1			07/08/2020 12:03	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1			07/08/2020 12:03	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1			07/08/2020 12:03	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1			07/08/2020 12:03	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1			07/08/2020 12:03	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1			07/08/2020 12:03	RLD	EPA 8260C
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1			07/08/2020 12:03	RLD	EPA 8260C
Acetone	**4.1**	ug/L	4.0 *	12	1			07/08/2020 12:03	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1			07/08/2020 12:03	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1			07/08/2020 12:03	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1			07/08/2020 12:03	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1			07/08/2020 12:03	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1			07/08/2020 12:03	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1			07/08/2020 12:03	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1			07/08/2020 12:03	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1			07/08/2020 12:03	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1			07/08/2020 12:03	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1			07/08/2020 12:03	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1			07/08/2020 12:03	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438629 Sample Description: AA-MW-2 Sampled: 06/25/2020 1015

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1			07/08/2020 12:03	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.3	1			07/08/2020 12:03	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1			07/08/2020 12:03	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1			07/08/2020 12:03	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1			07/08/2020 12:03	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	1.5	1			07/08/2020 12:03	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1			07/08/2020 12:03	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1			07/08/2020 12:03	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1			07/08/2020 12:03	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1			07/08/2020 12:03	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1			07/08/2020 12:03	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1			07/08/2020 12:03	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1			07/08/2020 12:03	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1			07/08/2020 12:03	RLD	EPA 8260C
Toluene	<0.21	ug/L	0.21	0.69	1			07/08/2020 12:03	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1			07/08/2020 12:03	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1			07/08/2020 12:03	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:03	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1			07/08/2020 12:03	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438629 Sample Description: AA-MW-2 Sampled: 06/25/2020 1015

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Vinyl acetate	<5.0	ug/L	5.0	17	1			07/08/2020 12:03	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1			07/08/2020 12:03	RLD	EPA 8260C

CT LAB Sample#: 438630 Sample Description: AA-MW-4 Sampled: 06/25/2020 1045

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Organic Results										
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1			07/08/2020 12:34	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1			07/08/2020 12:34	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1			07/08/2020 12:34	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1			07/08/2020 12:34	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1			07/08/2020 12:34	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1			07/08/2020 12:34	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1			07/08/2020 12:34	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1			07/08/2020 12:34	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1			07/08/2020 12:34	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1			07/08/2020 12:34	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1			07/08/2020 12:34	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1			07/08/2020 12:34	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1			07/08/2020 12:34	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438630 Sample Description: AA-MW-4 Sampled: 06/25/2020 1045

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1			07/08/2020 12:34	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1			07/08/2020 12:34	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1			07/08/2020 12:34	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1			07/08/2020 12:34	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1			07/08/2020 12:34	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1			07/08/2020 12:34	RLD	EPA 8260C
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1			07/08/2020 12:34	RLD	EPA 8260C
Acetone	<4.0	ug/L	4.0	12	1			07/08/2020 12:34	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1			07/08/2020 12:34	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1			07/08/2020 12:34	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1			07/08/2020 12:34	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1			07/08/2020 12:34	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1			07/08/2020 12:34	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1			07/08/2020 12:34	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1			07/08/2020 12:34	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1			07/08/2020 12:34	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1			07/08/2020 12:34	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1			07/08/2020 12:34	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1			07/08/2020 12:34	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438630 Sample Description: AA-MW-4 Sampled: 06/25/2020 1045

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Dibromomethane	<0.22	ug/L	0.22	0.73	1			07/08/2020 12:34	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.3	1			07/08/2020 12:34	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1			07/08/2020 12:34	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1			07/08/2020 12:34	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1			07/08/2020 12:34	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	1.5	1			07/08/2020 12:34	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1			07/08/2020 12:34	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1			07/08/2020 12:34	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1			07/08/2020 12:34	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1			07/08/2020 12:34	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1			07/08/2020 12:34	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1			07/08/2020 12:34	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1			07/08/2020 12:34	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1			07/08/2020 12:34	RLD	EPA 8260C
Toluene	<0.21	ug/L	0.21	0.69	1			07/08/2020 12:34	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1			07/08/2020 12:34	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1			07/08/2020 12:34	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1			07/08/2020 12:34	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1			07/08/2020 12:34	RLD	EPA 8260C
Vinyl acetate	<5.0	ug/L	5.0	17	1			07/08/2020 12:34	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438630 Sample Description: AA-MW-4 Sampled: 06/25/2020 1045

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Vinyl chloride	<0.14	ug/L	0.14	0.46	1			07/08/2020 12:34	RLD	EPA 8260C

CT LAB Sample#: 438631 Sample Description: AA-MW-1 Sampled: 06/25/2020 1125

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Organic Results										
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1			07/08/2020 13:05	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1			07/08/2020 13:05	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:05	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1			07/08/2020 13:05	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:05	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1			07/08/2020 13:05	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1			07/08/2020 13:05	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1			07/08/2020 13:05	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:05	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1			07/08/2020 13:05	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1			07/08/2020 13:05	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1			07/08/2020 13:05	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1			07/08/2020 13:05	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:05	RLD	EPA 8260C
1,2-Dichloroethane	**4.7**	ug/L	0.24	0.81	1			07/08/2020 13:05	RLD	EPA 8260C
1,2-Dichloropropane	**4.9**	ug/L	0.18	0.61	1			07/08/2020 13:05	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1			07/08/2020 13:05	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1			07/08/2020 13:05	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438631 Sample Description: AA-MW-1 Sampled: 06/25/2020 1125

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1			07/08/2020 13:05	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:05	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1			07/08/2020 13:05	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1			07/08/2020 13:05	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1			07/08/2020 13:05	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1			07/08/2020 13:05	RLD	EPA 8260C
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:05	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1			07/08/2020 13:05	RLD	EPA 8260C
Acetone	**26**	ug/L	4.0	12	1			07/08/2020 13:05	RLD	EPA 8260C
Benzene	**150**	ug/L	2.0	7.0	5			07/08/2020 18:30	DGS	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1			07/08/2020 13:05	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1			07/08/2020 13:05	RLD	EPA 8260C
Bromodichloromethane	**0.46**	ug/L	0.29 *	0.95	1			07/08/2020 13:05	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1			07/08/2020 13:05	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1			07/08/2020 13:05	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1			07/08/2020 13:05	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:05	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:05	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1			07/08/2020 13:05	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1			07/08/2020 13:05	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1			07/08/2020 13:05	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:05	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1			07/08/2020 13:05	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:05	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1			07/08/2020 13:05	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438631 Sample Description: AA-MW-1 Sampled: 06/25/2020 1125

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Dichlorodifluoromethane	<0.40	ug/L	0.40		1.3	1			07/08/2020 13:05	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40		1.3	1			07/08/2020 13:05	RLD	EPA 8260C
Ethylbenzene	**7.6**	ug/L	0.30		1.1	1			07/08/2020 13:05	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40		1.2	1			07/08/2020 13:05	RLD	EPA 8260C
Isopropylbenzene	**23**	ug/L	0.30		1.1	1			07/08/2020 13:05	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70		2.4	1			07/08/2020 13:05	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30		1.1	1			07/08/2020 13:05	RLD	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40		1.5	1			07/08/2020 13:05	RLD	EPA 8260C
n-Butylbenzene	**5.1**	ug/L	0.29		0.98	1			07/08/2020 13:05	RLD	EPA 8260C
n-Propylbenzene	**33**	ug/L	0.30		1.1	1			07/08/2020 13:05	RLD	EPA 8260C
Naphthalene	**65**	ug/L	0.30		1.0	1			07/08/2020 13:05	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26		0.88	1			07/08/2020 13:05	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30		1.1	1			07/08/2020 13:05	RLD	EPA 8260C
sec-Butylbenzene	**9.5**	ug/L	0.40		1.2	1			07/08/2020 13:05	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29		0.95	1			07/08/2020 13:05	RLD	EPA 8260C
tert-Butylbenzene	**0.69**	ug/L	0.40	*	1.2	1			07/08/2020 13:05	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27		0.89	1			07/08/2020 13:05	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0		10	1			07/08/2020 13:05	RLD	EPA 8260C
Toluene	<0.21	ug/L	0.21		0.69	1			07/08/2020 13:05	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30		1.2	1			07/08/2020 13:05	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23		0.77	1			07/08/2020 13:05	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30		1.1	1			07/08/2020 13:05	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40		1.4	1			07/08/2020 13:05	RLD	EPA 8260C
Vinyl acetate	<5.0	ug/L	5.0		17	1			07/08/2020 13:05	RLD	EPA 8260C
Vinyl chloride	**0.74**	ug/L	0.14		0.46	1			07/08/2020 13:05	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438632 Sample Description: AA-MW-5 Sampled: 06/25/2020 1210

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Organic Results										
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1			07/08/2020 13:36	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1			07/08/2020 13:36	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
1,1,2-Trichloroethane	**3.6**	ug/L	0.30	0.99	1			07/08/2020 13:36	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1			07/08/2020 13:36	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1			07/08/2020 13:36	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1			07/08/2020 13:36	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1			07/08/2020 13:36	RLD	EPA 8260C
1,2,4-Trimethylbenzene	**660**	ug/L	2.9	9.6	10			07/09/2020 11:22	DGS	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1			07/08/2020 13:36	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1			07/08/2020 13:36	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1			07/08/2020 13:36	RLD	EPA 8260C
1,2-Dichloropropane	**3.9**	ug/L	0.18	0.61	1			07/08/2020 13:36	RLD	EPA 8260C
1,3,5-Trimethylbenzene	**68**	ug/L	0.27	0.89	1			07/08/2020 13:36	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1			07/08/2020 13:36	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1			07/08/2020 13:36	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1			07/08/2020 13:36	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1			07/08/2020 13:36	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1			07/08/2020 13:36	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1			07/08/2020 13:36	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438632 Sample Description: AA-MW-5 Sampled: 06/25/2020 1210

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
4-Chlorotoluene	**10**	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1			07/08/2020 13:36	RLD	EPA 8260C
Acetone	**15**	ug/L	4.0	12	1			07/08/2020 13:36	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1			07/08/2020 13:36	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1			07/08/2020 13:36	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1			07/08/2020 13:36	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1			07/08/2020 13:36	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1			07/08/2020 13:36	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1			07/08/2020 13:36	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1			07/08/2020 13:36	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1			07/08/2020 13:36	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1			07/08/2020 13:36	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1			07/08/2020 13:36	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1			07/08/2020 13:36	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1			07/08/2020 13:36	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.3	1			07/08/2020 13:36	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1			07/08/2020 13:36	RLD	EPA 8260C
Ethylbenzene	**14**	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1			07/08/2020 13:36	RLD	EPA 8260C
Isopropylbenzene	**56**	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
m & p-Xylene	**360**	ug/L	3.5	12	5			07/08/2020 19:02	DGS	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438632 Sample Description: AA-MW-5 Sampled: 06/25/2020 1210

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	1.5	1			07/08/2020 13:36	RLD	EPA 8260C
n-Butylbenzene	**28**	ug/L	0.29	0.98	1			07/08/2020 13:36	RLD	EPA 8260C
n-Propylbenzene	**61**	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
Naphthalene	**180**	ug/L	1.5	5.0	5			07/08/2020 19:02	DGS	EPA 8260C
o-Xylene	**0.37**	ug/L	0.26 *	0.88	1			07/08/2020 13:36	RLD	EPA 8260C
p-Isopropyltoluene	**29**	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
sec-Butylbenzene	**21**	ug/L	0.40	1.2	1			07/08/2020 13:36	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1			07/08/2020 13:36	RLD	EPA 8260C
tert-Butylbenzene	**4.1**	ug/L	0.40	1.2	1			07/08/2020 13:36	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1			07/08/2020 13:36	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1			07/08/2020 13:36	RLD	EPA 8260C
Toluene	<0.21	ug/L	0.21	0.69	1			07/08/2020 13:36	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1			07/08/2020 13:36	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1			07/08/2020 13:36	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1			07/08/2020 13:36	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1			07/08/2020 13:36	RLD	EPA 8260C
Vinyl acetate	<5.0	ug/L	5.0	17	1			07/08/2020 13:36	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1			07/08/2020 13:36	RLD	EPA 8260C

CT LAB Sample#: 438633 Sample Description: TRIP BLANK Sampled: 06/25/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method

Organic Results

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438633 Sample Description: TRIP BLANK Sampled: 06/25/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1			07/08/2020 10:32	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1			07/08/2020 10:32	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1			07/08/2020 10:32	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1			07/08/2020 10:32	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1			07/08/2020 10:32	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1			07/08/2020 10:32	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1			07/08/2020 10:32	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1			07/08/2020 10:32	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1			07/08/2020 10:32	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1			07/08/2020 10:32	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1			07/08/2020 10:32	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1			07/08/2020 10:32	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1			07/08/2020 10:32	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1			07/08/2020 10:32	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1			07/08/2020 10:32	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1			07/08/2020 10:32	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1			07/08/2020 10:32	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1			07/08/2020 10:32	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1			07/08/2020 10:32	RLD	EPA 8260C
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438633 Sample Description: TRIP BLANK Sampled: 06/25/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1			07/08/2020 10:32	RLD	EPA 8260C
Acetone	<4.0	ug/L	4.0	12	1			07/08/2020 10:32	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1			07/08/2020 10:32	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1			07/08/2020 10:32	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1			07/08/2020 10:32	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1			07/08/2020 10:32	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1			07/08/2020 10:32	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1			07/08/2020 10:32	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1			07/08/2020 10:32	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1			07/08/2020 10:32	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1			07/08/2020 10:32	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1			07/08/2020 10:32	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1			07/08/2020 10:32	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1			07/08/2020 10:32	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.3	1			07/08/2020 10:32	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1			07/08/2020 10:32	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1			07/08/2020 10:32	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1			07/08/2020 10:32	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438633 Sample Description: TRIP BLANK Sampled: 06/25/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Methylene chloride	**0.54**	ug/L	0.40 *	1.5	1			07/08/2020 10:32	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1			07/08/2020 10:32	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1			07/08/2020 10:32	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1			07/08/2020 10:32	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1			07/08/2020 10:32	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1			07/08/2020 10:32	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1			07/08/2020 10:32	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1			07/08/2020 10:32	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1			07/08/2020 10:32	RLD	EPA 8260C
Toluene	<0.21	ug/L	0.21	0.69	1			07/08/2020 10:32	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1			07/08/2020 10:32	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1			07/08/2020 10:32	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1			07/08/2020 10:32	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1			07/08/2020 10:32	RLD	EPA 8260C
Vinyl acetate	<5.0	ug/L	5.0	17	1			07/08/2020 10:32	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1			07/08/2020 10:32	RLD	EPA 8260C

CT LAB Sample#: 438634 Sample Description: 124A Sampled: 06/24/2020 1530

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Hexavalent Chromium	<0.175	Total ug	0.175	0.60	1		06/29/2020 09:00	07/01/2020 09:10	KMT	EPA 7199

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438669 Sample Description: 124B Sampled: 06/24/2020 1540

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Hexavalent Chromium	<0.175	Total ug	0.175	0.60	1		06/29/2020 09:00	07/01/2020 09:18	KMT	EPA 7199

CT LAB Sample#: 438670 Sample Description: 118A Sampled: 06/24/2020 1545

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
General Results										
Sample Lost Status	**spilled extract**		N/A	N/A	1			07/09/2020 00:00	ETK	

CT LAB Sample#: 438671 Sample Description: 118B Sampled: 06/24/2020 1550

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Hexavalent Chromium	<0.175	Total ug	0.175	0.60	1		06/29/2020 09:00	07/01/2020 09:27	KMT	EPA 7199

CT LAB Sample#: 438672 Sample Description: 100A Sampled: 06/24/2020 1600

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Hexavalent Chromium	**4.09**	Total ug	0.175	0.60	1		06/29/2020 09:00	07/01/2020 09:36	KMT	EPA 7199

CT LAB Sample#: 438673 Sample Description: 100B Sampled: 06/24/2020 1605

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438673 Sample Description: 100B Sampled: 06/24/2020 1605

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Hexavalent Chromium	**0.248**	Total ug	0.175 *	0.60	1		06/29/2020 09:00	07/01/2020 10:03	KMT	EPA 7199

CT LAB Sample#: 438674 Sample Description: 111A Sampled: 06/24/2020 1610

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Hexavalent Chromium	**0.936**	Total ug	0.175	0.60	1		06/29/2020 09:00	07/01/2020 10:12	KMT	EPA 7199

CT LAB Sample#: 438675 Sample Description: 111B Sampled: 06/24/2020 1615

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Hexavalent Chromium	<0.175	Total ug	0.175	0.60	1		06/29/2020 09:00	07/01/2020 10:20	KMT	EPA 7199

CT LAB Sample#: 438676 Sample Description: 109A Sampled: 06/24/2020 1620

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Hexavalent Chromium	<0.175	Total ug	0.175	0.60	1		06/29/2020 09:00	07/01/2020 10:29	KMT	EPA 7199

CT LAB Sample#: 438677 Sample Description: 109B Sampled: 06/24/2020 1625

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 438677 Sample Description: 109B Sampled: 06/24/2020 1625

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Hexavalent Chromium	<0.175	Total ug	0.175	0.60	1		06/29/2020 09:00	07/01/2020 10:38	KMT	EPA 7199

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes regarding entire Chain of Custody:

Notes: * Indicates a value in between the LOD (limit of detection) and the LOQ (limit of quantitation). All LOD/LOQs are adjusted to reflect dilution and also any differences in the sample weight / volume as compared to standard amounts.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 289
Louisiana NELAP (primary) ID# ACC20190002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20190002

Rev. 02/2017

CHAIN OF CUSTODY

Page 1 of 1

Company: Ayres Associates
Project Contact: Jeff Steiner
Telephone: 608 443 1200
Project Name: Truax Bldg 414
Project #: 51-0444.10
Location: WIANG Madison, WI
Sampled By: Thomas P Jank

CT LABORATORIES

1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Folder #: 154334
Company: AYRES ASSOCIATES
Project: TRUAX BLDG 414
Logged By: JLS PM: ET

Program:
SM RCRA SDWA NPDES
Solid Waste Other _____
PO #

Report To:
EMAIL: steinerje@ayresassociates.com
Company: Ayres Associates
Address: 5201 E Terrace Dr #300
Madison WI 53718

Invoice To:*
EMAIL:
Company:
Address:

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

Matrix:
GW – groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

Collection Date	Collection Time	Matrix	Grab/ Comp	Sample #	Sample ID Description	Filtered? Y/N	ANALYSES REQUESTED: VOC	Total # Containers	Designated MS/MSD	CT Lab ID # (Lab use only)
6/25/2020	9:30	GW			AA-MW-3	N	3			438628
	10:15				AA-MW-2		3			438629
	10:45				AA-MW-4		3			438630
	11:25				AA-MW-1		3			438631
	12:10				AA-MW-5		3			438632
					Trip Blank		1			438633

Turnaround Time
Normal RUSH*
Date Needed: _____
Rush analysis requires prior CT Laboratories' approval
Surcharges:
24 hr 200%
2-3 days 100%
4-9 days 50%

Fill in Spaces with Bottles per Test

Relinquished By:	Date/Time	Received By:	Date/Time
Thomas P Jank	6/26/2020 9:00		6/26/2020 1215
Received by:	Date/Time	Received for Laboratory by:	Date/Time
			6/26/2020 1455

Lab Use Only
Ice Present (Yes) No
Temp 5.3 IR Gun 27
Cooler # 6442

Rev. 02/2017

CHAIN OF CUSTODY

Page 1 of 1

Company: Ayres Associates
Project Contact: Jeff Steiner
Telephone: 608-443-1200
Project Name: Truax Bldg 414
Project #: 51-0444.10
Location: WIANG, Madison WI
Sampled By: Thomas P Gavick

CT LABORATORIES

1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Lab Use Only
Place Header Sticker Here:

154334

Program:
QSM RCRA SDWA NPDES
Solid Waste Other _____

PO #

Report To:
EMAIL: Steiner.j@ayresassociates.com
Company: Ayres Associates
Address: 5201 E Terrace Dr #300 Madison WI 53718
Invoice To:*
EMAIL: Same As Above
Company:
Address:

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

Matrix:
GW – groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

Collection Date	Collection Time	Matrix	Grab/ Comp	Sample #	Sample ID Description	Filtered? Y/N	ANALYSES REQUESTED (Fill in Spaces with Bottles per Test)	Total # Containers	Designated MS/MSD	CT Lab ID # (Lab use only)
6/24/2020	3:30	M			124A (Wipe Sample)	N	1			438634
	3:40				124B		1			438669
	3:45				118A		1			438670
	3:50				118B		1			438671
	4:00				100A		1			438672
	4:05				100B		1			438673
	4:10				111A		1			438674
	4:15				111B		1			438675
	4:20				109A		1			438676
	4:25				109B		1			438677

Turnaround Time
Normal RUSH*
Date Needed: _____
Rush analysis requires prior CT Laboratories' approval
Surcharges:
24 hr 200%
2-3 days 100%
4-9 days 50%

Relinquished By:	Date/Time	Received By:	Date/Time	Lab Use Only
Thomas P Gavick	6/26/2020 9:00		6/26/2020 1215	Ice Present (Yes) No
Received by:	Date/Time	Received for Laboratory by:	Date/Time	Temp 5.3 IR Gun 27
			6/26/2020 1455	Cooler # 6442

August 13, 2020

Vista Work Order No. 2001366

Mr. Dennis Linley
C T Laboratories
1230 Lange Court
Baraboo, WI 53913-3109

Dear Mr. Linley,

Enclosed are the amended results for the sample set received at Vista Analytical Laboratory on June 26, 2020 under your Project Name 'Truax Bldg 414 / 51-0444.10'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier
Laboratory Director

Vista Work Order No. 2001366
Case Narrative

Sample Condition on Receipt:

Two water samples and six groundwater samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology. This report was amended to revise the reporting format.

Analytical Notes:

PFAS Isotope Dilution Method

The samples were extracted and analyzed for a selected list of PFAS using Vista's PFAS Isotope Dilution Method. The results for PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Results for all other analytes include the linear isomers only.

Holding Times

The samples were extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above the Reporting Limit. The OPR recoveries were within the method acceptance criteria.

The recoveries of all internal standards in the QC and field samples were within the acceptance criteria.

TABLE OF CONTENTS

Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
2001366-01	AA-MW-3	25-Jun-20 09:30	26-Jun-20 09:15	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
2001366-02	AA-MW-2	25-Jun-20 10:15	26-Jun-20 09:15	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
2001366-03	AA-MW-4	25-Jun-20 10:45	26-Jun-20 09:15	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
2001366-04	AA-MW-1	25-Jun-20 11:25	26-Jun-20 09:15	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
2001366-05	AA-MW-5	25-Jun-20 12:10	26-Jun-20 09:15	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
2001366-06	AA-MW-4 DUP	25-Jun-20 10:45	26-Jun-20 09:15	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
2001366-07	Field Blank	25-Jun-20 12:20	26-Jun-20 09:15	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
2001366-08	Equip Blank	25-Jun-20 12:35	26-Jun-20 09:15	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL

Vista Project: 2001366

Client Project: Truax Bldg 414 / 51-0444.10

ANALYTICAL RESULTS

Sample ID: Method Blank **PFAS Isotope Dilution Method**

Client Data
Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Aqueous

Laboratory Data
Lab Sample: B0F0250-BLK1
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.365	0.365	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFPeA	2706-90-3	<0.640	0.640	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFBS	375-73-5	<0.895	0.895	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
4:2 FTS	757124-72-4	<0.695	0.695	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFHxA	307-24-4	<1.09	1.09	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFPeS	2706-91-4	<1.21	1.21	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
HFPO-DA	13252-13-6	<2.41	2.41	2.50		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFHpA	375-85-9	<0.296	0.296	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
ADONA	919005-14-4	<0.361	0.361	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFHxS	355-46-4	<0.474	0.474	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
6:2 FTS	27619-97-2	<1.00	1.00	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFOA	335-67-1	<0.326	0.326	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFHpS	375-92-8	<0.469	0.469	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFNA	375-95-1	<0.405	0.405	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFOSA	754-91-6	<0.885	0.885	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFOS	1763-23-1	<0.404	0.404	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
9Cl-PF3ONS	756426-58-1	<0.725	0.725	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFDA	335-76-2	<0.745	0.745	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
8:2 FTS	39108-34-4	<1.03	1.03	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFNS	68259-12-1	<1.94	1.94	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
MeFOSAA	2355-31-9	<0.825	0.825	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
EtFOSAA	2991-50-6	<0.685	0.685	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFUnA	2058-94-8	<0.525	0.525	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFDS	335-77-3	<0.615	0.615	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
11Cl-PF3OUdS	763051-92-9	<1.21	1.21	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
10:2 FTS	120226-60-0	<1.57	1.57	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFDoA	307-55-1	<0.396	0.396	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
MeFOSA	31506-32-8	<1.92	1.92	10.0		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFTrDA	72629-94-8	<0.247	0.247	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFDoS	79780-39-5	<2.09	2.09	2.50		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFTeDA	376-06-7	<0.378	0.378	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
EtFOSA	4151-50-2	<2.56	2.56	10.0		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFHxDA	67905-19-5	<0.147	0.147	2.00		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
PFODA	16517-11-6	<3.07	3.07	3.50		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
MeFOSE	24448-09-7	<3.04	3.04	10.0		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
EtFOSE	1691-99-2	<4.72	4.72	10.0		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	89.4	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1

Sample ID: Method Blank — **PFAS Isotope Dilution Method**

Client Data
Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Aqueous

Laboratory Data
Lab Sample: B0F0250-BLK1
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	81.2	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C3-PFBS	IS	82.2	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C3-HFPO-DA	IS	75.9	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-4:2 FTS	IS	86.2	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFHxA	IS	79.0	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C4-PFHpA	IS	82.2	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C3-PFHxS	IS	86.9	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-6:2 FTS	IS	85.2	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C5-PFNA	IS	82.6	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C8-PFOSA	IS	36.0	10 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFOA	IS	85.9	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C8-PFOS	IS	79.6	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFDA	IS	79.8	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-8:2 FTS	IS	80.9	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
d3-MeFOSAA	IS	72.1	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFUnA	IS	80.6	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
d5-EtFOSAA	IS	65.7	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-10:2 FTS	IS	74.4	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFDoA	IS	76.3	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
d3-MeFOSA	IS	17.4	10 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFTeDA	IS	66.1	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
d5-EtFOSA	IS	16.8	10 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
13C2-PFHxDA	IS	57.2	25 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
d7-MeFOSE	IS	27.0	10 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1
d9-EtFOSE	IS	26.6	10 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:46	1

MDL - Method Detection Limit RL - Reporting limit Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: OPR **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Aqueous

Laboratory Data

Lab Sample: B0F0250-BS1
Column: BEH C18

Analyte	CAS Number	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	8.28	8.00	104	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFPeA	2706-90-3	8.04	8.00	100	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFBS	375-73-5	8.50	8.00	106	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
4:2 FTS	757124-72-4	8.23	8.00	103	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFHxA	307-24-4	7.97	8.00	99.7	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFPeS	2706-91-4	7.44	8.00	93.0	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
HFPO-DA	13252-13-6	9.42	8.00	118	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFHpA	375-85-9	8.00	8.00	100	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
ADONA	919005-14-4	8.47	8.00	106	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFHxS	355-46-4	7.85	8.00	98.1	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
6:2 FTS	27619-97-2	7.84	8.00	98.0	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFOA	335-67-1	7.63	8.00	95.4	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFHpS	375-92-8	7.69	8.00	96.1	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFNA	375-95-1	7.68	8.00	96.1	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFOSA	754-91-6	7.97	8.00	99.6	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFOS	1763-23-1	8.02	8.00	100	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
9Cl-PF3ONS	756426-58-1	8.55	8.00	107	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFDA	335-76-2	7.86	8.00	98.2	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
8:2 FTS	39108-34-4	7.17	8.00	89.7	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFNS	68259-12-1	7.97	8.00	99.6	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
MeFOSAA	2355-31-9	7.17	8.00	89.6	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
EtFOSAA	2991-50-6	8.41	8.00	105	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFUnA	2058-94-8	8.14	8.00	102	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFDS	335-77-3	7.59	8.00	94.9	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
11Cl-PF3OUdS	763051-92-9	8.12	8.00	102	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
10:2 FTS	120226-60-0	8.95	8.00	112	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFDoA	307-55-1	7.83	8.00	97.8	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
MeFOSA	31506-32-8	42.6	40.0	106	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFTrDA	72629-94-8	7.74	8.00	96.8	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFDoS	79780-39-5	8.97	8.00	112	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFTeDA	376-06-7	7.84	8.00	97.9	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
EtFOSA	4151-50-2	44.0	40.0	110	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFHxDA	67905-19-5	7.89	8.00	98.6	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
PFODA	16517-11-6	6.38	8.00	79.8	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1

Sample ID: OPR **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Aqueous

Laboratory Data

Lab Sample: B0F0250-BS1
Column: BEH C18

Analyte	CAS Number	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
MeFOSE	24448-09-7	40.2	40.0	100	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
EtFOSE	1691-99-2	33.6	40.0	84.1	50 - 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
Labeled Standards		**Type**		**% Rec**	**Limits**	**Qualifiers**	**Batch**	**Extracted**	**Samp Size**	**Analyzed**	**Dilution**
13C3-PFBA		IS		88.4	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C3-PFPeA		IS		83.8	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C3-PFBS		IS		89.3	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C3-HFPO-DA		IS		77.0	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-4:2 FTS		IS		88.3	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFHxA		IS		84.6	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C4-PFHpA		IS		87.0	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C3-PFHxS		IS		94.4	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-6:2 FTS		IS		92.6	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C5-PFNA		IS		92.2	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C8-PFOSA		IS		34.7	10- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFOA		IS		92.6	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C8-PFOS		IS		83.0	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFDA		IS		82.1	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-8:2 FTS		IS		82.9	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
d3-MeFOSAA		IS		80.6	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFUnA		IS		80.3	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
d5-EtFOSAA		IS		71.4	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-10:2 FTS		IS		73.2	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFDoA		IS		76.2	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
d3-MeFOSA		IS		15.8	10- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFTeDA		IS		69.8	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
d5-EtFOSA		IS		14.4	10- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
13C2-PFHxDA		IS		64.1	25- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
d7-MeFOSE		IS		24.3	10- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1
d9-EtFOSE		IS		26.6	10- 150		B0F0250	11-Jul-20	0.250 L	13-Jul-20 22:56	1

Sample ID: AA-MW-3 **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Groundwater
Date Collected: 25-Jun-20 09:30

Laboratory Data

Lab Sample: 2001366-01
Date Received: 26-Jun-20 09:15
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	37.2	0.378	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFPeA	2706-90-3	76.2	0.665	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFBS	375-73-5	41.8	0.929	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
4:2 FTS	757124-72-4	<0.722	0.722	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFHxA	307-24-4	126	1.13	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFPeS	2706-91-4	33.0	1.26	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
HFPO-DA	13252-13-6	<2.50	2.50	2.60		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFHpA	375-85-9	39.5	0.307	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
ADONA	919005-14-4	<0.375	0.375	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFHxS	355-46-4	885	0.492	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
6:2 FTS	27619-97-2	4.81	1.04	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFOA	335-67-1	75.0	0.338	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFHpS	375-92-8	18.8	0.486	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFNA	375-95-1	15.9	0.421	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFOSA	754-91-6	13.6	0.919	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFOS	1763-23-1	1310	0.419	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
9Cl-PF3ONS	756426-58-1	<0.753	0.753	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFDA	335-76-2	1.53	0.774	2.08	J	B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
8:2 FTS	39108-34-4	3.91	1.07	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFNS	68259-12-1	<2.01	2.01	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
MeFOSAA	2355-31-9	<0.857	0.857	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
EtFOSAA	2991-50-6	<0.711	0.711	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFUnA	2058-94-8	<0.545	0.545	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFDS	335-77-3	<0.639	0.639	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
11Cl-PF3OUdS	763051-92-9	<1.25	1.25	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
10:2 FTS	120226-60-0	<1.62	1.62	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFDoA	307-55-1	<0.411	0.411	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
MeFOSA	31506-32-8	<1.99	1.99	10.4		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFTrDA	72629-94-8	<0.256	0.256	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFDoS	79780-39-5	<2.16	2.16	2.60		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFTeDA	376-06-7	<0.392	0.392	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
EtFOSA	4151-50-2	<2.65	2.65	10.4		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFHxDA	67905-19-5	<0.153	0.153	2.08		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
PFODA	16517-11-6	<3.19	3.19	3.63		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
MeFOSE	24448-09-7	<3.15	3.15	10.4		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
EtFOSE	1691-99-2	<4.90	4.90	10.4		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	86.4	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1

Sample ID: AA-MW-3 **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Groundwater
Date Collected: 25-Jun-20 09:30

Laboratory Data

Lab Sample: 2001366-01
Date Received: 26-Jun-20 09:15
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	88.5	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C3-PFBS	IS	85.0	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C3-HFPO-DA	IS	81.4	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C2-4:2 FTS	IS	82.1	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C2-PFHxA	IS	83.6	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C4-PFHpA	IS	84.3	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C3-PFHxS	IS	88.0	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C2-6:2 FTS	IS	80.1	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C5-PFNA	IS	90.0	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C8-PFOSA	IS	45.4	10 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C2-PFOA	IS	91.6	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C8-PFOS	IS	72.6	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C2-PFDA	IS	82.3	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C2-8:2 FTS	IS	82.5	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
d3-MeFOSAA	IS	80.6	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C2-PFUnA	IS	81.6	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
d5-EtFOSAA	IS	76.9	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C2-10:2 FTS	IS	70.9	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C2-PFDoA	IS	80.3	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
d3-MeFOSA	IS	22.4	10 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C2-PFTeDA	IS	74.7	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
d5-EtFOSA	IS	24.0	10 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
13C2-PFHxDA	IS	64.0	25 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
d7-MeFOSE	IS	49.4	10 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1
d9-EtFOSE	IS	49.2	10 - 150		B0F0250	11-Jul-20	0.241 L	14-Jul-20 00:31	1

MDL - Method Detection Limit RL - Reporting limit Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: AA-MW-2 **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Groundwater
Date Collected: 25-Jun-20 10:15

Laboratory Data

Lab Sample: 2001366-02
Date 9 eceiRed: 26-Jun-20 0v:15
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	110	0.3v1	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFPeA	2706-v0-3	317	0.686	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFBS	375-73-5	10v	0.v5v	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
4:2 FTS	757124-72-4	1.02	0.745	2.14	J	B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFHxA	307-24-4	3v1	1.17	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFPeS	2706-v1-4	118	1.30	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
HFP<-DA	13252-13-6	O2.58	2.58	2.68		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFHpA	375-85-v	140	0.317	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
AD<NA	v1v005-14-4	O0.387	0.387	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFHxS	355-46-4	2070	0.507	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
6:2 FTS	2761v-v7-2	268	1.07	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PF<A	335-67-1	1v1	0.34v	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFHpS	375-v2-8	60.v	0.502	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFNA	375-v5-1	37.8	0.434	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PF<SA	754-v1-6	6v.v	0.v48	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PF<S	1763-23-1	3270	2.16	10.7	D	B0F0250	11-Jul-20	0.233 L	14-Jul-20 16:24	5
vCl-PF3<NS	756426-58-1	O0.777	0.777	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFDA	335-76-2	3.66	0.7v8	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
8:2 FTS	3v108-34-4	188	1.10	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFNS	6825v-12-1	O2.07	2.07	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
MeF<SAA	2355-31-v	O0.884	0.884	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
EtF<SAA	2vv1-50-6	O0.734	0.734	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFUnA	2058-v4-8	O0.563	0.563	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFDS	335-77-3	O0.65v	0.65v	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
11Cl-PF3<UdS	763051-v2-v	O1.2v	1.2v	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
10:2 FTS	120226-60-0	O1.68	1.68	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFDoA	307-55-1	O0.424	0.424	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
MeF<SA	31506-32-8	O2.05	2.05	10.7		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFTrDA	7262v-v4-8	O0.265	0.265	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFDoS	7v780-3v-5	O2.23	2.23	2.68		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFTeDA	376-06-7	O0.405	0.405	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
EtF<SA	4151-50-2	O2.74	2.74	10.7		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PFHxDA	67v05-1v-5	O0.158	0.158	2.14		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
PF<DA	16517-11-6	O3.2v	3.2v	3.75		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
MeF<SE	24448-0v-7	O3.25	3.25	10.7		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
EtF<SE	16v1-vv-2	O5.06	5.06	10.7		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	77.5	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1

Sample ID: AA-MW-2 **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Groundwater
Date Collected: 25-Jun-20 10:15

Laboratory Data

Lab Sample: 2001366-02
Date 9eceiRed: 26-Jun-20 0v:15
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	83.1	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C3-PFBS	IS	84.7	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C3-HFP<-DA	IS	80.7	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C2-4:2 FTS	IS	v2.6	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C2-PFHxA	IS	84.6	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C4-PFHpA	IS	86.8	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C3-PFHxS	IS	78.4	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C2-6:2 FTS	IS	7v.4	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C5-PFNA	IS	87.3	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C8-PF<SA	IS	45.8	10 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C2-PF<A	IS	8v.2	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C8-PF<S	IS	132	25 - 150	D	B0F0250	11-Jul-20	0.233 L	14-Jul-20 16:24	5
13C2-PFDA	IS	81.1	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C2-8:2 FTS	IS	87.v	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
d3-MeF<SAA	IS	80.2	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C2-PFUnA	IS	78.7	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
d5-EtF<SAA	IS	75.0	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C2-10:2 FTS	IS	73.0	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C2-PFDoA	IS	78.v	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
d3-MeF<SA	IS	26.4	10 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C2-PFTeDA	IS	72.2	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
d5-EtF<SA	IS	26.7	10 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
13C2-PFHxDA	IS	61.4	25 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
d7-MeF<SE	IS	53.4	10 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1
dv-EtF<SE	IS	53.8	10 - 150		B0F0250	11-Jul-20	0.233 L	14-Jul-20 00:42	1

MDL - Method Detection Limit 9L - 9eporting limit 9esults reported to MDL.

When reported, PFHxS, PF<A, PF<S, MeF<SAA and EtF<SAA include both linear and branched isomers. <nly the linear isomer is reported for all other analytes.

Sample ID: AA-MW-4 **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Groundwater
Date Collected: 25-Jun-20 10:45

Laboratory Data

Lab Sample: 2001366-03
Date Received: 26-Jun-20 09:15
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	51.5	0.376	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFPeA	2706-90-3	142	0.660	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFBS	375-73-5	20.8	0.923	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
4:2 FTS	757124-72-4	<0.717	0.717	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFHxA	307-24-4	107	1.12	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFPeS	2706-91-4	33.5	1.25	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
HFPO-DA	13252-13-6	<2.49	2.49	2.58		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFHpA	375-85-9	61.7	0.305	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
ADONA	919005-14-4	<0.372	0.372	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFHxS	355-46-4	1040	0.488	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
6:2 FTS	27619-97-2	18.2	1.03	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFOA	335-67-1	121	0.336	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFHpS	375-92-8	141	0.483	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFNA	375-95-1	31.1	0.418	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFOSA	754-91-6	66.8	0.913	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFOS	1763-23-1	2630	2.08	10.3	D	B0F0250	11-Jul-20	0.242 L	14-Jul-20 16:34	5
9Cl-PF3ONS	756426-58-1	<0.748	0.748	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFDA	335-76-2	2.19	0.768	2.06	Q	B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
8:2 FTS	39108-34-4	1.47	1.06	2.06	J	B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFNS	68259-12-1	<2.00	2.00	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
MeFOSAA	2355-31-9	<0.851	0.851	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
EtFOSAA	2991-50-6	<0.706	0.706	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFUnA	2058-94-8	<0.541	0.541	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFDS	335-77-3	<0.634	0.634	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
11Cl-PF3OUdS	763051-92-9	<1.24	1.24	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
10:2 FTS	120226-60-0	<1.61	1.61	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFDoA	307-55-1	<0.408	0.408	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
MeFOSA	31506-32-8	<1.97	1.97	10.3		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFTrDA	72629-94-8	<0.255	0.255	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFDoS	79780-39-5	<2.15	2.15	2.58		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFTeDA	376-06-7	<0.389	0.389	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
EtFOSA	4151-50-2	<2.63	2.63	10.3		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFHxDA	67905-19-5	<0.152	0.152	2.06		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
PFODA	16517-11-6	<3.17	3.17	3.61		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
MeFOSE	24448-09-7	<3.13	3.13	10.3		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
EtFOSE	1691-99-2	<4.87	4.87	10.3		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	71.2	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1

Sample ID: AA-MW-4 **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Groundwater
Date Collected: 25-Jun-20 10:45

Laboratory Data

Lab Sample: 2001366-03
Date Received: 26-Jun-20 09:15
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	80.1	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C3-PFBS	IS	82.6	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C3-HFPO-DA	IS	69.8	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C2-4:2 FTS	IS	82.8	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C2-PFHxA	IS	80.3	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C4-PFHpA	IS	80.7	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C3-PFHxS	IS	79.0	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C2-6:2 FTS	IS	86.8	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C5-PFNA	IS	83.2	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C8-PFOSA	IS	43.6	10 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C2-PFOA	IS	88.1	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C8-PFOS	IS	130	25 - 150	D	B0F0250	11-Jul-20	0.242 L	14-Jul-20 16:34	5
13C2-PFDA	IS	80.1	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C2-8:2 FTS	IS	78.5	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
d3-MeFOSAA	IS	80.1	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C2-PFUnA	IS	81.6	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
d5-EtFOSAA	IS	71.8	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C2-10:2 FTS	IS	75.4	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C2-PFDoA	IS	78.4	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
d3-MeFOSA	IS	36.5	10 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C2-PFTeDA	IS	62.1	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
d5-EtFOSA	IS	35.1	10 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
13C2-PFHxDA	IS	37.9	25 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
d7-MeFOSE	IS	52.4	10 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1
d9-EtFOSE	IS	52.1	10 - 150		B0F0250	11-Jul-20	0.242 L	14-Jul-20 00:52	1

MDL - Method Detection Limit RL - Reporting limit Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: AA-MW-1 **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Groundwater
Date Collected: 25-Jun-20 11:25

Laboratory Data

Lab Sample: 2001366-04
Date 9 eceiRed: 26-Jun-20 0v:15
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	133	0.363	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFPeA	2706-v0-3	441	0.637	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFBS	375-73-5	v8.0	0.8v1	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
4:2 FTS	757124-72-4	11.8	0.6v2	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFHxA	307-24-4	446	1.0v	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFPeS	2706-v1-4	122	1.20	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
HFP<-DA	13252-13-6	O2.40	2.40	2.4v		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFHpA	375-85-v	28v	0.2v4	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
AD<NA	v1v005-14-4	O0.35v	0.35v	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFHxS	355-46-4	11v0	0.472	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
6:2 FTS	2761v-v7-2	1010	0.vv6	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PF<A	335-67-1	332	0.324	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFHpS	375-v2-8	106	0.467	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFNA	375-v5-1	30.7	0.403	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PF<SA	754-v1-6	100	0.881	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PF<S	1763-23-1	4020	2.01	v.v6	D	B0F0250	11-Jul-20	0.251 L	14-Jul-20 17:17	5
vCl-PF3<NS	756426-58-1	O0.722	0.722	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFDA	335-76-2	4.1v	0.742	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
8:2 FTS	3v108-34-4	4v1	1.03	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFNS	6825v-12-1	O1.v3	1.v3	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
MeF<SAA	2355-31-v	O0.822	0.822	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
EtF<SAA	2vv1-50-6	O0.682	0.682	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFUnA	2058-v4-8	O0.523	0.523	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFDS	335-77-3	O0.612	0.612	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
11Cl-PF3<UdS	763051-v2-v	O1.20	1.20	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
10:2 FTS	120226-60-0	O1.56	1.56	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFDoA	307-55-1	O0.3v4	0.3v4	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
MeF<SA	31506-32-8	O1.v1	1.v1	v.v6		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFTrDA	7262v-v4-8	O0.246	0.246	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFDoS	7v780-3v-5	O2.08	2.08	2.4v		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFTeDA	376-06-7	O0.376	0.376	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
EtF<SA	4151-50-2	O2.54	2.54	v.v6		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PFHxDA	67v05-1v-5	O0.146	0.146	1.vv		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
PF<DA	16517-11-6	O3.06	3.06	3.4v		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
MeF<SE	24448-0v-7	O3.02	3.02	v.v6		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
EtF<SE	16v1-vv-2	O4.70	4.70	v.v6		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	72.6	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1

Sample ID: AA-MW-1 **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Groundwater
Date Collected: 25-Jun-20 11:25

Laboratory Data

Lab Sample: 2001366-04
Date 9eceiRed: 26-Jun-20 0v:15
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	82.8	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C3-PFBS	IS	84.v	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C3-HFP<-DA	IS	78.1	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C2-4:2 FTS	IS	86.3	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C2-PFHxA	IS	82.1	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C4-PFHpA	IS	82.4	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C3-PFHxS	IS	84.v	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C2-6:2 FTS	IS	73.7	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C5-PFNA	IS	85.8	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C8-PF<SA	IS	48.7	10 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C2-PF<A	IS	87.4	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C8-PF<S	IS	114	25 - 150	D	B0F0250	11-Jul-20	0.251 L	14-Jul-20 17:17	5
13C2-PFDA	IS	7v.3	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C2-8:2 FTS	IS	85.6	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
d3-MeF<SAA	IS	84.3	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C2-PFUnA	IS	81.0	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
d5-EtF<SAA	IS	73.0	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C2-10:2 FTS	IS	7v.0	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C2-PFDoA	IS	77.3	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
d3-MeF<SA	IS	35.2	10 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C2-PFTeDA	IS	75.5	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
d5-EtF<SA	IS	36.3	10 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
13C2-PFHxDA	IS	65.v	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
d7-MeF<SE	IS	57.2	10 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1
dv-EtF<SE	IS	54.1	10 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:03	1

MDL - Method Detection Limit 9L - 9eporting limit 9esults reported to MDL.

When reported, PFHxS, PF<A, PF<S, MeF<SAA and EtF<SAA include both linear and branched isomers. <nly the linear isomer is reported for all other analytes.

Sample ID: AA-MW-5 **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Groundwater
Date Collected: 25-Jun-20 12:10

Laboratory Data

Lab Sample: 2001366-05
Date 9 eceiRed: 26-Jun-20 0v:15
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.367	0.367	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFPeA	2706-v0-3	138	0.644	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFBS	375-73-5	60.v	0.v01	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
4:2 FTS	757124-72-4	<0.700	0.700	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFHxA	307-24-4	172	1.10	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFPeS	2706-v1-4	68.0	1.22	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
HFPO-DA	13252-13-6	<2.43	2.43	2.52		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFHpA	375-85-v	104	0.2v8	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
ADONA	v1v005-14-4	<0.364	0.364	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFHxS	355-46-4	3300	2.38	10.1	D	B0F0250	11-Jul-20	0.248 L	14-Jul-20 17:27	5
6:2 FTS	2761v-v7-2	4.63	1.01	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFOA	335-67-1	162	0.328	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFHpS	375-v2-8	38.v	0.472	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFNA	375-v5-1	36.8	0.408	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFOSA	754-v1-6	17.5	0.8v1	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFOS	1763-23-1	2120	2.03	10.1	D	B0F0250	11-Jul-20	0.248 L	14-Jul-20 17:27	5
vCl-PF3ONS	756426-58-1	<0.730	0.730	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFDA	335-76-2	3.63	0.750	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
8:2 FTS	3v108-34-4	<1.04	1.04	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFNS	6825v-12-1	<1.v5	1.v5	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
MeFOSAA	2355-31-v	<0.831	0.831	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
EtFOSAA	2vv1-50-6	<0.6v0	0.6v0	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFUnA	2058-v4-8	<0.52v	0.52v	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFDS	335-77-3	<0.61v	0.61v	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
11Cl-PF3OUdS	763051-v2-v	<1.21	1.21	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
10:2 FTS	120226-60-0	<1.58	1.58	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFDoA	307-55-1	<0.3vv	0.3vv	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
MeFOSA	31506-32-8	<1.v3	1.v3	10.1		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFTrDA	7262v-v4-8	<0.24v	0.24v	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFDoS	7v780-3v-5	<2.10	2.10	2.52		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFTeDA	376-06-7	<0.380	0.380	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
EtFOSA	4151-50-2	<2.57	2.57	10.1		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFHxDA	67v05-1v-5	<0.148	0.148	2.01		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
PFODA	16517-11-6	<3.0v	3.0v	3.52		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
MeFOSE	24448-0v-7	<3.06	3.06	10.1		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
EtFOSE	16v1-vv-2	<4.75	4.75	10.1		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	66.8	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1

Sample ID: AA-MW-5 **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Groundwater
Date Collected: 25-Jun-20 12:10

Laboratory Data

Lab Sample: 2001366-05
Date 9eceiRed: 26-Jun-20 0v:15
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	7v.8	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C3-PFBS	IS	86.0	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C3-HFPO-DA	IS	78.0	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C2-4:2 FTS	IS	74.8	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C2-PFHxA	IS	7v.2	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C4-PFHpA	IS	82.2	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C3-PFHxS	IS	13v	25 - 150	D	B0F0250	11-Jul-20	0.248 L	14-Jul-20 17:27	5
13C2-6:2 FTS	IS	75.1	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C5-PFNA	IS	83.2	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C8-PFOSA	IS	51.3	10 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C2-PFOA	IS	87.4	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C8-PFOS	IS	126	25 - 150	D	B0F0250	11-Jul-20	0.248 L	14-Jul-20 17:27	5
13C2-PFDA	IS	78.7	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C2-8:2 FTS	IS	82.v	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
d3-MeFOSAA	IS	7v.0	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C2-PFUnA	IS	75.0	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
d5-EtFOSAA	IS	73.8	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C2-10:2 FTS	IS	6v.v	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C2-PFDoA	IS	73.2	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
d3-MeFOSA	IS	25.8	10 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C2-PFTeDA	IS	66.0	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
d5-EtFOSA	IS	26.v	10 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
13C2-PFHxDA	IS	54.1	25 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
d7-MeFOSE	IS	50.6	10 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1
dv-EtFOSE	IS	4v.4	10 - 150		B0F0250	11-Jul-20	0.248 L	14-Jul-20 01:14	1

MDL - Method Detection Limit 9 L - 9eporting limit 9esults reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: AA-MW-4 DUP **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Groundwater
Date Collected: 25-Jun-20 10:45

Laboratory Data

Lab Sample: 2001366-06
Date 9 eceiRed: 26-Jun-20 0v:15
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	48.2	0.3v6	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFPeA	2706-v0-3	142	0.6v5	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFBS	375-73-5	21.2	0.v72	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
4:2 FTS	757124-72-4	<0.755	0.755	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFHxA	307-24-4	106	1.18	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFPeS	2706-v1-4	36.7	1.31	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
HFPO-DA	13252-13-6	<2.62	2.62	2.72		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFHpA	375-85-v	5v.8	0.321	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
ADONA	v1v005-14-4	<0.3v2	0.3v2	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFHxS	355-46-4	1010	0.514	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
6:2 FTS	2761v-v7-2	18.3	1.0v	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFOA	335-67-1	117	0.354	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFHpS	375-v2-8	132	0.50v	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFNA	375-v5-1	31.5	0.440	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFOSA	754-v1-6	75.1	0.v61	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFOS	1763-23-1	25v0	2.1v	10.v	D	B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:38	5
vCl-PF3ONS	756426-58-1	<0.788	0.788	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFDA	335-76-2	1.v6	0.80v	2.17	J	B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
8:2 FTS	3v108-34-4	<1.12	1.12	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFNS	6825v-12-1	<2.10	2.10	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
MeFOSAA	2355-31-v	<0.8v6	0.8v6	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
EtFOSAA	2vv1-50-6	<0.744	0.744	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFUnA	2058-v4-8	<0.570	0.570	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFDS	335-77-3	<0.668	0.668	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
11Cl-PF3OUdS	763051-v2-v	<1.31	1.31	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
10:2 FTS	120226-60-0	<1.70	1.70	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFDoA	307-55-1	<0.430	0.430	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
MeFOSA	31506-32-8	<2.08	2.08	10.v		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFTrDA	7262v-v4-8	<0.268	0.268	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFDoS	7v780-3v-5	<2.27	2.27	2.72		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFTeDA	376-06-7	<0.410	0.410	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
EtFOSA	4151-50-2	<2.78	2.78	10.v		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFHxDA	67v05-1v-5	<0.160	0.160	2.17		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
PFODA	16517-11-6	<3.34	3.34	3.80		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
MeFOSE	24448-0v-7	<3.30	3.30	10.v		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
EtFOSE	16v1-vv-2	<5.13	5.13	10.v		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	7v.7	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1

Sample ID: AA-MW-4 DUP **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Groundwater
Date Collected: 25-Jun-20 10:45

Laboratory Data

Lab Sample: 2001366-06
Date 9eceiRed: 26-Jun-20 0v:15
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	67.3	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C3-PFBS	IS	6v.3	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C3-HFPO-DA	IS	6v.6	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C2-4:2 FTS	IS	80.6	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C2-PFHxA	IS	67.3	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C4-PFHpA	IS	68.6	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C3-PFHxS	IS	6v.2	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C2-6:2 FTS	IS	71.8	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C5-PFNA	IS	66.0	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C8-PFOSA	IS	42.2	10 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C2-PFOA	IS	70.7	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C8-PFOS	IS	122	25 - 150	D	B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:38	5
13C2-PFDA	IS	66.5	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C2-8:2 FTS	IS	6v.6	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
d3-MeFOSAA	IS	65.5	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C2-PFUnA	IS	6v.2	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
d5-EtFOSAA	IS	64.8	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C2-10:2 FTS	IS	64.1	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C2-PFDoA	IS	63.7	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
d3-MeFOSA	IS	31.7	10 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C2-PFTeDA	IS	55.0	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
d5-EtFOSA	IS	31.7	10 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
13C2-PFHxDA	IS	36.7	25 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
d7-MeFOSE	IS	48.8	10 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1
dv-EtFOSE	IS	48.2	10 - 150		B0F0250	11-Jul-20	0.230 L	14-Jul-20 17:48	1

MDL - Method Detection Limit 9 L - 9eporting limit 9esults reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: Melh o land **yMPS IHLtLpe DilAtiLn s etuLh**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10

Matrix: Water
Date Collected: 25-Jun-20 12:20

BakLbatLbr Data

Lab Sample: 2001366-07
Date Received: 26-Jun-20 09:15

Column: BEH C18

Pnalrte	CPS NAmkeb	CLnc. (ng/B)	s DB	RB	QAalifiebF	o atcu	Extbacteh	Samp Size	Pnalrzeh	DilAtiLn
PFBA	375-22-4	<0.357	0.357	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFPeA	2706-90-3	<0.628	0.628	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFBS	375-73-5	<0.878	0.878	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
4:2 FTS	757124-72-4	<0.681	0.681	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFHxA	307-24-4	<1.07	1.07	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFPeS	2706-91-4	<1.19	1.19	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
HFPO-DA	13252-13-6	<2.36	2.36	2.45		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFHpA	375-85-9	<0.290	0.290	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
ADONA	919005-14-4	<0.354	0.354	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFHxS	355-46-4	<0.464	0.464	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
6:2 FTS	27619-97-2	<0.981	0.981	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFOA	335-67-1	<0.319	0.319	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFHpS	375-92-8	<0.459	0.459	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFNA	375-95-1	<0.397	0.397	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFOSA	754-91-6	<0.868	0.868	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFOS	1763-23-1	0.543	0.396	1.96	J, Q	B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
9Cl-PF3ONS	756426-58-1	<0.711	0.711	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFDA	335-76-2	<0.731	0.731	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
8:2 FTS	39108-34-4	<1.01	1.01	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFNS	68259-12-1	<1.90	1.90	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
MeFOSAA	2355-31-9	<0.809	0.809	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
EtFOSAA	2991-50-6	<0.672	0.672	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFUnA	2058-94-8	<0.515	0.515	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFDS	335-77-3	<0.603	0.603	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
11Cl-PF3OUdS	763051-92-9	<1.18	1.18	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
10:2 FTS	120226-60-0	<1.53	1.53	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFDoA	307-55-1	<0.388	0.388	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
MeFOSA	31506-32-8	<1.88	1.88	9.81		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFTrDA	72629-94-8	<0.242	0.242	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFDoS	79780-39-5	<2.04	2.04	2.45		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFTeDA	376-06-7	<0.370	0.370	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
EtFOSA	4151-50-2	<2.51	2.51	9.81		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFHxDA	67905-19-5	<0.144	0.144	1.96		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
PFODA	16517-11-6	<3.01	3.01	3.43		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
MeFOSE	24448-09-7	<2.98	2.98	9.81		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
EtFOSE	1691-99-2	<4.63	4.63	9.81		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1

Bakeleh StanhabhF	Trpe	% RecLvebr	BimitF	QAalifiebF	o atcu	Extbacteh	Samp Size	Pnalrzeh	DilAtiLn
13C3-PFBA	IS	88.0	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1

Sample ID: Melh o land **yMPS IHLtLpe DilAtiLn s etuLh**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10

Matrix: Water
Date Collected: 25-Jun-20 12:20

BakLbatLbr Data

Lab Sample: 2001366-07
Date Received: 26-Jun-20 09:15

Column: BEH C18

Bakeleh StanhabhF	Trpe	% RecLvebr	BimitF	QAalifiebF	o atcu	Extbacteh	Samp Size	Pnalrzeh	DilAtiLn
13C3-PFPeA	IS	68.6	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C3-PFBS	IS	73.2	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C3-HFPO-DA	IS	67.0	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C2-4:2 FTS	IS	77.4	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C2-PFHxA	IS	67.9	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C4-PFHpA	IS	66.6	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C3-PFHxS	IS	74.0	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C2-6:2 FTS	IS	69.1	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C5-PFNA	IS	63.7	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C8-PFOSA	IS	30.4	10 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C2-PFOA	IS	71.3	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C8-PFOS	IS	69.8	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C2-PFDA	IS	67.6	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C2-8:2 FTS	IS	66.2	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
d3-MeFOSAA	IS	58.3	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C2-PFUnA	IS	66.2	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
d5-EtFOSAA	IS	57.8	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C2-10:2 FTS	IS	64.8	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C2-PFDoA	IS	58.8	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
d3-MeFOSA	IS	16.3	10 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C2-PFTeDA	IS	55.6	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
d5-EtFOSA	IS	16.0	10 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
13C2-PFHxDA	IS	53.2	25 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
d7-MeFOSE	IS	22.8	10 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1
d9-EtFOSE	IS	23.1	10 - 150		B0F0250	11-Jul-20	0.255 L	14-Jul-20 18:10	1

MDL - Method Detection Limit RL - Reporting limit Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: Equip Blank — **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Water
Date Collected: 25-Jun-20 12:35

Laboratory Data

Lab Sample: 2001366-08
Date Received: 26-Jun-20 09:15
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.363	0.363	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFPeA	2706-90-3	<0.637	0.637	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFBS	375-73-5	<0.891	0.891	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
4:2 FTS	757124-72-4	<0.692	0.692	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFHxA	307-24-4	<1.08	1.08	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFPeS	2706-91-4	<1.20	1.20	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
HFPO-DA	13252-13-6	<2.40	2.40	2.49		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFHpA	375-85-9	<0.294	0.294	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
ADONA	919005-14-4	<0.359	0.359	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFHxS	355-46-4	<0.471	0.471	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
6:2 FTS	27619-97-2	<0.995	0.995	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFOA	335-67-1	<0.324	0.324	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFHpS	375-92-8	<0.466	0.466	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFNA	375-95-1	<0.403	0.403	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFOSA	754-91-6	<0.881	0.881	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFOS	1763-23-1	<0.402	0.402	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
9Cl-PF3ONS	756426-58-1	<0.722	0.722	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFDA	335-76-2	<0.741	0.741	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
8:2 FTS	39108-34-4	<1.03	1.03	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFNS	68259-12-1	<1.93	1.93	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
MeFOSAA	2355-31-9	<0.821	0.821	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
EtFOSAA	2991-50-6	<0.682	0.682	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFUnA	2058-94-8	<0.522	0.522	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFDS	335-77-3	<0.612	0.612	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
11Cl-PF3OUdS	763051-92-9	<1.20	1.20	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
10:2 FTS	120226-60-0	<1.56	1.56	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFDoA	307-55-1	<0.394	0.394	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
MeFOSA	31506-32-8	<1.91	1.91	9.95		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFTrDA	72629-94-8	<0.246	0.246	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFDoS	79780-39-5	<2.08	2.08	2.49		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFTeDA	376-06-7	<0.376	0.376	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
EtFOSA	4151-50-2	<2.54	2.54	9.95		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFHxDA	67905-19-5	<0.146	0.146	1.99		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
PFODA	16517-11-6	<3.06	3.06	3.48		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
MeFOSE	24448-09-7	<3.02	3.02	9.95		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
EtFOSE	1691-99-2	<4.70	4.70	9.95		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	87.8	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1

Sample ID: Equip Blank **PFAS Isotope Dilution Method**

Client Data

Name: C T Laboratories
Project: Truax Bldg 414 / 51-0444.10
Matrix: Water
Date Collected: 25-Jun-20 12:35

Laboratory Data

Lab Sample: 2001366-08
Date Received: 26-Jun-20 09:15
Column: BEH C18

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	80.4	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C3-PFBS	IS	83.7	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C3-HFPO-DA	IS	68.9	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C2-4:2 FTS	IS	83.2	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C2-PFHxA	IS	80.7	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C4-PFHpA	IS	85.5	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C3-PFHxS	IS	87.7	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C2-6:2 FTS	IS	81.1	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C5-PFNA	IS	86.4	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C8-PFOSA	IS	38.5	10 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C2-PFOA	IS	88.2	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C8-PFOS	IS	80.9	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C2-PFDA	IS	81.4	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C2-8:2 FTS	IS	75.1	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
d3-MeFOSAA	IS	79.0	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C2-PFUnA	IS	80.8	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
d5-EtFOSAA	IS	63.7	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C2-10:2 FTS	IS	75.5	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C2-PFDoA	IS	74.2	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
d3-MeFOSA	IS	20.1	10 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C2-PFTeDA	IS	68.4	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
d5-EtFOSA	IS	18.9	10 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
13C2-PFHxDA	IS	64.0	25 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
d7-MeFOSE	IS	28.3	10 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1
d9-EtFOSE	IS	28.0	10 - 150		B0F0250	11-Jul-20	0.251 L	14-Jul-20 01:45	1

MDL - Method Detection Limit RL - Reporting limit Results reported to MDL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank
Conc.	Concentration
CRS	Cleanup Recovery Standard
D	Dilution
DL	Detection Limit
E	The associated compound concentration exceeded the calibration range of the instrument
H	Recovery and/or RPD was outside laboratory acceptance limits
I	Chemical Interference
IS	Internal Standard
J	The amount detected is below the Reporting Limit/LOQ
LOD	Limit of Detection
LOQ	Limit of Quantitation
M	Estimated Maximum Possible Concentration (CA Region 2 projects only)
MDL	Method Detection Limit
NA	Not applicable
ND	Not Detected
OPR	Ongoing Precision and Recovery sample
P	The reported concentration may include contribution from chlorinated diphenyl ether(s).
Q	The ion transition ratio is outside of the acceptance criteria.
RL	Reporting Limit
TEQ	Toxic Equivalency
U	Not Detected (specific projects only)
*	See Cover Letter

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

Vista Analytical Laboratory Certifications

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
Arkansas Department of Environmental Quality	19-013-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-23
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2018017
Massachusetts Department of Environmental Protection	N/A
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	1521520
New Hampshire Environmental Accreditation Program	207718-B
New Jersey Department of Environmental Protection	190001
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-010
Pennsylvania Department of Environmental Protection	016
Texas Commission on Environmental Quality	T104704189-19-10
Vermont Department of Health	VT-4042
Virginia Department of General Services	10272
Washington Department of Ecology	C584-19
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	**Method**
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA TO-9A

MATRIX: Biological Tissue	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	**Method**
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613/1613B
1,4-Dioxane (1,4-Diethyleneoxide) analysis by GC/HRMS	EPA 522
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	ISO 25101 2009

MATRIX: Non-Potable Water	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	**Method**
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

2001366 1.2°C

Rev. 02/2017

CHAIN OF CUSTODY

Page 1 of 1

Company: Ayres Associates
Project Contact: Jeff Steiner
Telephone: 608-443-1200
Project Name: Truax Bldg 414
Project #: 51-0444.10
Location: WIANG Madison WI
Sampled By: Thomas P Bausch

CT LABORATORIES
1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Lab Use Only
Place Header Sticker Here:

Program:
QSM RCRA SDWA NPDES
Solid Waste Other _____

PO #

Report To:
EMAIL: steinerj@ayresassociates.com
Company: Ayres Associates
Address: 5201 E. Terrace Dr #200 Madison WI 53718

Invoice To:*
EMAIL: Same As Above
Company:
Address:

**Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions*

Client Special Instructions

Matrix:
GW – groundwater **SW** - surface water **WW** - wastewater **DW** - drinking water
S - soil/sediment **SL** - sludge **A** - air **M** - misc/waste

Turnaround Time
Normal RUSH*
Date Needed: _____
Rush analysis requires prior CT Laboratories' approval
Surcharges:
24 hr 200%
2-3 days 100%
4-9 days 50%

Collection Date	Collection Time	Matrix	Grab/ Comp	Sample #	Sample ID Description	Filtered? Y(N)	PFAS	Total # Containers	Designated MS/MSD	CT Lab ID # (Lab use only)
6/25/20	9:30	GW			AA-MW-3	N	2			
	10:15	GW			AA-MW-2	N	2			
	10:45	GW			AA-MW-4	N	2			
	11:25	GW			AA-MW-1	N	2			
	12:10	GW			AA-MW-5	N	2			
	10:45	GW			AA-MW-4 DUP	N	2			
	12:20	W			Field Blank	N	2			
↓	12:35	W			Equip Blank	N	2			

Fill in Spaces with Bottles per Test

Relinquished by:	Date/Time	Received By:	Date/Time
Thomas P Bausch	6/25/2020 4:30	William R Wright	06/26/20 09:15
Received by:	Date/Time	Received for Laboratory by:	Date/Time

Lab Use Only
Ice Present Yes No
Temp _____ IR Gun _____
Cooler # _____

Vista Analytical Laboratory

Sample Log-In Checklist

Page # 1 of 1

Vista Work Order #: 2001366 TAT 21

Samples Arrival:	**Date/Time** 06/26/20 09:15		**Initials:** WRW		**Location:** WR-2 **Shelf/Rack:** NA		
Delivered By:	FedEx	UPS	On Trac	GLS	DHL	Hand Delivered	Other
Preservation:	Ice		Blue Ice		Dry Ice		None
Temp °C: 1.2 (uncorrected) **Temp °C:** 1.2 (corrected)			**Probe used:** (Y) / N		**Thermometer ID:** DT-3		

	YES	NO	NA
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Airbill = Trk # 394230365039	✓		
Shipping Documentation Present?	✓		
Shipping Container: (Vista) / Client / (Retain) / Return / Dispose	✓		
Chain of Custody / Sample Documentation Present?	✓		
Chain of Custody / Sample Documentation Complete?	✓		
Holding Time Acceptable?	✓		

Logged In:	**Date/Time** 06/26/20 1209	**Initials:** CM	**Location:** R-13, WR-2 **Shelf/Rack:** A-2, B-5	
COC Anomaly/Sample Acceptance Form completed?			✓	✓

Comments:

CoC/Label Reconciliation Report WO# 2001366

LabNumber	CoC Sample ID	SampleAlias	Sample Date/Time	Container	BaseMatrix	Sample Comments
2001366-01	A AA-MW-3		25-Jun-20 09:30	HDPE Bottle, 250 mL	Aqueous	
2001366-01	B AA-MW-3		25-Jun-20 09:30	HDPE Bottle, 250 mL	Aqueous	
2001366-02	A AA-MW-2		25-Jun-20 10:15	HDPE Bottle, 250 mL	Aqueous	
2001366-02	B AA-MW-2		25-Jun-20 10:15	HDPE Bottle, 250 mL	Aqueous	
2001366-03	A AA-MW-4		25-Jun-20 10:45	HDPE Bottle, 250 mL	Aqueous	
2001366-03	B AA-MW-4		25-Jun-20 10:45	HDPE Bottle, 250 mL	Aqueous	
2001366-04	A AA-MW-1		25-Jun-20 11:25	HDPE Bottle, 250 mL	Aqueous	
2001366-04	B AA-MW-1		25-Jun-20 11:25	HDPE Bottle, 250 mL	Aqueous	
2001366-05	A AA-MW-5		25-Jun-20 12:10	HDPE Bottle, 250 mL	Aqueous	
2001366-05	B AA-MW-5		25-Jun-20 12:10	HDPE Bottle, 250 mL	Aqueous	
2001366-06	A AA-MW-4 DUP		25-Jun-20 10:45	HDPE Bottle, 250 mL	Aqueous	
2001366-06	B AA-MW-4 DUP		25-Jun-20 10:45	HDPE Bottle, 250 mL	Aqueous	
2001366-07	A Field Blank		25-Jun-20 12:20	HDPE Bottle, 250 mL	Aqueous	
2001366-07	B Field Blank		25-Jun-20 12:20	HDPE Bottle, 250 mL	Aqueous	
2001366-08	A Equip Blank		25-Jun-20 12:35	HDPE Bottle, 250 mL	Aqueous	
2001366-08	B Equip Blank		25-Jun-20 12:35	HDPE Bottle, 250 mL	Aqueous	

Checkmarks indicate that information on the COC reconciled with the sample label.
Any discrepancies are noted in the following columns.

	Yes	No	NA
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Adequate Sample Volume?	✓		
Container Type Appropriate for Analysis(es)	✓		
Preservation Documented: Na2S2O3 Trizma None Other		✓	✓
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

Comments:

Verifed by/Date: CM 06/26/20

WISCONSIN AIR NATIONAL GUARD
HEADQUARTERS 115TH FIGHTER WING (ACC) (ANG)
3110 MITCHELL STREET
MADISON WISCONSIN 53704-2529

14 October 2021

MEMORANDUM FOR WISCONSIN DEPARTMENT OF NATURAL RESOURCES

FROM: 115 CES/CC

SUBJECT: XGFG189002 F-35 3-Bay Hangar, Truax Field. Materials Management Plan Addendum – BRRTS #: 02-13-585319

1. Pursuant to the 21 July 2021 approved materials management plan, this serves as a project specific addendum for the subject project.

2. Attachment 1 details PFAS sampling results for the subject project. All sample points within the sampling area contained PFAS compromised soil. For materials removed within the project site, materials will be managed as PFAS compromised soil. Materials removed within these boundaries (vertically and horizontally) will be managed in accordance with the 21 July 2021 letter, BRRTS #: 02-13-585319. The sample boundaries represent the entirety of the construction area.

3. If you have any additional questions, please feel free to contact me at 608-286-0010 or michael.dunlap@us.af.mil at any time. Thank you in advance for your review of this material management plan.

DUNLAP.MICHAEL.J.1138452693 Digitally signed by DUNLAP.MICHAEL.J.1138452693 Date: 2021.10.14 12:20:16 -05'00'

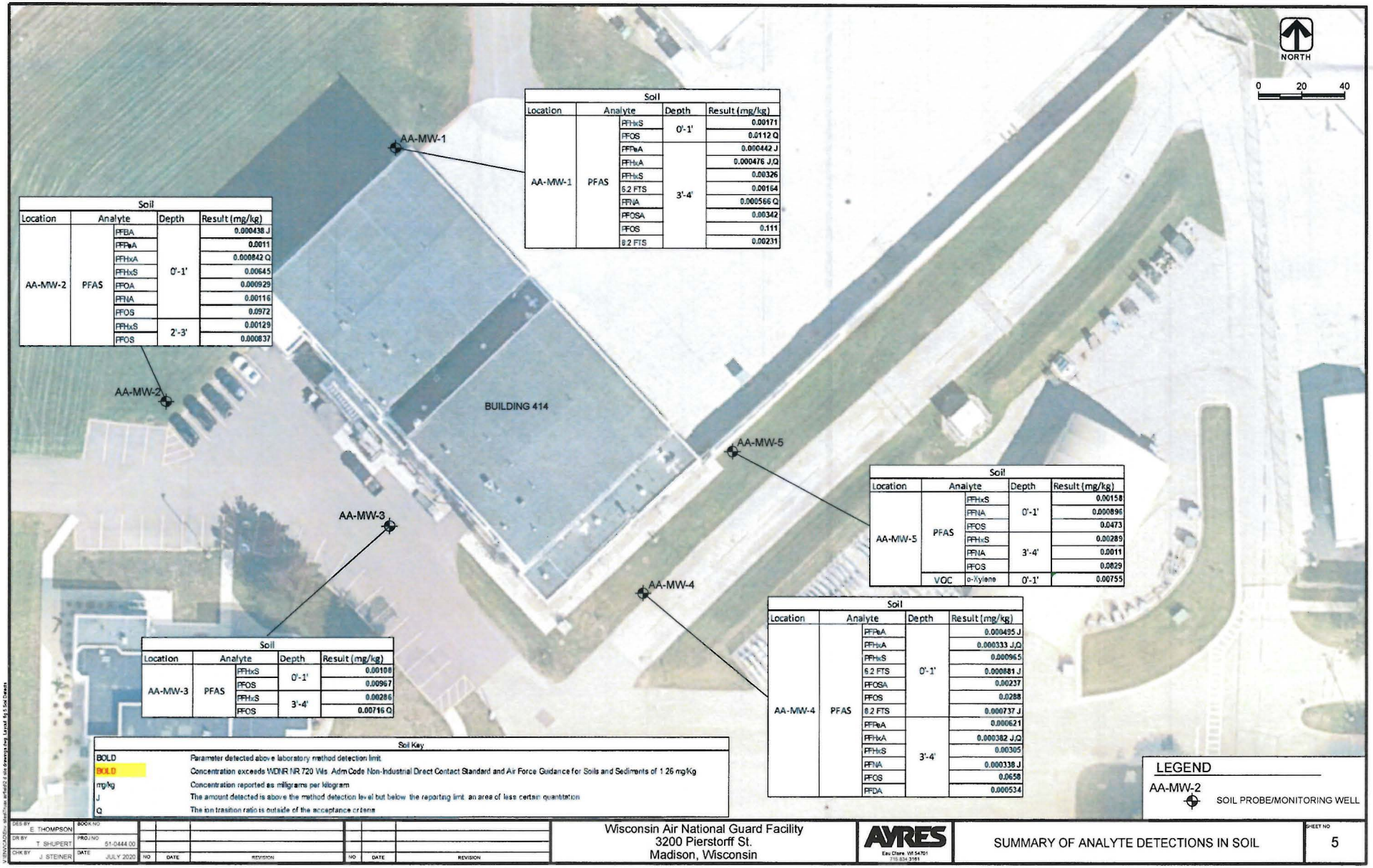
MICHAEL J. DUNLAP, Lt Col, WI ANG
Commander, 115th Civil Engineer Squadron
Base Civil Engineer, 115th Fighter Wing

Attachment:
1. 3-Bay Sampling Report Results
2. 3-Bay Sampling Plan

3 Bay Soil sampling results - PFAS

Site	Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	WI RCL NI (ng/g)	EPA RSL (ng/g)
AA-MW-1 0-1'	PFHxS	355-46-4	1.71	0.391	0.501			
AA-MW-1 0-1'	PFOS	1763-23-1	11.2	0.431	0.501	Q	1260	1260
AA-MW-1 3-4'	PFPeA	2706-90-3	0.442	0.389	0.489	J		
AA-MW-1 3-4'	PFHxA	307-24-4	0.476	0.211	0.489	J,Q		
AA-MW-1 3-4'	PFHxS	355-46-4	3.26	0.381	0.489			
AA-MW-1 3-4'	6:02 FTS	27619-97-2	1.64	0.639	0.977			
AA-MW-1 3-4'	PFNA	375-95-1	0.566	0.305	0.489	Q		
AA-MW-1 3-4'	PFOSA	754-91-6	3.42	0.985	1.47			
AA-MW-1 3-4'	PFOS	1763-23-1	111	0.420	0.489		1260	1260
AA-MW-1 3-4'	8:02 FTS	39108-34-4	2.31	0.706	0.977			
AA-MW-2 0-1'	PFBA	375-22-4	0.438	0.332	0.480	J		
AA-MW-2 0-1'	PFPeA	2706-90-3	1.10	0.382	0.480			
AA-MW-2 0-1'	PFHxA	307-24-4	0.842	0.207	0.480	Q		
AA-MW-2 0-1'	PFHxS	355-46-4	6.45	0.374	0.480			
AA-MW-2 0-1'	PFOA	335-67-1	0.929	0.421	0.480		1260	1260
AA-MW-2 0-1'	PFNA	375-95-1	1.16	0.299	0.480			
AA-MW-2 0-1'	PFOS	1763-23-1	97.2	0.413	0.480		1260	1260
AA-MW-2 2-3'	PFHxS	355-46-4	1.29	0.390	0.500			
AA-MW-2 2-3'	PFOS	1763-23-1	0.837	0.430	0.500		1260	1260
AA-MW-3 0-1'	PFHxS	355-46-4	1.08	0.391	0.502			
AA-MW-3 0-1'	PFOS	1763-23-1	9.67	0.431	0.502		1260	1260
AA-MW-3 3-4'	PFHxS	355-46-4	2.86	0.388	0.497			
AA-MW-3 3-4'	PFOS	1763-23-1	7.16	0.427	0.497	Q	1260	1260
AA-MW-4 0-1'	PFPeA	2706-90-3	0.495	0.400	0.502	J		
AA-MW-4 0-1'	PFHxA	307-24-4	0.333	0.217	0.502	J,Q		
AA-MW-4 0-1'	PFHxS	355-46-4	0.965	0.392	0.502			
AA-MW-4 0-1'	PFOSA	754-91-6	2.37	1.01	1.51			
AA-MW-4 0-1'	PFOS	1763-23-1	28.8	0.432	0.502		1260	1260
AA-MW-4 0-1'	8:02 FTS	39108-34-4	0.737	0.725	1.00	J		
AA-MW-4 3-4'	PFPeA	2706-90-3	0.621	0.392	0.493			
AA-MW-4 3-4'	PFHxA	307-24-4	0.382	0.213	0.483	J,Q		
AA-MW-4 3-4'	PFHxS	355-46-4	3.05	0.385	0.493			
AA-MW-4 3-4'	PFNA	375-95-1	0.338	0.308	0.493	J		
AA-MW-4 3-4'	PFOS	1763-23-1	65.8	0.424	0.493		1260	1260
AA-MW-4 3-4'	PFDA	335-76-2	0.534	0.446	0.493			
AA-MW-5 0-1'	PFHxS	355-46-4	1.58	0.375	0.481			
AA-MW-5 0-1'	PFNA	375-95-1	0.896	0.300	0.481			
AA-MW-5 0-1'	PFOS	1763-23-1	47.3	0.414	0.481		1260	1260
AA-MW-5 3-4'	PFHxS	355-46-4	2.89	0.375	0.481			
AA-MW-5 3-4'	PFNA	375-95-1	1.10	0.300	0.481			
AA-MW-5 3-4'	PFOS	1763-23-1	82.9	0.414	0.481		1260	1260

WI RCL NI - Wisconsin DNR Residual Contaminant Level - non-industrial
EPA RSL - US EPA Regional Screening Level (AF guidance for soils and sediments)
MDL = Method Detection Limit
RL = Reporting Limit
J = The amount detected is below the Reporting Limit/LOQ
Q = The ion transition ratio is outside of the acceptance criteria.



Soil				
Location	Analyte		Depth	Result (mg/kg)
AA-MW-1	PFAS	PFHxS	0'-1'	0.00171
		PFOS		0.0112 Q
		PFPeA	3'-4'	0.000442 J
		PFHxA		0.000476 J,Q
		PFHxS		0.00326
		6:2 FTS		0.00164
		PFNA		0.000566 Q
		PFOSA		0.00342
		PFOS		0.111
		8:2 FTS		0.00231

Soil				
Location	Analyte		Depth	Result (mg/kg)
AA-MW-2	PFAS	PFBA	0'-1'	0.000438 J
		PFPeA		0.0011
		PFHxA		0.000842 Q
		PFHxS		0.00645
		PFOA		0.000929
		PFNA		0.00116
		PFOS		0.0972
		PFHxS	2'-3'	0.00129
		PFOS		0.000837

Soil				
Location	Analyte		Depth	Result (mg/kg)
AA-MW-3	PFAS	PFHxS	0'-1'	0.00108
		PFOS		0.00967
		PFHxS	3'-4'	0.00286
		PFOS		0.00716 Q

Soil				
Location	Analyte		Depth	Result (mg/kg)
AA-MW-4	PFAS	PFPeA	0'-1'	0.000495 J
		PFHxA		0.000333 J,Q
		PFHxS		0.000965
		6:2 FTS		0.000881 J
		PFOSA		0.00237
		PFOS		0.0288
		8:2 FTS		0.000737 J
		PFPeA	3'-4'	0.000621
		PFHxA		0.000382 J,Q
		PFHxS		0.00305
		PFNA		0.000338 J
		PFOS		0.0658
		PFDA		0.000534

Soil				
Location	Analyte		Depth	Result (mg/kg)
AA-MW-5	PFAS	PFHxS	0'-1'	0.00158
		PFNA		0.000896
		PFOS		0.0473
		PFHxS	3'-4'	0.00289
		PFNA		0.0011
		PFOS		0.0829
	VOC	o-Xylene	0'-1'	0.00755

Soil Key	
BOLD	Parameter detected above laboratory method detection limit
BOLD	Concentration exceeds WDNR NR 720 Wis. Adm Code Non-Industrial Direct Contact Standard and Air Force Guidance for Soils and Sediments of 1.26 mg/Kg
mg/kg	Concentration reported as milligrams per kilogram
J	The amount detected is above the method detection level but below the reporting limit; an area of less certain quantitation
Q	The ion transition ratio is outside of the acceptance criteria

LEGEND

AA-MW-2 SOIL PROBE/MONITORING WELL

DES BY E. THOMPSON | BOOK NO
DR BY T. SHUPERT | PROJ NO 51-0444.00
CHK BY J. STEINER | DATE JULY 2020

NO	DATE	REVISION

Wisconsin Air National Guard Facility
3200 Pierstorff St.
Madison, Wisconsin

AYRES Eau Claire, WI 54701 715.834.3161

SUMMARY OF ANALYTE DETECTIONS IN SOIL

SHEET NO 5