



May 24, 2024

Mr. Shawn Cross  
Senior Project Manager  
Kansas City Water Department  
7300 Hawthorne Rd.  
Kansas City, Missouri 64120

Re: Limited Phase II Environmental Site Assessment Report  
Primary and Alternate Sites for Proposed Todd Creek Wastewater Treatment  
Plant, 7800 NW 144th Street, Kansas City, Missouri

Dear Mr. Cross:

Burns & McDonnell has prepared this Limited Phase II Environmental Site Assessment (ESA) Report (Report) to investigate the findings associated with the Phase I ESAs for the Primary and Alternate Sites for the proposed Todd Creek Wastewater Treatment Plant located near 7800 NW 144<sup>th</sup> Street in Kansas City Missouri (Site). The location of the Site is shown on **Figure 1**.

## Site Background

According to the *Burns & McDonnell Phase I ESA, Primary Site* (Burns & McDonnell, 2024a); the Primary Site was previously used for agricultural purposes (since at least 1947), residential purposes (1914 to 2012), surface mining activities (1947 to 2009), and/or waste management (2012). A second Phase I was concurrently conducted at the Alternate Site. According to the *Alternate Site Phase I ESA* (Burns & McDonnell, 2024b); the Alternate Site is mostly forested, but portions have historically been used for agricultural purposes (since at least 1947), residential purposes (1914 to at least 1975), and/or surface mining (since at least 1960). Conclusions from both Phase I ESA Reports included the following Recognized Environmental Condition (REC) for both the Primary and Alternate Sites:

- Based on the Notice and Order to Abate *Violations and Pay Administrative Penalties, Sultany Trucking, LLC and Sultany Farms, LLC* prepared by the Missouri Department of Natural Resources (MDNR) and signed September 18, 2020; the adjacent property owners operated an unpermitted composting or waste disposal operation. A summary from the MDNR notice is included below:

“The facility consisted of approximately 500 tons of stockpiled biosolids material as of September 20, 2018, with an unknown number of stormwater outfalls. The receiving stream for this composting operation is an unnamed tributary to Todd Creek. Composting processes produce leachate, which is

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water that has percolated through a solid and leached out some of the constituents, as water moves through the compost pile and exits the bottom of the pile. Compost wastewater may include process water, wash water, leachate, and comingled stormwater. Compost material and compost wastewater are water contaminants as the term is defined by Section 644.016(24), RSMo. Water contaminants that cause the dissolved oxygen (DO) in the receiving stream to be lower than 5 milligrams per liter (mg/L) violate the specific criteria for water quality standards as defined by 10 CSR 20-7.031(5)(J).” Furthermore, “On September 20, 2018, Department staff conducted an inspection at the facility. Department staff observed piles of starch, industrial byproduct sludge, lime, and sawdust. [...] Department staff also observed sludge material that had been placed on a hillside on the property near 144<sup>th</sup> Street that drained to the tributary of Todd Creek.”

This facility has been ordered by MDNR to conduct specific corrective actions that have not been completed. Although the piling of industrial byproduct sludge did not occur on the Subject Property, the receiving stream that received the wastewater from these activities runs through the Subject Property. MDNR only conducted limited sampling as part of this order (DO), and an impact to tributaries of Todd Creek was confirmed. Therefore, this unpermitted composting activity resulting in contamination of tributaries to Todd Creek is considered a REC.

## Screening Levels

The screening levels used for soil, surface water, and sediment analytical data are provided below.

### *Soil and Sediment Screening Levels*

Soil and sediment data collected during this investigation were screened against the following:

- United States Environmental Protection Agency (USEPA) residential and industrial soil Regional Screening Levels (RSLs); hazard quotient (HQ) of 0.1 (USEPA, 2024).

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- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) were screened against the *Missouri Risk-Based Corrective Action Petroleum Storage Tank Guidance* (MDNR, 2013).

### ***Surface Water Screening Levels***

Surface water data collected during this investigation was screened against the following:

- 10 Code of State Regulations 20-7; Rules of Department of Natural Resources; Division 20 – Clean Water Commission; Chapter 7 – Water Quality (i.e., Missouri Surface Water Quality Standards [SWQSs]) (Missouri Secretary of State, 2023) for:
  - Aquatic Life Protection
  - Human Health Protection
  - Drinking Water Supply
  - Irrigation/Livestock and Wildlife Protection
  - Groundwater
- USEPA Primary and Secondary Maximum Contaminant Levels (MCLs) (USEPA, 2009 and 2011).

### **Investigation Activities and Results**

A summary of the investigation activities and results are provided in the sections below.

#### ***Utility Clearance***

Prior to initiation of any field work involving subsurface activities, utilities were marked and/or cleared using a public utility location service, licensed by the state of Missouri. Subsurface activities were not conducted within 5 feet of any marked underground utilities and there were no utilities marked/located near any of the proposed boring locations.

#### ***Surface and Subsurface Soil Sampling Activities***

Surface and subsurface soil sampling activities were conducted to evaluate potential impacts from areas identified during the 2024 Burns & McDonnell Phase I ESAs for the Primary and Alternate Sites. A total of eight soil borings (SS01 through SS08)

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were advanced at the Site. Three borings were located at the Primary Site (SS01 through SS03), and five borings were located at the Alternate Site (SS04 through SS08) (see **Figure 2**). Soil borings SS03 through SS07 were advanced by hand auger to the planned depth of 4 feet below ground surface (bgs). Early refusal was encountered at several borings: Soil Boring SS01 was advanced by shovel to a depth of 1-foot bgs, due to encountering refusal (rocky subsurface material). Soil boring SS02 was advanced by hand auger to a depth of 2 feet bgs, due to encountering refusal (metal and other debris). Soil boring SS08 was advanced by hand auger to a depth of 3 feet bgs, due to encountering refusal. Soil borings SS01 and SS02 were offset multiple times in an attempt to reach the target depth of 4 feet bgs.

A total of 14 surface and subsurface soil samples and one field duplicate sample were collected. Seven surface soil samples (SS02/SS-1 through SS08/SS-1) and one field duplicate sample were collected from 0-2 feet bgs and one surface soil sample (SS01/SS-1) was collected from 0-1-foot bgs. The field duplicate sample (DUP-01) was collected concurrently with the surface soil sample collected from SS02/SS-1. Five subsurface soil samples (SS03/SS-2 through SS07/SS-2) were collected from 2-4 feet bgs and one subsurface soil sample (SS08/SS-2) was collected from 2-3 feet bgs. A general description of the materials encountered at each boring location was documented on drilling logs. A photoionization detector was used to screen soil from each boring location and was documented on the boring logs. A copy of the field logbook is provided as **Attachment A**. Copies of drilling logs are provided as **Attachment B**.

Soil samples were collected using a clean, stainless steel sampling knife, spoon, or nitrile-gloved hand. Soil was transferred directly to clean, laboratory provided sample containers. Each sample container was sealed, labeled, and immediately placed into a cooler containing ice.

Soil samples were submitted to Pace Analytical Services, LLC (Pace) located in Lenexa, Kansas under proper chain-of-custody for laboratory analysis of the following:

- Volatile organic compounds (VOCs) using USEPA Method 8260C;
- Semi-volatile organic compounds (SVOCs) using USEPA Method 8270E;
- Target analyte list (TAL) metals and molybdenum using USEPA Methods 6020B/7471B;

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- Polychlorinated biphenyls (PCBs) using USEPA Method 8082;
- Pesticides using USEPA Method 8081B;
- Chlorinated herbicides using USEPA Method 8151A;
- Nitrate and nitrite using USEPA Method 9056;
- Ammonia using USEPA Method 350.1;
- Total cyanide using Standard Method (SM) 4500-CN-E;
- TPH-GRO using USEPA Method 8260;
- TPH-DRO and TPH-ORO using USEPA Method 8270;
- Percent moisture using American Society for Testing Materials (ASTM) D2974;  
and
- Total solids using SM 2540G.

The hand auger and nondedicated sampling equipment were decontaminated before sample collection and between sample locations. Upon completion of soil sampling, each borehole was backfilled with topsoil that was purchased from a home and garden store.

### ***Surface and Subsurface Soil Analytical Results***

Surface and subsurface soils sample laboratory analytical results indicated detections of metals, VOCs, TPH-DRO, TPH-ORO, ammonia as nitrogen (N), nitrate as N, nitrite as N, and cyanide. Of the analytes detected, only metals were detected above USEPA residential and/or industrial RSLs. A summary of the metals exceeding USEPA RSLs is provided below. The soil sample analytical results from the Limited Phase II ESA are presented in **Table 1**. Copies of the laboratory analytical reports for soil are included as **Attachment C**.

#### **Aluminum**

Aluminum was detected in all 14 soil samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 4,250 estimated value (J) milligrams per kilogram (mg/kg) (SS02/SS-1) to 42,100 mg/kg (SS08/SS-2) (see **Table 1**). Thirteen of the soil samples had analytical detections above the USEPA residential RSL of 7,700 mg/kg (see **Figures 3a** and **3b**). None of the samples had analytical detections above the USEPA industrial RSL of 110,000 mg/kg. Aluminum is naturally occurring in soils in Missouri and is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

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### Arsenic

Arsenic was detected in all 14 soil samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 5.10 mg/kg (SS08/SS-1) to 14.7 mg/kg (SS08/SS-2) (see **Table 1**). All soil samples had analytical detections above the USEPA residential RSL of 0.68 mg/kg and the industrial RSL of 3.0 mg/kg (see **Figures 3a** and **3b**). Arsenic is naturally occurring in soils in Missouri and is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### Cobalt

Cobalt was detected in all 14 soil samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 3.36 mg/kg (SS02/SS-1) to 21.1 mg/kg (SS03/SS-2) (see **Table 1**). All soil samples had analytical detections above the USEPA residential RSL of 2.3 mg/kg (see **Figures 3a** and **3b**). None of the samples had analytical detections above the USEPA industrial RSL of 35 mg/kg. Cobalt is naturally occurring in soils in Missouri and is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### Iron

Iron was detected in all 14 soil samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 11,300 mg/kg (SS02/SS-1) to 43,600 mg/kg (SS08/SS-2) (see **Table 1**). All soil samples had analytical detections above the USEPA residential RSL of 5,500 mg/kg (see **Figures 3a** and **3b**). None of the samples had analytical detections above the USEPA industrial RSL of 82,000 mg/kg. Iron is naturally occurring in soils in Missouri and is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### Manganese

Manganese was detected in all 14 soil samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 536 mg/kg (SS03/SS-1) to 2,540 mg/kg (SS08/SS-2) (see **Table 1**). All soil samples had analytical detections above the USEPA residential RSL of 180 mg/kg (see **Figures 3a** and **3b**). None of the samples had analytical detections above the USEPA industrial RSL of 2,600 mg/kg. Manganese is naturally occurring in soils in Missouri and is not

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expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### **Thallium**

Thallium was detected in all 14 soil samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 0.110 J mg/kg (SS02/SS-1) to 0.405 J mg/kg (SS08/SS-2) (see **Table 1**). All soil samples had analytical detections above the USEPA residential RSL of 0.078 mg/kg (see **Figures 3a** and **3b**). None of the samples had analytical detections above the USEPA industrial RSL of 1.2 mg/kg. Thallium is naturally occurring in soils in Missouri and is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### **Vanadium**

Vanadium was detected in all 14 soil samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 12.7 J mg/kg (SS02/SS-1) to 67.1 mg/kg (SS08/SS-2) (see **Table 1**). Ten soil samples had analytical detections above the USEPA residential RSL of 39 mg/kg (see **Figures 3a** and **3b**). None of the samples had analytical detections above the USEPA industrial RSL of 580 mg/kg. Aluminum is naturally occurring in soils in Missouri and is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### ***Surface Water and Sediment Sampling Activities***

Surface water and sediment sampling activities were conducted to evaluate potential impacts from areas identified during the 2024 Burns & McDonnell Phase I ESAs for the Primary and Alternate Sites. Nine surface water samples (SW02/SW-1 through SW10/SW-1) and one field duplicate sample (DUP-02) and ten sediment samples (SD01/SD-1 through SD10/SD-1) and one field duplicate sample (DUP-03) were collected from the unnamed tributary of Todd Creek (see **Figure 2**). The surface water field duplicate sample (DUP-02) was collected concurrently with the sample collected from SW03/SW-1. The sediment field duplicate sample (DUP-03) was collected concurrently with the sediment sample collected from SD03/SD-1. Surface Water and Sediment Samples SW02/SW-1 through SW07/SW-1 and SD01/SD-1 through SD07/SD-1 were collected from the Primary Site. Surface Water and Sediment Samples SW08/SW-1 through SW10/SW-1 and SD08/SD-1 through

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SD10/SD-1 were collected from the Alternate Site. A surface water sample was not collected from sample location SW01 due to insufficient water; however, a dry sediment sample was collected.

Surface water and sediment sampling was completed by collecting samples from the furthest downstream location first, then working upstream to reduce the potential of cross-contamination of sampling locations. At each location, surface water samples were collected prior to field personnel collecting the corresponding sediment sample. A copy of the field logbook is provided as **Attachment A**.

Surface water samples were collected by placing a clean, unpreserved disposable sample container into the stream and then transferring the water to the appropriate preserved, laboratory provided sample container. The sediment sample was then collected from the 0 to 6-inch interval of the stream bed using a shovel. The shovel was decontaminated before sample collection and between sample locations. Each container was sealed, labeled, and immediately placed into a cooler containing ice.

Surface water samples were submitted to Pace for analysis of the following:

- VOCs using USEPA Method 8260C;
- SVOCs using USEPA Method 8270E;
- TAL metals and molybdenum using USEPA Methods 6020B/7470A;
- PCBs using USEPA Method 8082;
- Pesticides using USEPA Method 8081B;
- Chlorinated herbicides using USEPA Method 8151A;
- Nitrate and nitrite using USEPA Method 353.2;
- Nitrate and nitrite (preserved) using USEPA Method 353.2;
- Fluoride and sulfate using USEPA Method 300.0;
- Ammonia using USEPA Method 350.1;
- Sulfide using SM 4500-S2D;
- Alkalinity using SM 2320B;
- Dissolved oxygen using SM 4500-O-G;
- Total cyanide using SM 4500-CN-E;
- TPH-GRO using USEPA Method 8260;
- TPH-DRO and TPH-ORO using USEPA Method 8270; and
- pH using USEPA Method 9040C.



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Sediment samples were submitted to Pace for analysis of the following:

- VOCs using USEPA Method 8260C;
- SVOCs using USEPA Method 8270E;
- TAL metals and molybdenum using USEPA Methods 6020B/7471B;
- PCBs using USEPA Method 8082;
- Pesticides using USEPA Method 8081B;
- Chlorinated herbicides using USEPA Method 8151A;
- Nitrate and nitrite using USEPA Method 9056;
- Ammonia using USEPA Method 350.1;
- Total cyanide using SM 4500-CN-E;
- TPH-GRO using USEPA Method 8260;
- TPH-DRO and TPH-ORO using USEPA Method 8270;
- Percent moisture using ASTM D2974; and
- Total solids using SM 2540G.

### ***Surface Water Results***

Surface water sample laboratory analytical results indicated detections of pesticides, metals, ammonia as N, nitrate as N, combined nitrate/nitrite as N, sulfide, fluoride, and sulfate. Water quality parameters alkalinity, dissolved oxygen, and pH were also reported. Of the analytes detected only pesticides, metals, alkalinity, and sulfate were detected above one or more of the Missouri SWQs and/or USEPA Primary and Secondary MCLs. A summary of analytes exceeding Missouri SWQs and/or USEPA Primary and Secondary MCLs is provided below. The surface water sample results from the Limited Phase II ESA are presented in **Table 2**. Copies of the laboratory analytical reports for surface water samples are presented as **Attachment C**.

#### **Pesticide (alpha-BHC)**

The pesticide, alpha-BHC was detected above the Missouri SWQs for drinking water supply and groundwater (0.0000022 mg/L), and Human Health Protection Fish Consumption (0.0000074 mg/L) in one surface water sample (SW06/SW-1) at a concentration of 0.0000187 mg/L (see **Table 2** and **Figure 4a**). Based on the alpha-BHC analytical detection in surface water, it is possible that operations associated with Sultany Trucking, LLC or Sultany Farms, LLC has affected surface water quality in the unnamed tributary to Todd Creek.

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### Aluminum

Aluminum was detected in all nine surface water samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 0.036 mg/L (SW05/SW-1) to 11.4 mg/L (SW02/SW-1) (see **Table 2**). Eight surface water samples had analytical detections above the USEPA Secondary MCL of 0.05 - 0.2 mg/L and two samples had analytical detections above the Missouri SWQS of 0.75 mg/L for Acute Aquatic Life Protection (see **Figures 4a** and **4b**). Detections of aluminum in surface water samples approximately mirror detections in soil samples. Aluminum is naturally occurring in surface waters in Missouri and is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### Iron

Iron was detected in all nine surface water samples the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 0.091 mg/L (SW05/SW-1) to 27.9 mg/L (SW02/SW-1) (see **Table 2**). Eight surface water samples had analytical detections above the USEPA Secondary MCL of 0.3 mg/L and Missouri SWQS for groundwater. Four samples had analytical detections above the Missouri SWQS of 1 mg/L for Chronic Aquatic Life Protection (see **Figures 4a** and **4b**). Detections of iron in surface water samples approximately mirror detections in soil samples. Aluminum is naturally occurring in surface waters in Missouri and is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### Lead

Lead was detected in four surface water samples collected during the Limited Phase II ESA at concentrations ranging from 0.002440 mg/L (SW04/SW-1) to 0.023800 mg/L (SW02/SW-1) (see **Table 2**). One surface water sample (SW02/SW-1) had an analytical detection above the Missouri SWQS for Drinking Water Supply and Groundwater and the USEPA Primary MCL of 0.015 mg/L (see **Figures 4a** and **4b**). Detections of lead in surface water samples approximately mirror detections in soil samples. Lead is naturally occurring in surface waters in Missouri; however, based on the location of the lead exceedance, operations associated with Sultany Trucking, LLC or Sultany Farms, LLC may have contributed to the lead in surface water of the unnamed tributary of Todd Creek.

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### **Manganese**

Manganese was detected in all nine surface water samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 0.038 mg/L (SW05/SW-1) to 4.44 mg/L (SW09/SW-1) (see **Table 2**). Eight surface water samples had analytical detections above the Missouri SWQS for Groundwater and the USEPA Secondary MCL of 0.05 mg/L (see **Figure 4a** and **4b**). Detections of manganese in surface water samples approximately mirror detections in soil samples. Aluminum is naturally occurring in surface waters in Missouri and is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### **Alkalinity**

Alkalinity was detected in all nine of the surface water samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 98.4 mg/L (SW09/SW-1) to 364 mg/L (SW03/SW-1, DUP-02, SW04/SW-1, and SW05/SW-1) (see **Table 3**). All nine surface water samples had analytical detections above the Missouri SWQS for Chronic Aquatic Life Protection of 20 mg/L (see **Figures 4a** and **4b**). Alkalinity in surface water is naturally occurring; however, the detections of alkalinity in the surface water samples collected were elevated. Based on the alkalinity detections in surface water, it is possible that historical activities or operations associated with Sultany Trucking, LLC or Sultany Farms, LLC has affected surface water quality in the unnamed tributary to Todd Creek.

### **Sulfate**

Sulfate was detected in all nine of the surface water samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 129 mg/L (SW04/SW-1) to 559 mg/L (SW10/SW-1) (see **Table 2**). Five surface water samples had analytical detections above the USEPA Secondary MCL of 250 mg/L (see **Figures 4a** and **4b**). Sulfate is naturally occurring in surface waters in Missouri. Based on the sulfate detections in surface water, it is possible that historical activities or operations associated with Sultany Trucking, LLC or Sultany Farms, LLC has affected surface water quality in the unnamed tributary to Todd Creek.

### ***Sediment Sample Results***

Sediment sample laboratory analytical results indicated detections of metals, VOCs, TPH-GRO, TPH-DRO, and TPH-ORO, ammonia as N, nitrate as N, and cyanide. Of the

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analytes detected, only metals were detected above USEPA residential and/or industrial RSLs for soil. A summary of metals exceeding USEPA RSLs is provided below. The sediment sample results from the Limited Phase II ESA are presented in **Table 3**. Copies of the laboratory analytical reports for sediment are presented as **Attachment C**.

### Aluminum

Aluminum was detected in all 10 sediment samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 1,780 mg/kg (SD03/SD-1) to 21,300 mg/kg (SD01/SD-1) (see **Table 3**). Two sediment samples had analytical detections above the USEPA residential RSL for soil of 7,700 mg/kg (see **Figures 5a** and **5b**). None of the samples had analytical detections above the USEPA industrial RSL for soil of 110,000 mg/kg. Aluminum is naturally occurring in sediments in Missouri. Additionally, there were corresponding detections of aluminum in the soil samples. The aluminum detected in sediment is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### Arsenic

Arsenic was detected in all 10 sediment samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 3.45 mg/kg (DUP-03) to 14.8 mg/kg (SD08/SD-1) (see **Table 3**). All sediment samples had analytical detections above the USEPA residential RSL for soil of 0.68 mg/kg and the industrial RSL for soil of 3.0 mg/kg (see **Figures 5a** and **5b**). Arsenic is naturally occurring in sediments in Missouri. Additionally, there were corresponding detections of arsenic in the soil samples. The arsenic detected in sediment is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### Cobalt

Cobalt was detected in all 10 sediment samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 2.46 mg/kg (DUP-03) to 18.1 mg/kg (SS08/SD-1) (see **Table 3**). All sediment samples had analytical detections above the USEPA residential RSL for soil of 2.3 mg/kg (see **Figures 5a** and **5b**). None of the samples had analytical detections above the USEPA industrial RSL for soil of 35 mg/kg. Cobalt is naturally occurring in sediments in

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Missouri. Additionally, there were corresponding detections of cobalt in the soil samples. The cobalt detected in sediment is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### Iron

Iron was detected in all 10 sediment samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 8,190 mg/kg (SD03/SD-1) to 26,300 mg/kg (SD01/SD-1) (see **Table 3**). All sediment samples had analytical detections above the USEPA residential RSL for soil of 5,500 mg/kg (see **Figures 5a** and **5b**). None of the samples had analytical detections above the USEPA industrial RSL for soil of 82,000 mg/kg. Iron is naturally occurring in sediments in Missouri. Additionally, there were corresponding detections of iron in the soil samples. The iron detected in sediment is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### Manganese

Manganese was detected in all 10 sediment samples and the field duplicate sample collected during the Limited Phase II ESA at concentrations ranging from 414 mg/kg (SD02/SD-1) to 2,020 mg/kg (SD08/SD-1) (see **Table 3**). All sediment samples had analytical detections above the USEPA residential RSL for soil of 180 mg/kg (see **Figures 5a** and **5b**). None of the samples had analytical detections above the USEPA industrial RSL for soil of 2,600 mg/kg. Manganese is naturally occurring in sediments in Missouri. Additionally, there were corresponding detections of manganese in the soil samples. The manganese detected in sediment is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### Thallium

Thallium was detected in nine sediment samples collected during the Limited Phase II ESA at concentrations ranging from 0.0922 J mg/kg (SD10/SD-1) to 0.320 J mg/kg (SD09/SD-1) (see **Table 3**). All nine of the sediment samples had analytical detections above the USEPA residential RSL for soil of 0.078 mg/kg (see **Figures 5a** and **5b**). None of the samples had analytical detections above the USEPA industrial RSL for soil of 1.2 mg/kg. Although there were detections that exceeded the USEPA

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residential RSL for soil, there were no exceedances of USEPA industrial RSLs for soil. Thallium is naturally occurring in sediments in Missouri. Thallium is naturally occurring in sediments in Missouri. Additionally, there were corresponding detections of thallium in the soil samples. The thallium detected in sediment is not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

### ***Management of Investigation-Derived Waste***

Investigation-derived waste (IDW) is classified into two categories: waste consisting of site materials generated during the field investigations (e.g., soil cuttings and decontamination process water), and waste consisting of non-site materials (e.g., nitrile gloves and trash). Due to the volume of soil needed to fill the sample containers, all of the soil material was used for the samples and no soil IDW was generated.

Liquid IDW generated during the field investigation was placed into a 55-gallon drum and a composite sample was collected from the liquid IDW for waste characterization purposes. The liquid IDW sample was submitted to Pace for analysis of the following:

- Toxicity characteristic leaching procedure (TCLP) VOCs using USEPA Methods 1311/8260D;
- TCLP SVOCs using USEPA Methods 1311/8270E;
- Resource Conservation and Recovery Act metals using USEPA Methods 6010D/7470A;
- TCLP pesticides using USEPA Methods 1311/8081B;
- TCLP chlorinated herbicides using USEPA Methods 1311/8151A;
- PCBs using USEPA Method 8082;
- pH/corrosivity using USEPA Method 9040C; and
- Flashpoint/ignitability using USEPA Method 1010A.

All other general waste generated, including all disposable personal protective equipment, paper towels, empty water bottles, etc., were placed in trash bags. The trash bags were placed in an appropriate solid waste receptacle. A copy of the laboratory analytical report for the IDW is presented as **Attachment D**.

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As shown in the laboratory analytical report the IDW, there were no detections above laboratory detection limits. It is recommended that the water be disposed of at the Todd Creek Wastewater Treatment Plant, where it is currently being staged.

### Laboratory Quality Assurance/Quality Control and Data Validation

Quality assurance/quality control (QA/QC) samples consisted of field duplicates, matrix spike (MS) and matrix spike duplicate (MSD) sample pairs, rinsate blanks, and trip blanks. One field duplicate sample was collected for each sampling matrix (soil, surface water, and sediment). One MS/MSD sample pair was collected for each sampling matrix (soil, surface water, and sediment). A total of two rinsate blanks were collected following decontamination of soil and sediment sampling equipment (one sample for each set of sampling equipment). Field duplicate samples, MS/MSD sample pairs, and rinsate blank samples were submitted to Pace and analyzed for the analytical suite of their corresponding parent samples. Trip blanks were placed in each sample cooler containing aqueous VOC and/or TPH-GRO samples and analyzed for VOC and TPH-GRO using previously identified methods.

Burns & McDonnell performed a Level 2 data review to evaluate the results for any method-specific QA/QC criteria. Data qualifiers, when appropriate, were assigned according to the guideline presented in the USEPA's *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a) and *National Functional Guidelines for Superfund Inorganic Methods Data Review* (USEPA, 2020b). The nitrate and nitrite data for sample SS03/SS-2 were rejected due to exceedance of holding time. The data for compounds dalapon (chlorinated herbicide) and hexachlorocyclopentadiene (SVOC) in sample SD07/SD-1 were rejected due to extremely low MS/MSD percent recoveries. With the exception of the nitrate and nitrite data for sample SS03/SS-2 and the dalapon and hexachlorocyclopentadiene data for sample SD07/SD-1 discussed above, the data are valid for use, as qualified. A copy of the Data Validation Memorandum is provided as **Attachment E**.

### Conclusions

Fourteen soil samples (eight surface soil and six subsurface soil samples) and one field duplicate were collected as part of the Limited Phase II ESA and submitted to Pace for laboratory analysis. Laboratory analytical results of the surface and subsurface soil samples indicated detections of metals, VOCs, TPH-DRO, TPH-ORO,

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ammonia as N, nitrate as N, and nitrite as N. Of the analytes detected in soil, only metals (aluminum, arsenic, cobalt, iron, manganese, thallium, and vanadium) were detected above USEPA residential RSLs. Arsenic was also detected above the USEPA industrial RSL. Metals that exceeded the USEPA RSLs are naturally occurring in soils in Missouri and are not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

Nine surface water samples and one field duplicate were collected as part of the Limited Phase II ESA and submitted to Pace for laboratory analysis. Surface water sample laboratory analytical results indicated detections of pesticides, metals, TPH-GRO, TPH-DRO, TPG-ORO, ammonia as N, nitrate as N, combined nitrate/nitrite as N, sulfide, fluoride, and sulfate. Of the analytes detected only pesticides (alpha-BHC), metals (aluminum, iron, lead, and manganese), alkalinity, and sulfate were detected above one or more SWQs and/or USEPA Primary and/or Secondary MCLs. Aluminum, iron, lead, and manganese detections in surface water samples approximately mirrored detections in soil samples. Aluminum, iron, lead, and manganese are naturally occurring in surface waters in Missouri. The exceedances of aluminum, iron, and manganese are not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC. However, based on the location of the lead exceedance, operations associated with Sultany Trucking, LLC or Sultany Farms, LLC may have contributed to the lead in surface water of the unnamed tributary of Todd Creek. The pesticide, alpha-BHC, was detected above multiple Missouri SWQs in one surface water sample. Alkalinity exceeded the Missouri SWQs for Chronic Aquatic Life Protection in all nine surface water samples collected. Sulfate exceeded the USEPA Secondary MCL in five surface water samples collected. Based on the detections of alpha-BHC, alkalinity, and sulfate in surface water, it is possible that historical mining activities or operations associated with Sultany Trucking, LLC or Sultany Farms, LLC has affected surface water quality in the unnamed tributary to Todd Creek.

Ten sediment samples and one field duplicate sample were collected as part of the Limited Phase II ESA and submitted to Pace for laboratory analysis. Sediment sample laboratory analytical results indicated detections of metals, VOCs, TPH-GRO, TPH-DRO, and TPH-ORO, ammonia as N, nitrate as N, and cyanide. Of the analytes detected in sediment, only metals (aluminum, arsenic, cobalt, iron, manganese, and



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thallium) were detected above USEPA residential RSLs for soil. Arsenic was also detected above the USEPA industrial RSL for soil. Aluminum, arsenic, cobalt, iron, manganese, and thallium are naturally occurring in sediments in Missouri. Additionally, there were corresponding detections of aluminum, arsenic, cobalt, iron, manganese, and thallium in the soil samples. The aluminum, arsenic, cobalt, iron, manganese, and thallium detections in sediment are not expected to be the result of contamination from historical mining activities or from operations associated with Sultany Trucking, LLC or Sultany Farms, LLC.

## References

- Burns & McDonnell, 2024a. *KC Water Draft Final Phase I ESA, Primary Site, 7800 NW 144<sup>th</sup> Street, Kansas City, Platte County, Missouri*. January.
- Burns & McDonnell, 2024b. *KC Water Draft Final Phase I ESA, Alternate Site, NW 144<sup>th</sup> Street, Kansas City, Platte County, Missouri*. January.
- MDNR, 2013. *Missouri Risk-Based Corrective Action Process for Petroleum Storage Tanks Guidance*. October.
- MDNR, 2023. *Notice and Order to Abate Violations and Pay Administrative Penalties, Sultany Trucking, LLC, and Sultany Farms, LLC*. September.
- Missouri Secretary of State, 2023. *10 CSR 20-7; Rules of Department of Natural Resources; Division 20 - Clean Water Commission; Chapter 7 - Water Quality*. September.
- USEPA, 2009. *National Primary Drinking Water Regulations*. May.
- USEPA, 2011. *National Secondary Drinking Water Regulations*, June.
- USEPA, 2020a. *National Functional Guidelines for Organic Superfund Methods Data Review*. December.
- USEPA, 2020b. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. December.
- USEPA, 2024. *Regional Screening Level Composite Summary Tables (TR 1E-06, THQ 0.1)*. Available: <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>. May.

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If you have any questions regarding this Limited Phase II ESA Report, please contact me at (816) 839-7183 or [jcarter@burnsmcd.com](mailto:jcarter@burnsmcd.com).

Sincerely,

Burns & McDonnell



Justin Carter  
Associate Geologist

Attachments:

Figure 1 - Site Location Map  
Figure 2 - Soil, Surface Water, and Sediment Sample Locations  
Figure 3a - Distribution of Soil Screening Level Exceedances - Primary Site  
Figure 3b - Distribution of Soil Screening Level Exceedances - Alternate Site  
Figure 4a - Distribution of Surface Water Screening Level Exceedances - Primary Site  
Figure 4b - Distribution of Surface Water Screening Level Exceedances - Alternate Site  
Figure 5a - Distribution of Sediment Screening Level Exceedances - Primary Site  
Figure 5b - Distribution of Sediment Screening Level Exceedances - Alternate Site

Table 1 - Soil Sample Results  
Table 2 - Surface Water Sample Results  
Table 3 - Sediment Sample results

Attachment A - Field Logbook  
Attachment B - Drilling Logs  
Attachment C - Laboratory Analytical Reports (Soil, Surface Water, and Sediment)  
Attachment D - Laboratory Analytical Report (IDW)  
Attachment E - Data Validation Memorandum



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cc: Brent Herring (KC Water)  
Kevin White (KC Water)  
Jeff Keller (Burns & McDonnell)

**FIGURE 1 - SITE LOCATION MAP**

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**FIGURE 2 - SOIL, SURFACE WATER, AND SEDIMENT  
SAMPLE LOCATIONS**

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**FIGURE 3a - DISTRIBUTION OF SOIL SCREENING LEVEL  
EXCEEDANCES - PRIMARY SITE**

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**FIGURE 3b - DISTRIBUTION OF SOIL SCREENING LEVEL  
EXCEEDANCES - ALTERNATE SITE**

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**FIGURE 4a - DISTRIBUTION OF SURFACE WATER  
SCREENING LEVEL EXCEEDANCES - PRIMARY SITE**

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**FIGURE 4b - DISTRIBUTION OF SURFACE WATER  
SCREENING LEVEL EXCEEDANCES - ALTERNATE SITE**

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**FIGURE 5a - DISTRIBUTION OF SEDIMENT SCENEING  
LEVEL EXCEEDANCES - PRIMARY SITE**

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**FIGURE 5b - DISTRIBUTION OF SEDIMENT SCREENING  
LEVEL EXCEEDANCES - ALTERNATE SITE**

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## TABLE 1 - SOIL SAMPLE RESULTS

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**TABLE 2 - SURFACE WATER SAMPLE RESULTS**

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### TABLE 3 - SEDIMENT SAMPLE RESULTS

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## ATTACHMENT A - FIELD LOGBOOK

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## ATTACHMENT B - DRILLING LOGS

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**ATTACHMENT C - LABORATORY ANALYTICAL REPORTS  
(SOIL, SURFACE WATER, AND SEDIMENT)**

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**ATTACHMENT D - LABORATORY ANALYTICAL REPORT  
(IDW)**

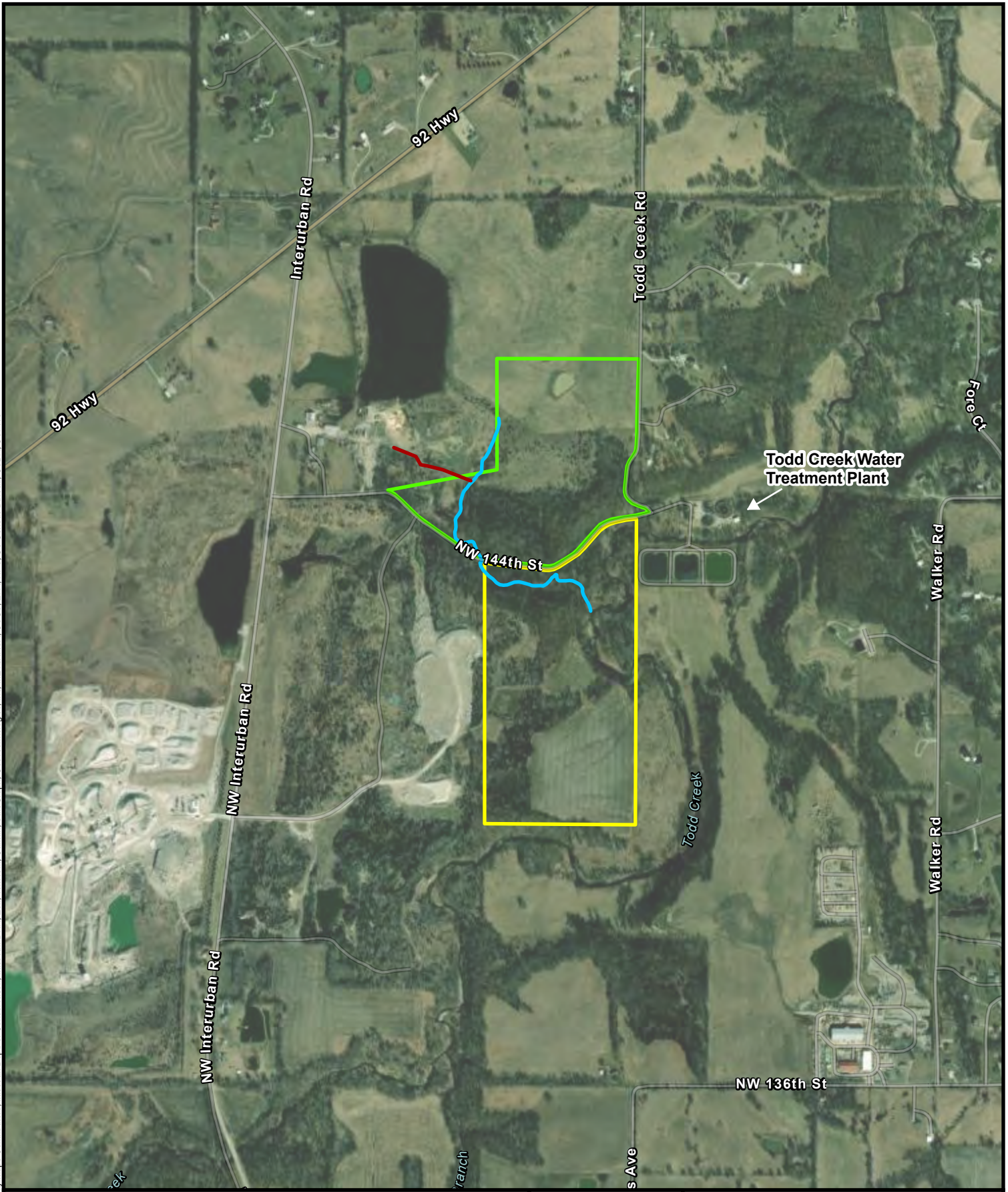
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## ATTACHMENT E - DATA VALIDATION MEMORANDUM

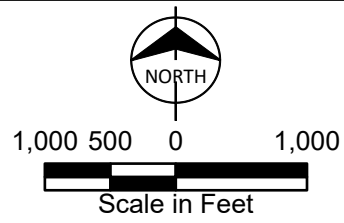
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**FIGURE 1 - SITE LOCATION MAP**

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- Legend**
- Unnamed Tributary
  - Berm
  - Primary Site
  - Alternate Site

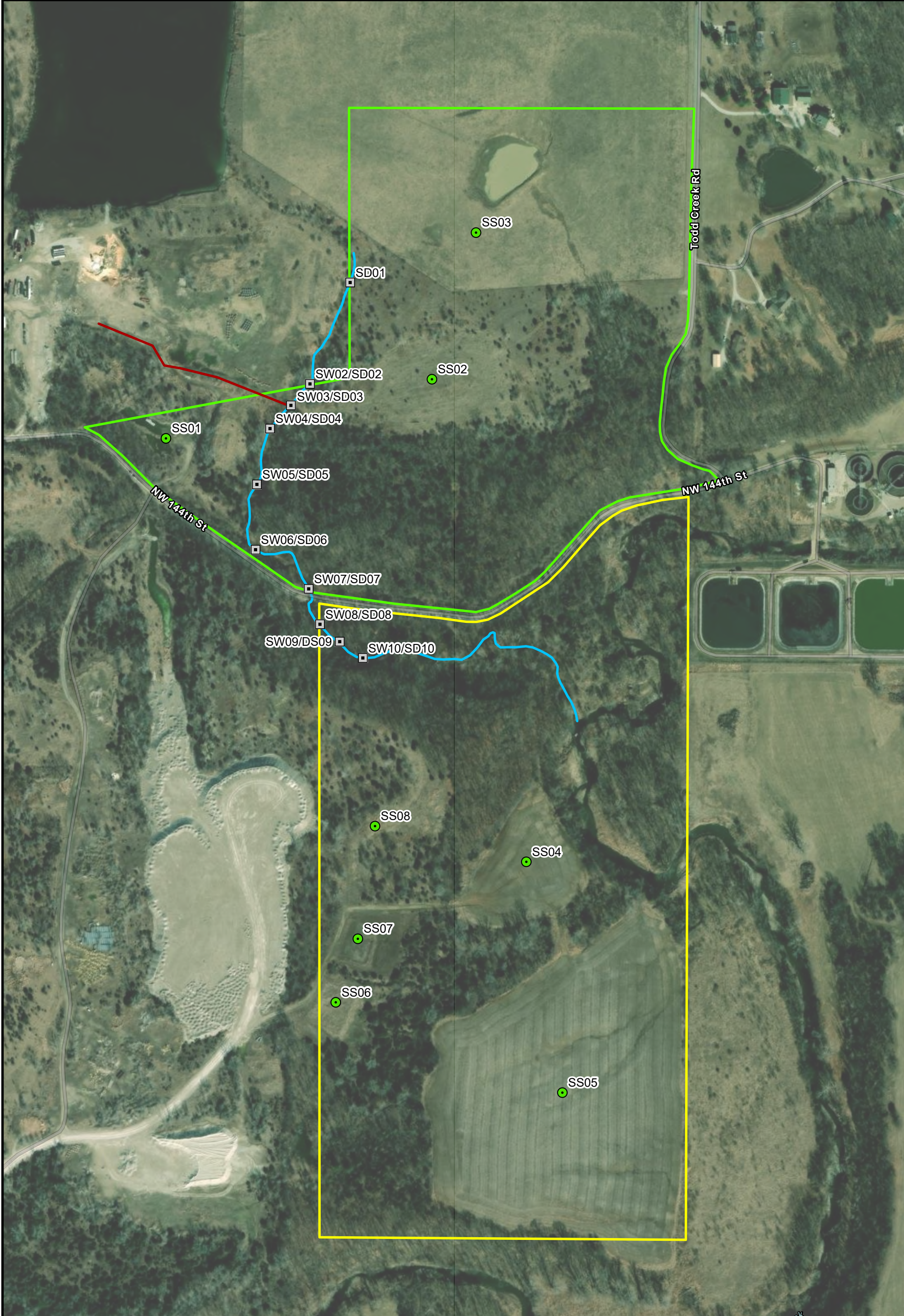


**Figure 1**  
**Site Location Map**  
**Limited Phase II ESA Report**  
**Kansas City, Missouri**

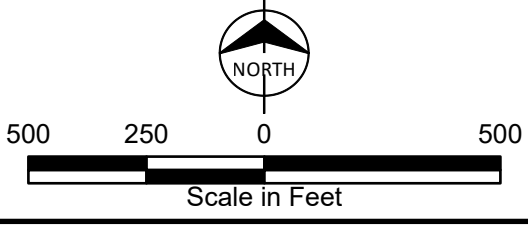
**FIGURE 2 - SOIL, SURFACE WATER, AND SEDIMENT  
SAMPLE LOCATIONS**

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Path: Z:\Clients\ENR\KCMO\_Client\InfoClient\_Mgmt\Bus\_Dev\Proposals\2024 Proposals\Todd Creek WWTP\WP\Figures\ArcDocs\KC\_Water\_Proposal\KC\_Water\_Proposal.aprx  
Service Layer Credits: World Imagery: MARC/Local Jurisdictions, Maxar  
Hybrid Reference Layer: Esri Community Maps Contributors, Kansas City, MO, Platte County, Missouri Dept. of Conservation, Missouri DNR, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METINASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS



- Legend**
- Soil Sample
  - Surface Water/Sediment Sample
  - Unnamed Tributary
  - Berm
  - ▭ Primary Site
  - ▭ Alternate Site



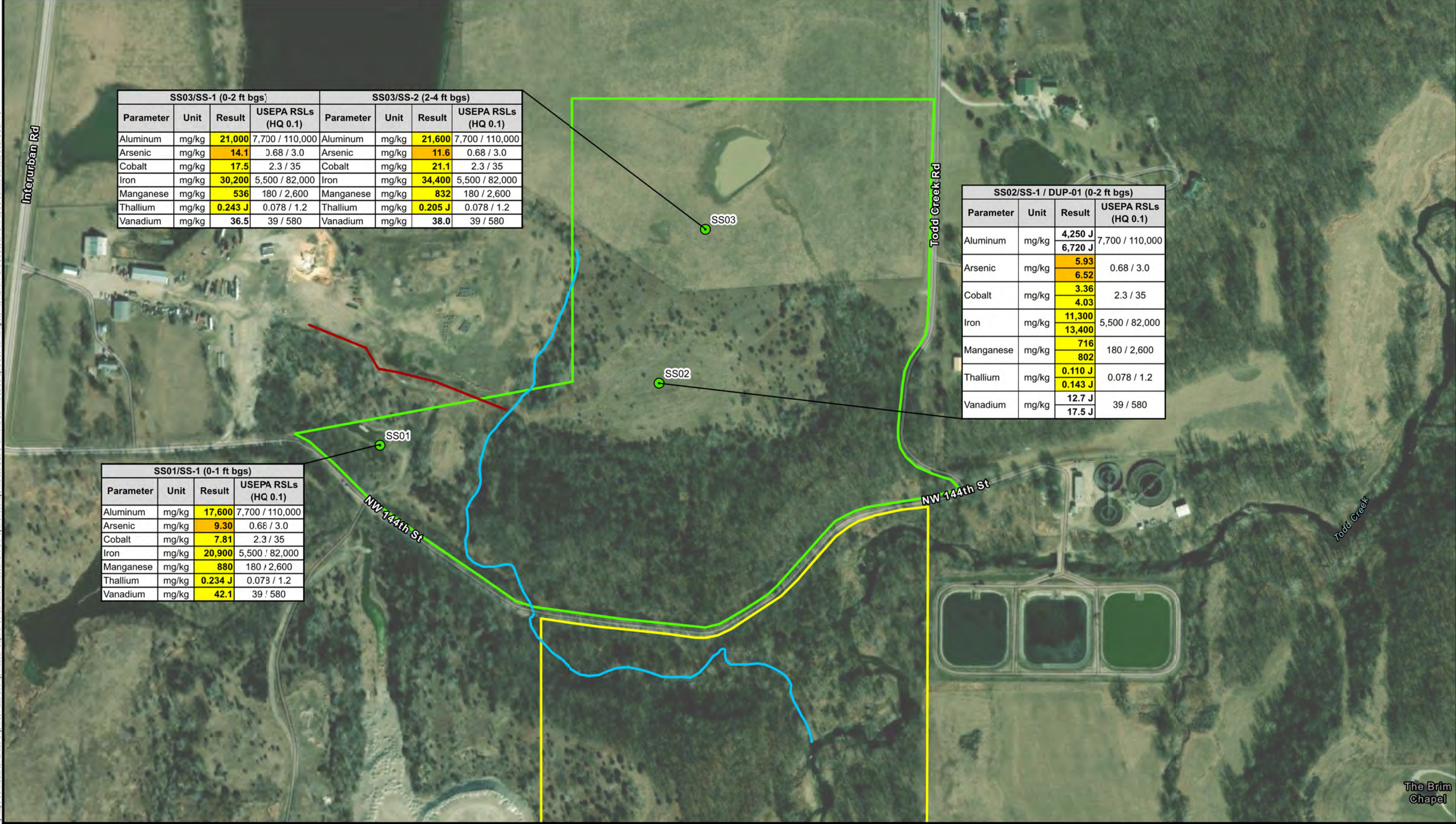
**Figure 2**  
**Soil, Surface Water, and Sediment Sample Locations**  
**Limited Phase II ESA Report**  
**Kansas City, Missouri**

**FIGURE 3A - DISTRIBUTION OF SOIL SCREENING LEVEL  
EXCEEDANCES - PRIMARY SITE**

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 Service Layer Credits: World Imagery: MARC\local jurisdictions, Maxar, Microsoft  
 Hybrid Reference Layer: Esri Community Maps Contributors, Kansas City, MO, Platte County, Missouri Dept. of Conservation, Missouri DNR, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METINASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS



SS03/SS-1 (0-2 ft bgs)				SS03/SS-2 (2-4 ft bgs)			
Parameter	Unit	Result	USEPA RSLs (HQ 0.1)	Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	<b>21,000</b>	7,700 / 110,000	Aluminum	mg/kg	<b>21,600</b>	7,700 / 110,000
Arsenic	mg/kg	<b>14.1</b>	0.68 / 3.0	Arsenic	mg/kg	<b>11.6</b>	0.68 / 3.0
Cobalt	mg/kg	<b>17.5</b>	2.3 / 35	Cobalt	mg/kg	<b>21.1</b>	2.3 / 35
Iron	mg/kg	<b>30,200</b>	5,500 / 82,000	Iron	mg/kg	<b>34,400</b>	5,500 / 82,000
Manganese	mg/kg	<b>536</b>	180 / 2,600	Manganese	mg/kg	<b>832</b>	180 / 2,600
Thallium	mg/kg	<b>0.243 J</b>	0.078 / 1.2	Thallium	mg/kg	<b>0.205 J</b>	0.078 / 1.2
Vanadium	mg/kg	<b>36.5</b>	39 / 580	Vanadium	mg/kg	<b>38.0</b>	39 / 580

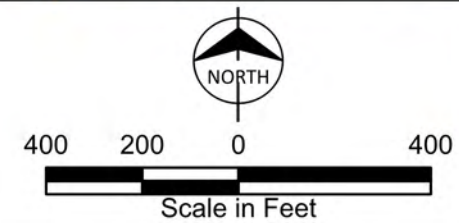
SS02/SS-1 / DUP-01 (0-2 ft bgs)			
Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	<b>4,250 J</b> <b>6,720 J</b>	7,700 / 110,000
Arsenic	mg/kg	<b>5.93</b> <b>6.52</b>	0.68 / 3.0
Cobalt	mg/kg	<b>3.36</b> <b>4.03</b>	2.3 / 35
Iron	mg/kg	<b>11,300</b> <b>13,400</b>	5,500 / 82,000
Manganese	mg/kg	<b>716</b> <b>802</b>	180 / 2,600
Thallium	mg/kg	<b>0.110 J</b> <b>0.143 J</b>	0.078 / 1.2
Vanadium	mg/kg	<b>12.7 J</b> <b>17.5 J</b>	39 / 580

SS01/SS-1 (0-1 ft bgs)			
Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	<b>17,600</b>	7,700 / 110,000
Arsenic	mg/kg	<b>9.30</b>	0.68 / 3.0
Cobalt	mg/kg	<b>7.81</b>	2.3 / 35
Iron	mg/kg	<b>20,900</b>	5,500 / 82,000
Manganese	mg/kg	<b>880</b>	180 / 2,600
Thallium	mg/kg	<b>0.234 J</b>	0.078 / 1.2
Vanadium	mg/kg	<b>42.1</b>	39 / 580

- Legend**
- Soil Sample
  - Primary Site
  - Unnamed Tributary
  - Berm
  - Alternate Site

**Abbreviations**  
 bgs - below ground surface  
 ft - feet  
 HQ - hazard quotient  
 J - estimated value  
 mg/kg - milligrams per kilogram  
 RSL - Regional Screening Level  
 USEPA - United States Environmental Protection Agency

- Notes**
1. Bold indicates parameter was detected.
  2. Yellow highlighted indicates exceedance of USEPA Residential RSL.
  3. Orange highlighted indicates exceedance of USEPA Industrial RSL.

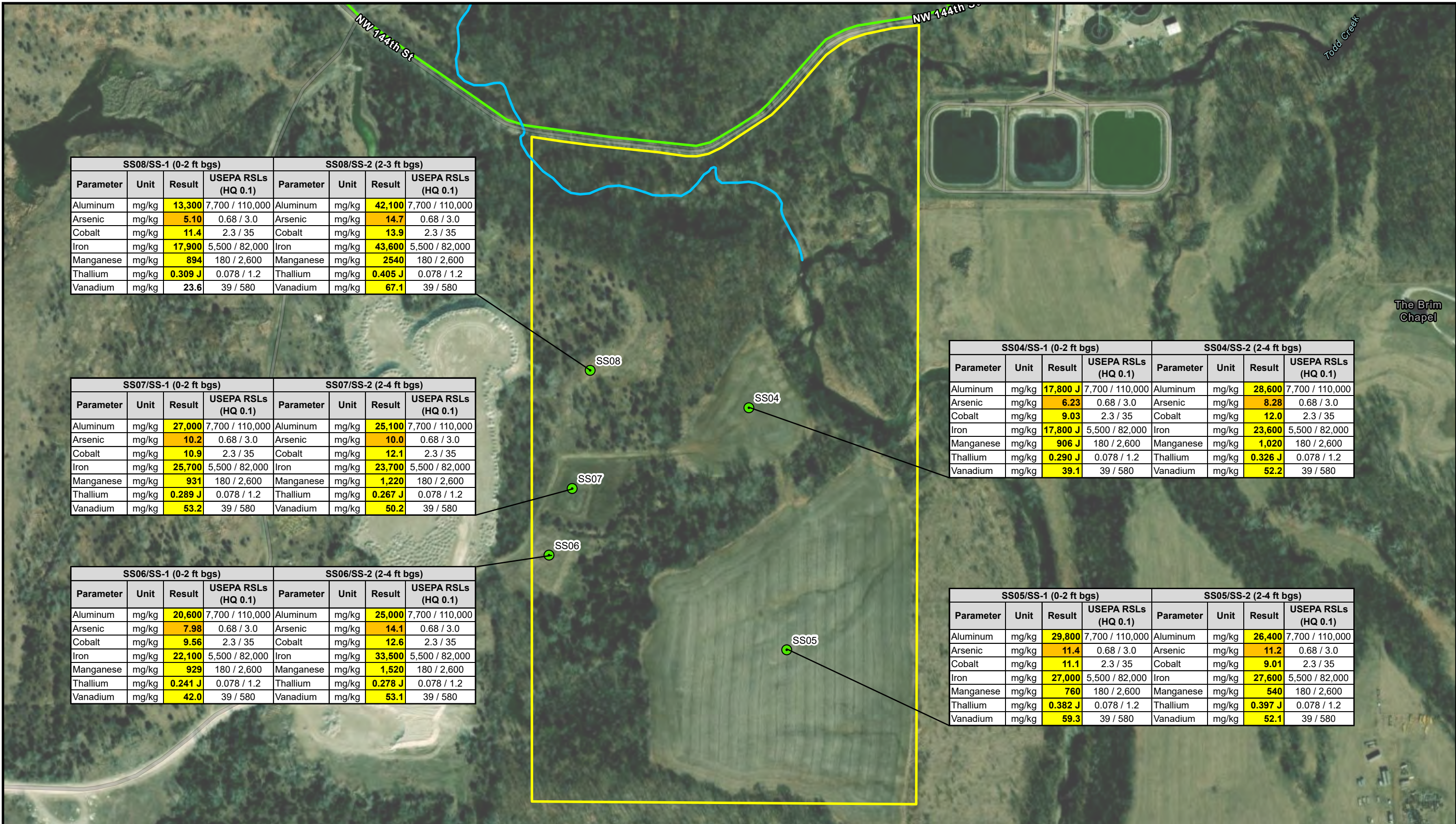


**Figure 3a**  
 Distribution of Soil Screening Level Exceedances - Primary Site Limited Phase II ESA Report  
 Kansas City, Missouri

**FIGURE 3B - DISTRIBUTION OF SOIL SCREENING LEVEL  
EXCEEDANCES - ALTERNATE SITE**

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 Service Layer Credits: World Imagery: MARC\Local Jurisdictions, Maxar, Microsoft Hybrid Reference Layer: Esri Community Maps Contributors, Kansas City, MO, Platte County, Missouri Dept. of Conservation, Missouri DNR, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc., MET/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS



SS08/SS-1 (0-2 ft bgs)				SS08/SS-2 (2-3 ft bgs)			
Parameter	Unit	Result	USEPA RSLs (HQ 0.1)	Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	<b>13,300</b>	7,700 / 110,000	Aluminum	mg/kg	<b>42,100</b>	7,700 / 110,000
Arsenic	mg/kg	<b>5.10</b>	0.68 / 3.0	Arsenic	mg/kg	<b>14.7</b>	0.68 / 3.0
Cobalt	mg/kg	<b>11.4</b>	2.3 / 35	Cobalt	mg/kg	<b>13.9</b>	2.3 / 35
Iron	mg/kg	<b>17,900</b>	5,500 / 82,000	Iron	mg/kg	<b>43,600</b>	5,500 / 82,000
Manganese	mg/kg	<b>894</b>	180 / 2,600	Manganese	mg/kg	<b>2540</b>	180 / 2,600
Thallium	mg/kg	<b>0.309 J</b>	0.078 / 1.2	Thallium	mg/kg	<b>0.405 J</b>	0.078 / 1.2
Vanadium	mg/kg	<b>23.6</b>	39 / 580	Vanadium	mg/kg	<b>67.1</b>	39 / 580

SS07/SS-1 (0-2 ft bgs)				SS07/SS-2 (2-4 ft bgs)			
Parameter	Unit	Result	USEPA RSLs (HQ 0.1)	Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	<b>27,000</b>	7,700 / 110,000	Aluminum	mg/kg	<b>25,100</b>	7,700 / 110,000
Arsenic	mg/kg	<b>10.2</b>	0.68 / 3.0	Arsenic	mg/kg	<b>10.0</b>	0.68 / 3.0
Cobalt	mg/kg	<b>10.9</b>	2.3 / 35	Cobalt	mg/kg	<b>12.1</b>	2.3 / 35
Iron	mg/kg	<b>25,700</b>	5,500 / 82,000	Iron	mg/kg	<b>23,700</b>	5,500 / 82,000
Manganese	mg/kg	<b>931</b>	180 / 2,600	Manganese	mg/kg	<b>1,220</b>	180 / 2,600
Thallium	mg/kg	<b>0.289 J</b>	0.078 / 1.2	Thallium	mg/kg	<b>0.267 J</b>	0.078 / 1.2
Vanadium	mg/kg	<b>53.2</b>	39 / 580	Vanadium	mg/kg	<b>50.2</b>	39 / 580

SS06/SS-1 (0-2 ft bgs)				SS06/SS-2 (2-4 ft bgs)			
Parameter	Unit	Result	USEPA RSLs (HQ 0.1)	Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	<b>20,600</b>	7,700 / 110,000	Aluminum	mg/kg	<b>25,000</b>	7,700 / 110,000
Arsenic	mg/kg	<b>7.98</b>	0.68 / 3.0	Arsenic	mg/kg	<b>14.1</b>	0.68 / 3.0
Cobalt	mg/kg	<b>9.56</b>	2.3 / 35	Cobalt	mg/kg	<b>12.6</b>	2.3 / 35
Iron	mg/kg	<b>22,100</b>	5,500 / 82,000	Iron	mg/kg	<b>33,500</b>	5,500 / 82,000
Manganese	mg/kg	<b>929</b>	180 / 2,600	Manganese	mg/kg	<b>1,520</b>	180 / 2,600
Thallium	mg/kg	<b>0.241 J</b>	0.078 / 1.2	Thallium	mg/kg	<b>0.278 J</b>	0.078 / 1.2
Vanadium	mg/kg	<b>42.0</b>	39 / 580	Vanadium	mg/kg	<b>53.1</b>	39 / 580

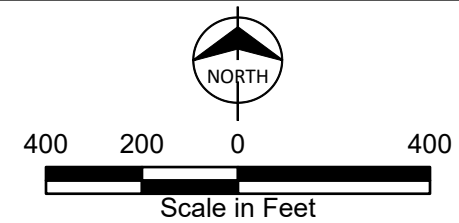
SS04/SS-1 (0-2 ft bgs)				SS04/SS-2 (2-4 ft bgs)			
Parameter	Unit	Result	USEPA RSLs (HQ 0.1)	Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	<b>17,800 J</b>	7,700 / 110,000	Aluminum	mg/kg	<b>28,600</b>	7,700 / 110,000
Arsenic	mg/kg	<b>6.23</b>	0.68 / 3.0	Arsenic	mg/kg	<b>8.28</b>	0.68 / 3.0
Cobalt	mg/kg	<b>9.03</b>	2.3 / 35	Cobalt	mg/kg	<b>12.0</b>	2.3 / 35
Iron	mg/kg	<b>17,800 J</b>	5,500 / 82,000	Iron	mg/kg	<b>23,600</b>	5,500 / 82,000
Manganese	mg/kg	<b>906 J</b>	180 / 2,600	Manganese	mg/kg	<b>1,020</b>	180 / 2,600
Thallium	mg/kg	<b>0.290 J</b>	0.078 / 1.2	Thallium	mg/kg	<b>0.326 J</b>	0.078 / 1.2
Vanadium	mg/kg	<b>39.1</b>	39 / 580	Vanadium	mg/kg	<b>52.2</b>	39 / 580

SS05/SS-1 (0-2 ft bgs)				SS05/SS-2 (2-4 ft bgs)			
Parameter	Unit	Result	USEPA RSLs (HQ 0.1)	Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	<b>29,800</b>	7,700 / 110,000	Aluminum	mg/kg	<b>26,400</b>	7,700 / 110,000
Arsenic	mg/kg	<b>11.4</b>	0.68 / 3.0	Arsenic	mg/kg	<b>11.2</b>	0.68 / 3.0
Cobalt	mg/kg	<b>11.1</b>	2.3 / 35	Cobalt	mg/kg	<b>9.01</b>	2.3 / 35
Iron	mg/kg	<b>27,000</b>	5,500 / 82,000	Iron	mg/kg	<b>27,600</b>	5,500 / 82,000
Manganese	mg/kg	<b>760</b>	180 / 2,600	Manganese	mg/kg	<b>540</b>	180 / 2,600
Thallium	mg/kg	<b>0.382 J</b>	0.078 / 1.2	Thallium	mg/kg	<b>0.397 J</b>	0.078 / 1.2
Vanadium	mg/kg	<b>59.3</b>	39 / 580	Vanadium	mg/kg	<b>52.1</b>	39 / 580

**Legend**  
 Soil Sample  
 Primary Site  
 Unnamed Tributary  
 Alternate Site

**Abbreviations**  
 bgs - below ground surface  
 ft - feet  
 HQ - hazard quotient  
 J - estimated value  
 mg/kg - milligrams per kilogram  
 RSL - Regional Screening Level  
 USEPA - United States Environmental Protection Agency

**Notes**  
 1. Bold indicates parameter was detected.  
 2. Yellow highlighted indicates exceedance of USEPA Residential RSL.  
 3. Orange highlighted indicates exceedance of USEPA Industrial RSL.



**Figure 3b**  
 Distribution of Soil Screening Level Exceedances - Alternate Site Limited Phase II ESA Report  
 Kansas City, Missouri

**FIGURE 4A - DISTRIBUTION OF SURFACE WATER  
SCREENING LEVEL EXCEEDANCES - PRIMARY SITE**

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SW02/SW-1										
Missouri SWQs										
Parameter	Unit	Result	Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW	USEPA Primary MCL	USEPA Secondary MCL
			Acute	Chronic						
alpha-BHC	mg/L	0.0000172 U	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE
Aluminum	mg/L	11.4	0.75	NE	NE	NE	NE	NE	NE	0.05 - 0.2
Iron	mg/L	27.9	NE	1	NE	NE	NE	0.3	NE	0.3
Lead	mg/L	0.023800	5.7	3.44	NE	0.015	NE	0.015	0.015	NE
Manganese	mg/L	1.30	NE	NE	NE	NE	NE	0.05	NE	0.05
Alkalinity	mg/L	361	NE	20	NE	NE	NE	NE	NE	NE
Sulfate	mg/L	145	NE	NE	NE	250	NE	NE	NE	250

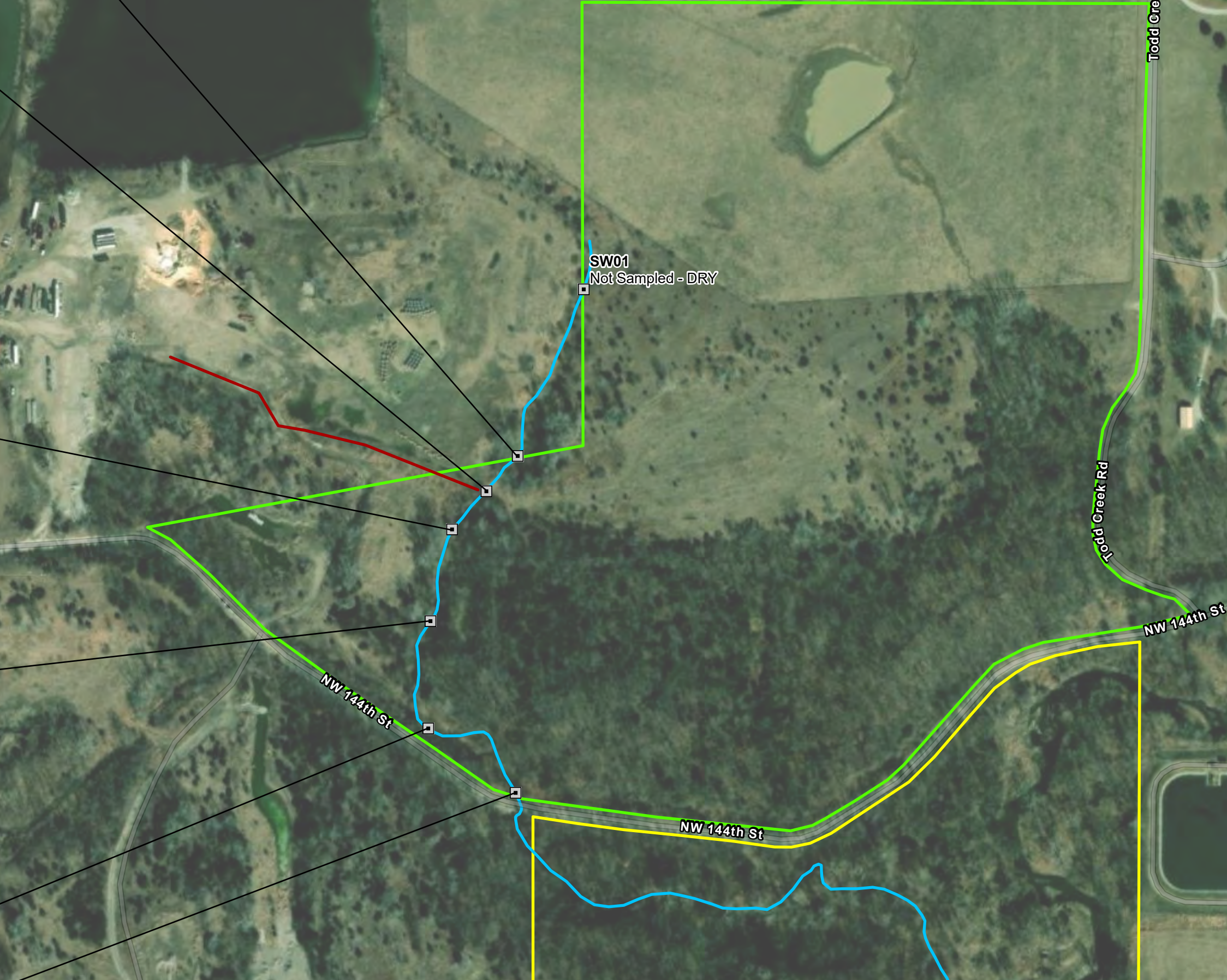
SW03/SW-1 / DUP-02										
Missouri SWQs										
Parameter	Unit	Result	Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW	USEPA Primary MCL	USEPA Secondary MCL
			Acute	Chronic						
alpha-BHC	mg/L	0.0000172 U 0.0000172 U	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE
Aluminum	mg/L	1.03 J 0.165 J	0.75	NE	NE	NE	NE	NE	NE	0.05 - 0.2
Iron	mg/L	3.93 J 0.704 J	NE	1	NE	NE	NE	0.3	NE	0.3
Lead	mg/L	0.003960 J 0.000849 UJ	5.7	3.44	NE	0.015	NE	0.015	0.015	NE
Manganese	mg/L	0.307 J 0.075 J	NE	NE	NE	NE	NE	0.05	NE	0.05
Alkalinity	mg/L	364 364	NE	20	NE	NE	NE	NE	NE	NE
Sulfate	mg/L	149 133	NE	NE	NE	250	NE	NE	NE	250

SW04/SW-1										
Missouri SWQs										
Parameter	Unit	Result	Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW	USEPA Primary MCL	USEPA Secondary MCL
			Acute	Chronic						
alpha-BHC	mg/L	0.0000172 U	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE
Aluminum	mg/L	0.566	0.75	NE	NE	NE	NE	NE	NE	0.05 - 0.2
Iron	mg/L	3.02	NE	1	NE	NE	NE	0.3	NE	0.3
Lead	mg/L	0.002440	5.7	3.44	NE	0.015	NE	0.015	0.015	NE
Manganese	mg/L	0.469	NE	NE	NE	NE	NE	0.05	NE	0.05
Alkalinity	mg/L	364	NE	20	NE	NE	NE	NE	NE	NE
Sulfate	mg/L	129	NE	NE	NE	250	NE	NE	NE	250

SW05/SW-1										
Missouri SWQs										
Parameter	Unit	Result	Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW	USEPA Primary MCL	USEPA Secondary MCL
			Acute	Chronic						
alpha-BHC	mg/L	0.0000172 U	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE
Aluminum	mg/L	0.036 J	0.75	NE	NE	NE	NE	NE	NE	0.05 - 0.2
Iron	mg/L	0.091 J	NE	1	NE	NE	NE	0.3	NE	0.3
Lead	mg/L	0.000849 U	5.7	3.44	NE	0.015	NE	0.015	0.015	NE
Manganese	mg/L	0.038	NE	NE	NE	NE	NE	0.05	NE	0.05
Alkalinity	mg/L	364	NE	20	NE	NE	NE	NE	NE	NE
Sulfate	mg/L	154	NE	NE	NE	250	NE	NE	NE	250

SW06/SW-1										
Missouri SWQs										
Parameter	Unit	Result	Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW	USEPA Primary MCL	USEPA Secondary MCL
			Acute	Chronic						
alpha-BHC	mg/L	0.0000187 J	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE
Aluminum	mg/L	0.236	0.75	NE	NE	NE	NE	NE	NE	0.05 - 0.2
Iron	mg/L	0.767	NE	1	NE	NE	NE	0.3	NE	0.3
Lead	mg/L	0.000849 U	5.7	3.44	NE	0.015	NE	0.015	0.015	NE
Manganese	mg/L	0.428	NE	NE	NE	NE	NE	0.05	NE	0.05
Alkalinity	mg/L	342	NE	20	NE	NE	NE	NE	NE	NE
Sulfate	mg/L	332	NE	NE	NE	250	NE	NE	NE	250

SW07/SW-1										
Missouri SWQs										
Parameter	Unit	Result	Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW	USEPA Primary MCL	USEPA Secondary MCL
			Acute	Chronic						
alpha-BHC	mg/L	0.0000172 U	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE
Aluminum	mg/L	0.085 J	0.75	NE	NE	NE	NE	NE	NE	0.05 - 0.2
Iron	mg/L	0.399	NE	1	NE	NE	NE	0.3	NE	0.3
Lead	mg/L	0.000849 U	5.7	3.44	NE	0.015	NE	0.015	0.015	NE
Manganese	mg/L	0.426	NE	NE	NE	NE	NE	0.05	NE	0.05
Alkalinity	mg/L	349	NE	20	NE	NE	NE	NE	NE	NE
Sulfate	mg/L	324 J	NE	NE	NE	250	NE	NE	NE	250

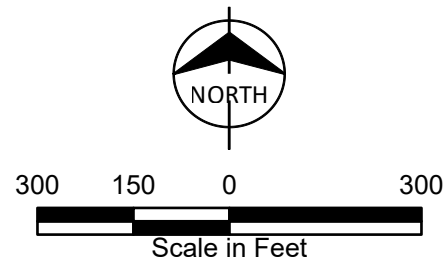


- Legend**
- Surface Water Sample
  - Primary Site
  - Unnamed Tributary
  - Alternate Site
  - Berm

**Abbreviations**  
DWS - drinking water supply  
GRW - groundwater  
IRR - irrigation  
SWQS - Surface Water Quality Standard  
LWP - livestock and wildlife protection  
MCL - Maximum Contaminant Level  
mg/L - milligrams per Liter

NE - not established  
J - estimated value  
U - compound was not detected  
UJ - estimated at the reporting limit  
USEPA - United States Environmental Protection Agency

**Notes**  
1. Bold indicates parameter was detected.  
2. Yellow highlighted indicates exceedance of surface water screening value.

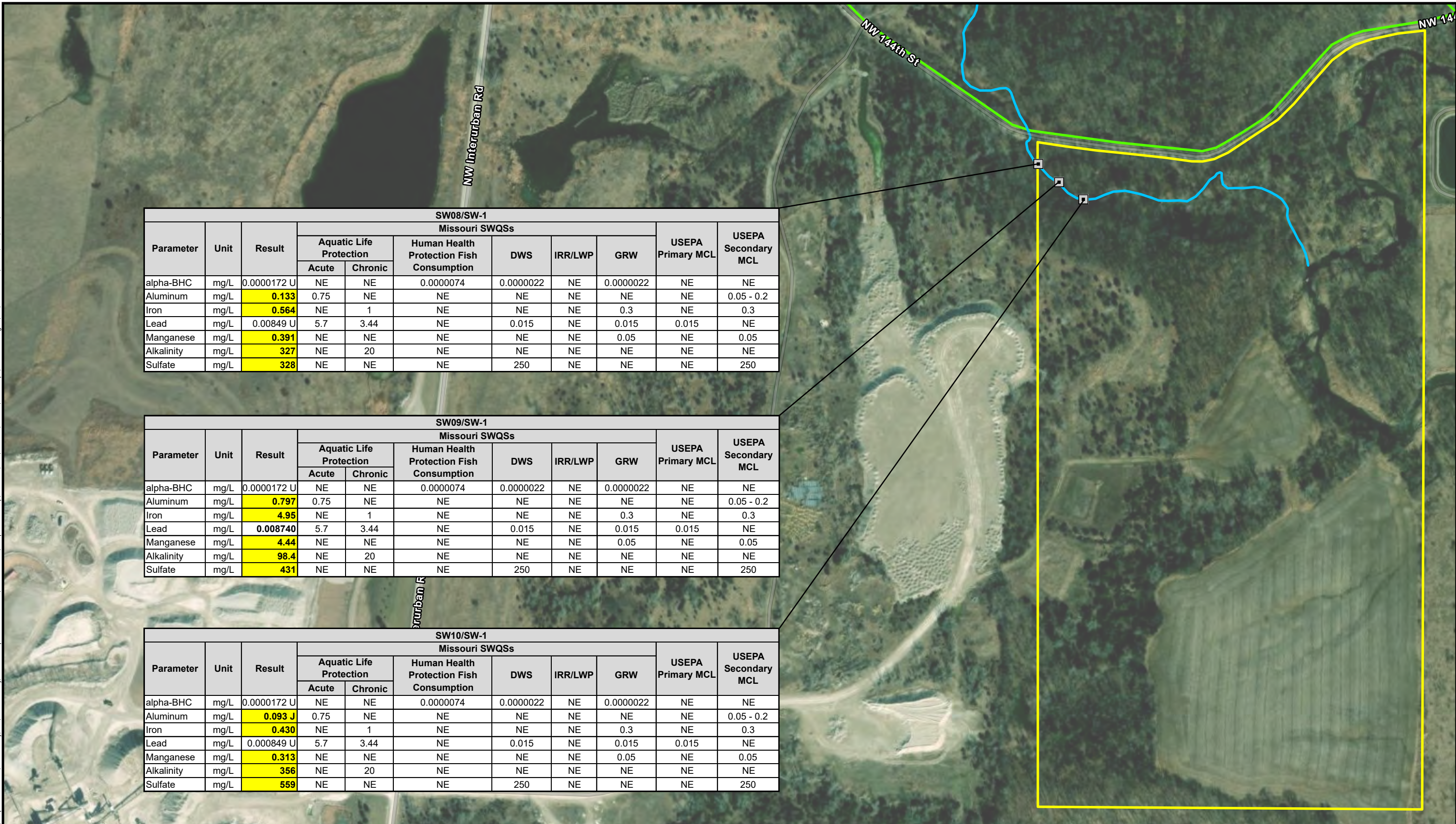


**Figure 4a**  
Distribution of Surface Water  
Screening Level Exceedances -  
Primary Site  
Limited Phase II ESA Report  
Kansas City, Missouri

**FIGURE 4B - DISTRIBUTION OF SURFACE WATER  
SCREENING LEVEL EXCEEDANCES - ALTERNATE SITE**

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 Date: 5/20/2024



SW08/SW-1										
Parameter	Unit	Result	Missouri SWQSS						USEPA Primary MCL	USEPA Secondary MCL
			Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW		
			Acute	Chronic						
alpha-BHC	mg/L	0.0000172 U	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE
Aluminum	mg/L	<b>0.133</b>	0.75	NE	NE	NE	NE	NE	NE	0.05 - 0.2
Iron	mg/L	<b>0.564</b>	NE	1	NE	NE	NE	0.3	NE	0.3
Lead	mg/L	0.00849 U	5.7	3.44	NE	0.015	NE	0.015	0.015	NE
Manganese	mg/L	<b>0.391</b>	NE	NE	NE	NE	NE	0.05	NE	0.05
Alkalinity	mg/L	<b>327</b>	NE	20	NE	NE	NE	NE	NE	NE
Sulfate	mg/L	<b>328</b>	NE	NE	NE	250	NE	NE	NE	250

SW09/SW-1										
Parameter	Unit	Result	Missouri SWQSS						USEPA Primary MCL	USEPA Secondary MCL
			Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW		
			Acute	Chronic						
alpha-BHC	mg/L	0.0000172 U	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE
Aluminum	mg/L	<b>0.797</b>	0.75	NE	NE	NE	NE	NE	NE	0.05 - 0.2
Iron	mg/L	<b>4.95</b>	NE	1	NE	NE	NE	0.3	NE	0.3
Lead	mg/L	<b>0.008740</b>	5.7	3.44	NE	0.015	NE	0.015	0.015	NE
Manganese	mg/L	<b>4.44</b>	NE	NE	NE	NE	NE	0.05	NE	0.05
Alkalinity	mg/L	<b>98.4</b>	NE	20	NE	NE	NE	NE	NE	NE
Sulfate	mg/L	<b>431</b>	NE	NE	NE	250	NE	NE	NE	250

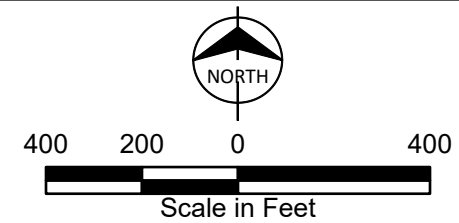
SW10/SW-1										
Parameter	Unit	Result	Missouri SWQSS						USEPA Primary MCL	USEPA Secondary MCL
			Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW		
			Acute	Chronic						
alpha-BHC	mg/L	0.0000172 U	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE
Aluminum	mg/L	<b>0.093 J</b>	0.75	NE	NE	NE	NE	NE	NE	0.05 - 0.2
Iron	mg/L	<b>0.430</b>	NE	1	NE	NE	NE	0.3	NE	0.3
Lead	mg/L	0.000849 U	5.7	3.44	NE	0.015	NE	0.015	0.015	NE
Manganese	mg/L	<b>0.313</b>	NE	NE	NE	NE	NE	0.05	NE	0.05
Alkalinity	mg/L	<b>356</b>	NE	20	NE	NE	NE	NE	NE	NE
Sulfate	mg/L	<b>559</b>	NE	NE	NE	250	NE	NE	NE	250

- Legend**
- Surface Water Sample
  - Unnamed Tributary
  - Primary Site
  - Alternate Site

- Abbreviations**
- DWS - drinking water supply
  - GRW - groundwater
  - IRR - irrigation
  - J - estimated value
  - LWP - livestock and wildlife protection
  - MCL - Maximum Contaminant Level
  - mg/L - milligrams per Liter

- NE - not established
- SWQS - Surface Water Quality Standard
- U - compound was not detected
- USEPA - United States Environmental Protection Agency

- Notes**
1. Bold indicates parameter was detected.
  2. Yellow highlighted indicates exceedance of surface water screening value.



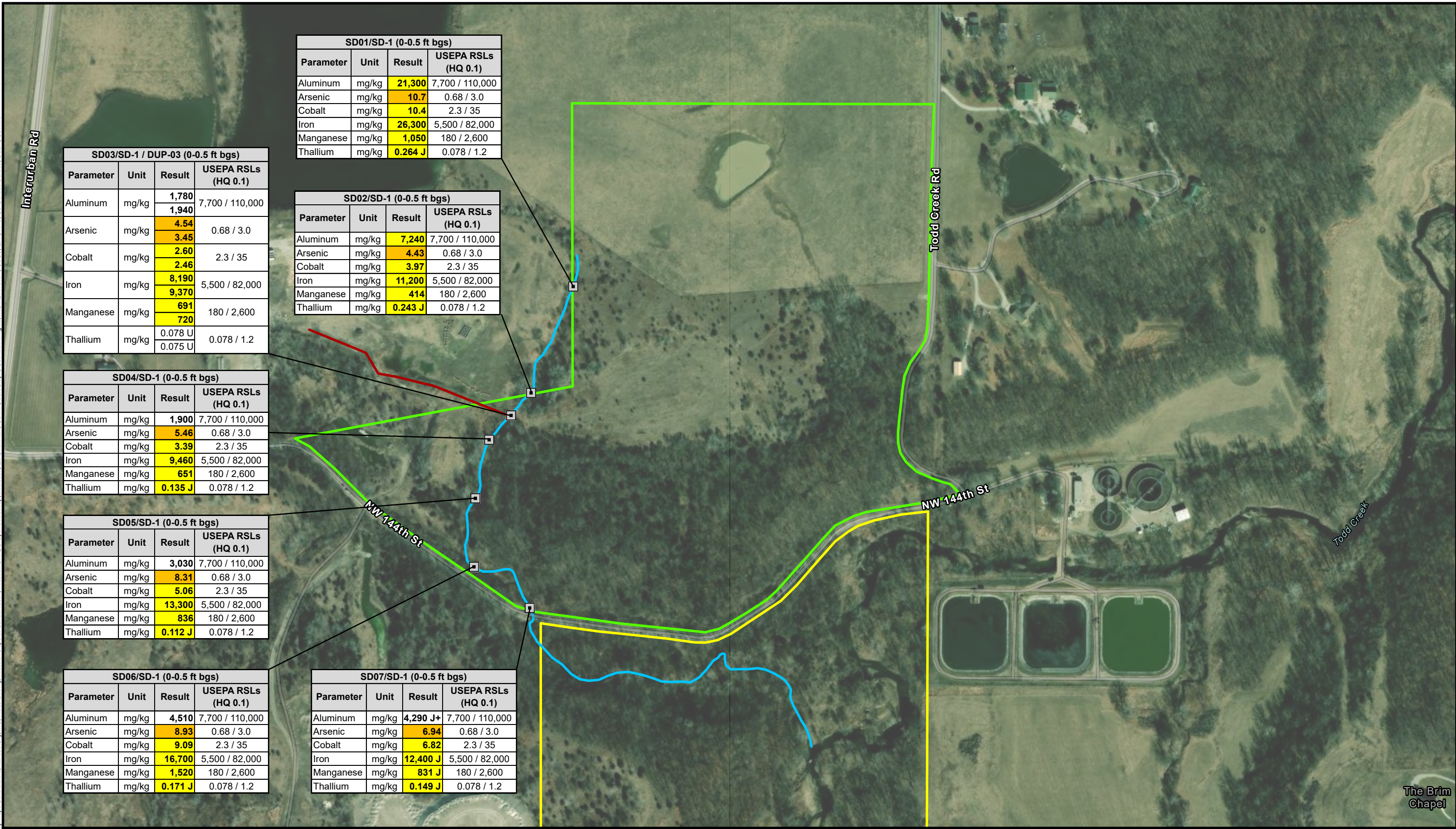
**Figure 4b**  
 Distribution of Surface Water Screening Level Exceedances - Alternate Site  
 Limited Phase II ESA Report  
 Kansas City, Missouri

**FIGURE 5A - DISTRIBUTION OF SEDIMENT SCENEING  
LEVEL EXCEEDANCES - PRIMARY SITE**

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 Date: 5/20/2024



**SD03/SD-1 / DUP-03 (0-0.5 ft bgs)**

Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	1,780	7,700 / 110,000
		1,940	
Arsenic	mg/kg	4.54	0.68 / 3.0
		3.45	
Cobalt	mg/kg	2.60	2.3 / 35
		2.46	
Iron	mg/kg	8,190	5,500 / 82,000
		9,370	
Manganese	mg/kg	691	180 / 2,600
		720	
Thallium	mg/kg	0.078 U	0.078 / 1.2
		0.075 U	

**SD01/SD-1 (0-0.5 ft bgs)**

Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	21,300	7,700 / 110,000
Arsenic	mg/kg	10.7	0.68 / 3.0
Cobalt	mg/kg	10.4	2.3 / 35
Iron	mg/kg	26,300	5,500 / 82,000
Manganese	mg/kg	1,050	180 / 2,600
Thallium	mg/kg	0.264 J	0.078 / 1.2

**SD02/SD-1 (0-0.5 ft bgs)**

Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	7,240	7,700 / 110,000
Arsenic	mg/kg	4.43	0.68 / 3.0
Cobalt	mg/kg	3.97	2.3 / 35
Iron	mg/kg	11,200	5,500 / 82,000
Manganese	mg/kg	414	180 / 2,600
Thallium	mg/kg	0.243 J	0.078 / 1.2

**SD04/SD-1 (0-0.5 ft bgs)**

Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	1,900	7,700 / 110,000
Arsenic	mg/kg	5.46	0.68 / 3.0
Cobalt	mg/kg	3.39	2.3 / 35
Iron	mg/kg	9,460	5,500 / 82,000
Manganese	mg/kg	651	180 / 2,600
Thallium	mg/kg	0.135 J	0.078 / 1.2

**SD05/SD-1 (0-0.5 ft bgs)**

Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	3,030	7,700 / 110,000
Arsenic	mg/kg	8.31	0.68 / 3.0
Cobalt	mg/kg	5.06	2.3 / 35
Iron	mg/kg	13,300	5,500 / 82,000
Manganese	mg/kg	836	180 / 2,600
Thallium	mg/kg	0.112 J	0.078 / 1.2

**SD06/SD-1 (0-0.5 ft bgs)**

Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	4,510	7,700 / 110,000
Arsenic	mg/kg	8.93	0.68 / 3.0
Cobalt	mg/kg	9.09	2.3 / 35
Iron	mg/kg	16,700	5,500 / 82,000
Manganese	mg/kg	1,520	180 / 2,600
Thallium	mg/kg	0.171 J	0.078 / 1.2

**SD07/SD-1 (0-0.5 ft bgs)**

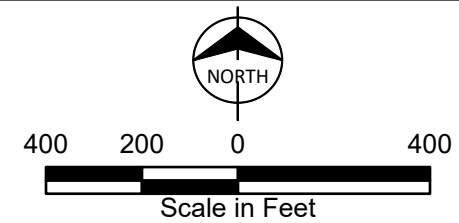
Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	4,290 J+	7,700 / 110,000
Arsenic	mg/kg	6.94	0.68 / 3.0
Cobalt	mg/kg	6.82	2.3 / 35
Iron	mg/kg	12,400 J	5,500 / 82,000
Manganese	mg/kg	831 J	180 / 2,600
Thallium	mg/kg	0.149 J	0.078 / 1.2

- Legend**
- Sediment Sample
  - ▭ Primary Site
  - Unnamed Tributary
  - ▭ Alternate Site
  - Berm

**Abbreviations**  
 bgs - below ground surface  
 ft - feet  
 HQ - hazard quotient  
 J - estimated value  
 J+ - estimated value, potential high bias  
 mg/kg - milligrams per kilogram

RSL - Regional Screening Level  
 U - compound was not detected  
 USEPA - United States Environmental Protection Agency

- Notes**
- Bold indicates parameter was detected.
  - Yellow highlighted indicates exceedance of USEPA Residential RSL.
  - Orange highlighted indicates exceedance of USEPA Industrial RSL.

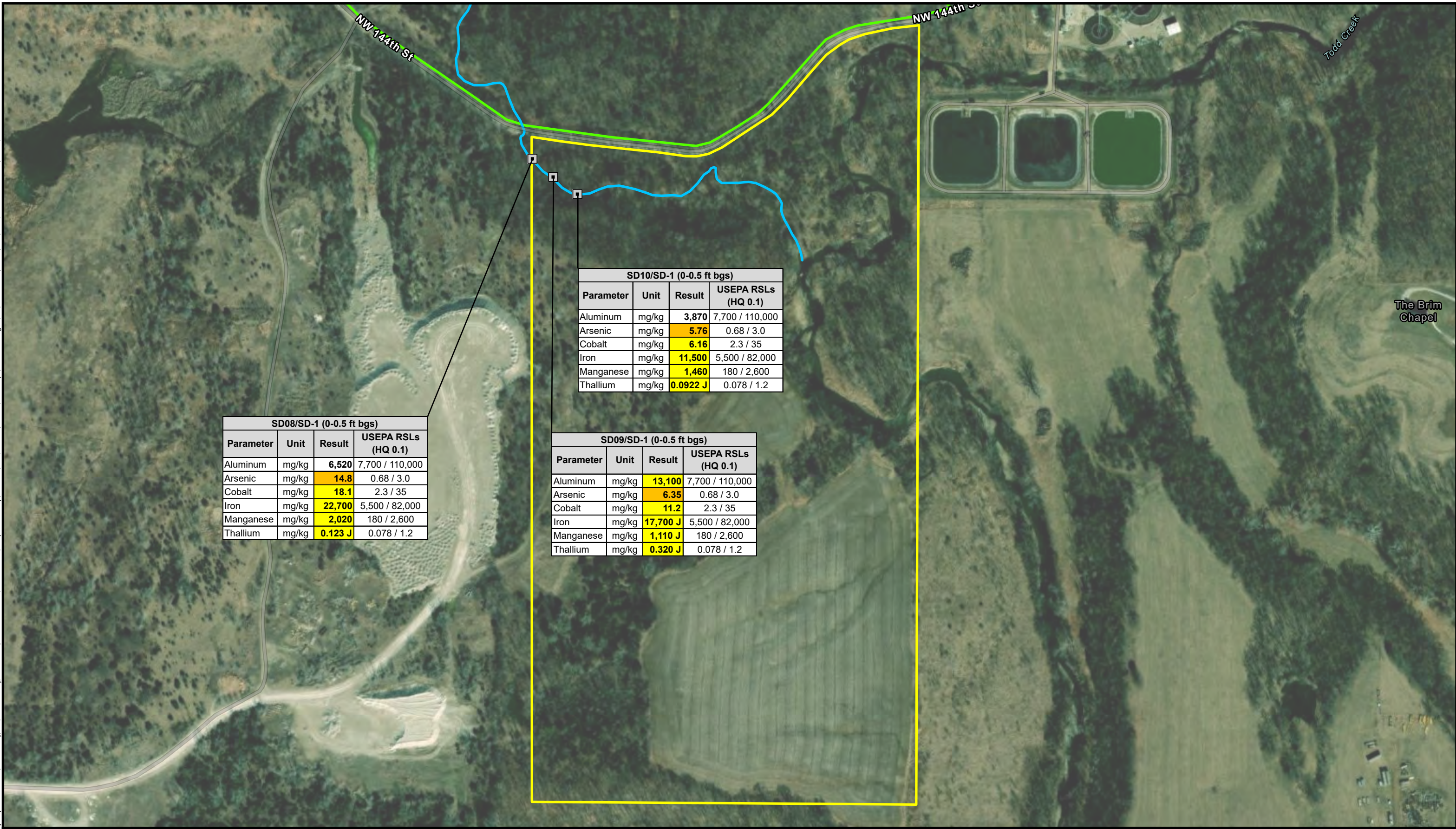


**Figure 5a**  
**Distribution of Sediment Screening Level Exceedances - Primary Site**  
 Limited Phase II ESA Report  
 Kansas City, Missouri

**FIGURE 5B - DISTRIBUTION OF SEDIMENT SCREENING  
LEVEL EXCEEDANCES - ALTERNATE SITE**

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SD08/SD-1 (0-0.5 ft bgs)			
Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	6,520	7,700 / 110,000
Arsenic	mg/kg	14.8	0.68 / 3.0
Cobalt	mg/kg	18.1	2.3 / 35
Iron	mg/kg	22,700	5,500 / 82,000
Manganese	mg/kg	2,020	180 / 2,600
Thallium	mg/kg	0.123 J	0.078 / 1.2

SD10/SD-1 (0-0.5 ft bgs)			
Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	3,870	7,700 / 110,000
Arsenic	mg/kg	5.76	0.68 / 3.0
Cobalt	mg/kg	6.16	2.3 / 35
Iron	mg/kg	11,500	5,500 / 82,000
Manganese	mg/kg	1,460	180 / 2,600
Thallium	mg/kg	0.0922 J	0.078 / 1.2

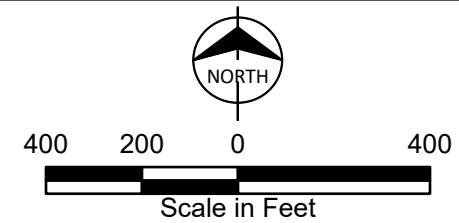
SD09/SD-1 (0-0.5 ft bgs)			
Parameter	Unit	Result	USEPA RSLs (HQ 0.1)
Aluminum	mg/kg	13,100	7,700 / 110,000
Arsenic	mg/kg	6.35	0.68 / 3.0
Cobalt	mg/kg	11.2	2.3 / 35
Iron	mg/kg	17,700 J	5,500 / 82,000
Manganese	mg/kg	1,110 J	180 / 2,600
Thallium	mg/kg	0.320 J	0.078 / 1.2

- Legend**
- Sediment Sample
  - ▭ Primary Site
  - Unnamed Tributary
  - ▭ Alternate Site

**Abbreviations**  
 bgs - below ground surface  
 ft - feet  
 HQ - hazard quotient  
 J - estimated value  
 J+ - estimated value, potential high bias  
 mg/kg - milligrams per kilogram

RSL - Regional Screening Level  
 USEPA - United States Environmental Protection Agency

- Notes**
1. Bold indicates parameter was detected.
  2. Yellow highlighted indicates exceedance of USEPA Residential RSL.
  3. Orange highlighted indicates exceedance of USEPA Industrial RSL.



**Figure 5b**  
 Distribution of Sediment Screening Level Exceedances - Alternate Site  
 Limited Phase II ESA Report  
 Kansas City, Missouri

## TABLE 1 - SOIL SAMPLE RESULTS

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**Table 1**  
**Soil Sample Results**  
**Limited Phase II Environmental Site Assessment - Primary and Alternate Sites**  
**Todd Creek Wastewater Treatment Plant - Kansas City, Missouri**

		Sample Point:	SS01/SS-1	SS02/SS-1	DUP-01	SS03/SS-1	SS03/SS-2	SS04/SS-1	SS04/SS-2	SS05/SS-1	SS05/SS-2	SS06/SS-1	SS06/SS-2	SS07/SS-1	SS07/SS-2	SS08/SS-1	SS08/SS-2	
		Sample Interval (feet bgs):	0-1	0-2	0-2	0-2	2-4	0-2	2-4	0-2	2-4	0-2	2-4	0-2	2-4	0-2	2-3	
		Sample Date:	4/8/2024	4/8/2024	4/8/2024	4/8/2024	4/8/2024	4/8/2024	4/8/2024	4/8/2024	4/8/2024	4/9/2024	4/9/2024	4/8/2024	4/8/2024	4/8/2024	4/8/2024	
		Notes:	Field Duplicate Pair															
Parameter	Units	USEPA Residential RSL (HQ 0.1)	USEPA Industrial RSL (HQ 0.1)															
<b>Volatile Organic Compounds (continued)</b>																		
Ethylbenzene	µg/kg	5,800	25,000	1.2 U	1.0 U	1.0 U	1.2 U	1.1 U	1.1 U	2.1 U	1.3 U	1.3 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	2.3 U
Hexachloro-1,3-butadiene	µg/kg	1,200	5,300	1.2 U	1.0 U	1.0 U	1.3 U	1.2 U	1.1 U	2.2 U	1.3 U	1.3 U	1.3 U	1.1 U	1.2 U	1.1 U	1.3 U	2.3 U
Isopropylbenzene (Cumene)	µg/kg	190,000	990,000	0.43 U	0.36 U	0.36 U	0.45 U	0.42 U	0.40 U	0.76 U	0.46 U	0.47 U	0.47 U	0.39 U	0.44 U	0.38 U	0.45 U	0.82 U
Methyl-tert-butyl ether	µg/kg	47,000	210,000	1.3 U	1.1 U	1.1 U	1.4 U	1.3 U	1.2 U	2.3 U	1.4 U	1.4 U	1.4 U	1.2 U	1.3 U	1.2 U	1.4 U	2.5 U
Methylene Chloride	µg/kg	35,000	320,000	26.3 U	22.3 U	22.3 U	28.0 U	25.6 U	24.8 U	47.1 U	28.3 U	28.6 U	28.8 U	24.0 U	26.9 U	23.7 U	27.8 U	50.6 U
Naphthalene	µg/kg	2,000	8,600	1.0 U	0.84 U	0.8 U	1.1 U	1.0 U	0.93 U	1.8 U	1.1 U	1.1 U	1.1 U	0.90 U	1.0 U	0.89 U	1.0 U	1.9 U
Styrene	µg/kg	600,000	3,500,000	0.55 U	0.47 U	0.46 U	0.58 U	0.53 U	0.52 U	0.98 U	0.59 U	0.60 U	0.60 U	0.50 U	0.56 U	0.49 U	0.58 U	1.1 U
Tetrachloroethene	µg/kg	8,100	39,000	0.72 U	0.61 U	0.61 U	0.77 U	0.70 U	0.68 U	1.3 U	0.78 U	0.79 U	0.79 U	0.66 U	0.74 U	0.65 U	0.76 U	1.4 U
Toluene	µg/kg	490,000	4,700,000	6.0 U	5.1 U	5.1 U	6.4 U	5.9 U	5.7 U	10.8 U	6.5 U	6.6 U	6.6 U	5.5 U	6.2 U	5.4 U	6.4 U	11.6 U
Trichloroethene	µg/kg	410	1,900	2.6 U	2.2 U	2.2 U	2.7 U	2.5 U	2.4 U	4.6 U	2.8 U	2.8 U	2.8 U	2.3 U	2.6 U	2.3 U	2.7 U	4.9 U
Trichlorofluoromethane	µg/kg	2,300,000	35,000,000	13.0 U	11.1 U	11.0 U	13.9 U	12.7 U	12.3 U	23.3 U	14.0 U	14.2 U	14.2 U	11.9 U	13.3 U	11.7 U	13.8 U	25.0 U
Vinyl chloride	µg/kg	59	1,700	1.3 U	1.1 U	1.1 U	1.3 U	1.2 U	1.2 U	2.2 U	1.4 U	1.4 U	1.4 U	1.1 U	1.3 U	1.1 U	1.3 U	2.4 U
Xylene (Total)	µg/kg	58,000	250,000	5.0 U	4.2 U	4.2 U	5.3 U	4.9 U	4.7 U	8.9 U	5.4 U	5.4 U	5.5 U	4.5 U	5.1 U	4.5 U	5.3 U	9.6 U
cis-1,2-Dichloroethene	µg/kg	6,300	37,000	1.3 U	1.1 U	1.1 U	1.3 U	1.2 U	1.2 U	2.3 U	1.4 U	1.4 U	1.4 U	1.1 U	1.3 U	1.1 U	1.3 U	2.4 U
cis-1,3-Dichloropropene	µg/kg	NE	NE	1.0 U	0.86 U	0.9 U	1.1 U	1.0 U	0.96 U	1.8 U	1.1 U	1.1 U	1.1 U	0.93 U	1.0 U	0.91 U	1.1 U	2.0 U
n-Butylbenzene	µg/kg	390,000	5,800,000	0.65 U	0.55 U	0.55 U	0.69 U	0.64 U	0.61 U	1.2 U	0.70 U	0.71 U	0.71 U	0.59 U	0.67 U	0.59 U	0.69 U	1.3 U
n-Propylbenzene	µg/kg	380,000	2,400,000	0.82 U	0.70 U	0.70 U	0.88 U	0.80 U	0.78 U	1.5 U	0.89 U	0.90 U	0.90 U	0.75 U	0.84 U	0.74 U	0.87 U	1.6 U
p-Isopropyltoluene	µg/kg	NE	NE	0.59 U	0.50 U	0.50 U	0.63 U	0.57 U	<b>1.2 J</b>	1.1 U	0.64 U	0.64 U	0.64 U	0.54 U	0.60 U	0.53 U	0.62 U	1.1 U
sec-Butylbenzene	µg/kg	780,000	12,000,000	0.67 U	0.57 U	0.57 U	0.71 U	0.65 U	0.63 U	1.2 U	0.72 U	0.73 U	0.73 U	0.61 U	0.68 U	0.60 U	0.71 U	1.3 U
tert-Butylbenzene	µg/kg	780,000	12,000,000	0.44 U	0.37 U	0.37 U	0.47 U	0.43 U	0.41 U	0.79 U	0.47 U	0.48 U	0.48 U	0.40 U	0.45 U	0.39 U	0.47 U	0.85 U
trans-1,2-Dichloroethene	µg/kg	7,000	30,000	1.5 U	1.3 U	1.3 U	1.6 U	1.5 U	1.4 U	2.7 U	1.6 U	1.6 U	1.6 U	1.4 U	1.5 U	1.4 U	1.6 U	2.9 U
trans-1,3-Dichloropropene	µg/kg	NE	NE	0.81 U	0.69 U	0.69 U	0.87 U	0.79 U	0.77 U	1.5 U	0.88 U	0.89 U	0.89 U	0.74 U	0.83 U	0.73 U	0.86 U	1.6 U
<b>Nitrogen</b>																		
Ammonia as Nitrogen	mg/kg	NE	NE	1.0 UJ	0.93 UJ	0.92 UJ	<b>1.1 J</b>	1.0 UJ	0.93 UJ	<b>1.6 J-</b>	<b>2.1 J-</b>	<b>1.2 J</b>	<b>3.3</b>	0.88 U	<b>2.9</b>	0.94 U	0.92 UJ	1.0 U
Nitrate as Nitrogen	mg/kg	13,000	190,000	<b>11.1 J</b>	6.2 UJ	10.4 JU	9.7 JU	184 UR	<b>10.5 J</b>	7.1 U	11.2 JU	10.8 JU	<b>49.1 J</b>	<b>37.4</b>	10.2 JU	6.7 U	<b>13.3 J+</b>	<b>15.1 J+</b>
Nitrite as Nitrogen	mg/kg	780	12,000	6.7 U	5.7 UJ	5.9 U	9.0 JU	211 UR	<b>9.3 J</b>	6.6 U	9.0 JU	6.3 U	6.1 UJ	6.3 U	6.4 U	6.2 U	6.2 U	6.1 U
<b>Total Cyanide</b>																		
Cyanide	mg/kg	2.3	15	0.15 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U	0.15 U	<b>0.35</b>	0.14 U	0.14 U	0.14 U	<b>0.15 J</b>	0.14 U

**Notes:**  
Screening Levels  
- USEPA Residential and Industrial RSLs (HQ = 01) (USEPA, 2024)  
- \* MRBCA Petroleum Storage Tank Guidance (MDNR, 2013)

**Bold - compound was detected**  
Highlighted - concentration exceeds USEPA Residential RSL  
Highlighted - concentration exceeds USEPA Industrial RSL

bgs - below ground surface  
HQ - hazard quotient  
J - estimated value  
J+ - estimated value, potential bias high  
J- - estimated value, potential bias low  
JU - trace detection qualified as a nondetect during data review  
MDNR - Missouri Department of Natural Resources  
µg/kg - micrograms per kilogram  
mg/kg - milligrams per kilogram  
MRBCA - Missouri Risk-Based Corrective Action  
NE - not established  
RSL - regional screening level  
U - compound was not detected  
UJ - estimated at the reporting limit  
UR - nondetect result, data rejected  
USEPA - United States Environmental Protection Agency

**TABLE 2 - SURFACE WATER SAMPLE RESULTS**

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**Table 2**  
**Surface Water Sample Results**  
**Limited Phase II Environmental Site Assessment Investigation - Primary and Alternate Sites**  
*Todd Creek Wastewater Treatment Plant - Kansas City, Missouri*

										Sample Point:	SW02/SW-1	SW03/SW-1	DUP-02	SW04/SW-1	SW05/SW-1
										Sample Date:	4/11/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024
										Notes:	Field Duplicate Pair				
Parameter	Units	Missouri SWQSS						USEPA Primary MCLs	USEPA Secondary MCLs						
		Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW								
		Acute	Chronic												
<b>Pesticides</b>															
4,4'-DDD	mg/L	NE	NE	0.0000084	0.0000083	NE	0.0000083	NE	NE	0.0000177 U	0.0000177 U	0.0000177 U	0.0000177 U	0.0000177 U	
4,4'-DDE	mg/L	NE	NE	0.0000059	0.0000059	NE	0.0000059	NE	NE	0.0000154 U	0.0000154 U	0.0000154 U	0.0000154 U	0.0000154 U	
4,4'-DDT	mg/L	0.0011	0.000001	0.0000059	0.0000059	NE	0.0000059	NE	NE	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U	
Aldrin	mg/L	0.003	NE	0.00000079	0.00000013	NE	0.00000013	0.004	NE	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U	
Chlordane (Technical)	mg/L	0.0024	0.0000043	0.00000048	0.002	NE	0.002	0.002	NE	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U	
Dieldrin	mg/L	0.00024	0.000056	0.00000076	0.00000014	NE	0.00000014	NE	NE	0.0000162 U	0.0000162 U	0.0000162 U	0.0000162 U	0.0000162 U	
Endosulfan I	mg/L	0.00022	0.000056	NE	NE	NE	NE	NE	NE	0.0000160 U	0.0000160 U	0.0000160 U	0.0000160 U	0.0000160 U	
Endosulfan II	mg/L	0.00022	0.000056	NE	NE	NE	NE	NE	NE	0.0000164 U	0.0000164 U	0.0000164 U	0.0000164 U	0.0000164 U	
Endosulfan sulfate	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.0000217 U	0.0000217 U	0.0000217 U	0.0000217 U	0.0000217 U	
Endrin	mg/L	0.000086	0.000036	0.0000023	0.002	NE	0.002	0.002	NE	0.0000161 U	0.0000161 U	0.0000161 U	0.0000161 U	0.0000161 U	
Endrin aldehyde	mg/L	NE	NE	0.0000023	0.00075	NE	0.00075	NE	NE	0.0000237 U	0.0000237 U	0.0000237 U	0.0000237 U	0.0000237 U	
Endrin ketone	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.0000219 U	0.0000219 U	0.0000219 U	0.0000219 U	0.0000219 U	
Heptachlor	mg/L	0.00052	0.0000038	0.0000002	0.0004	NE	0.0004	0.0004	NE	0.0000148 U	0.0000148 U	0.0000148 U	0.0000148 U	0.0000148 U	
Heptachlor epoxide	mg/L	0.00052	0.0000038	0.0000001	0.0002	NE	0.0002	0.0002	NE	0.0000183 U	0.0000183 U	0.0000183 U	0.0000183 U	0.0000183 U	
Hexachlorobenzene	mg/L	NE	NE	0.00000074	0.001	NE	0.001	0.001	NE	0.0000176 U	0.0000176 U	0.0000176 U	0.0000176 U	0.0000176 U	
Methoxychlor	mg/L	NE	0.00003	NE	0.04	NE	0.04	0.04	NE	0.0000193 U	0.0000193 U	0.0000193 U	0.0000193 U	0.0000193 U	
Toxaphene	mg/L	0.00073	0.0000002	0.000000073	0.003	NE	0.003	0.003	NE	0.0001680 U	0.0001680 U	0.0001680 U	0.0001680 U	0.0001680 U	
alpha-BHC	mg/L	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE	0.0000172 U	0.0000172 U	0.0000172 U	0.0000172 U	0.0000172 U	
beta-BHC	mg/L	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE	0.0000208 U	0.0000208 U	0.0000208 U	0.0000208 U	0.0000208 U	
delta-BHC	mg/L	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE	0.0000150 U	0.0000150 U	0.0000150 U	0.0000150 U	0.0000150 U	
gamma-BHC (Lindane)	mg/L	0.00095	NE	0.000062	0.0002	NE	0.0002	0.002	NE	0.0000209 U	0.0000209 U	0.0000209 U	0.0000209 U	0.0000209 U	
<b>Chlorinated Herbicides</b>															
2,4,5-T	mg/L	NE	NE	NE	0.07	NE	0.07	NE	NE	0.000304 U	0.000271 U	0.000304 U	0.000271 U	0.000294 U	
2,4,5-TP (Silvex)	mg/L	NE	NE	NE	0.05	NE	0.05	0.05	NE	0.000395 U	0.000352 U	0.000395 U	0.000352 U	0.000382 U	
2,4-D	mg/L	NE	NE	NE	0.07	NE	0.07	0.07	NE	0.000645 U	0.000574 U	0.000645 U	0.000574 U	0.000624 U	
2,4-DB	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.000356 U	0.000317 U	0.000356 U	0.000317 U	0.000344 U	
2-(2-methyl-4-chlorophenoxy)pa	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.0779 U	0.0693 U	0.0779 U	0.0693 U	0.0752 U	
Dalapon	mg/L	NE	NE	NE	0.2	NE	0.2	0.2	NE	0.000406 U	0.000361 U	0.000406 U	0.000361 U	0.000392 U	
Dicamba	mg/L	NE	NE	NE	0.2	NE	0.2	NE	NE	0.000289 U	0.000257 U	0.000289 U	0.000257 U	0.000279 U	
Dichlorprop	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.00123 U	0.00109 U	0.00123 U	0.00109 U	0.00119 U	
Dinoseb	mg/L	NE	NE	NE	0.007	NE	0.007	0.007	NE	0.000295 U	0.000263 U	0.000295 U	0.000263 U	0.000285 U	
MCPA	mg/L	NE	NE	NE	0.01	NE	0.01	NE	NE	0.0155 U	0.0138 U	0.0155 U	0.0138 U	0.0149 U	
<b>Polychlorinated Biphenyls</b>															
PCB-1016 (Aroclor 1016)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	
PCB-1221 (Aroclor 1221)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	
PCB-1232 (Aroclor 1232)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	
PCB-1242 (Aroclor 1242)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	
PCB-1248 (Aroclor 1248)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	
PCB-1254 (Aroclor 1254)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	
PCB-1260 (Aroclor 1260)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	

**Table 2**  
**Surface Water Sample Results**  
**Limited Phase II Environmental Site Assessment Investigation - Primary and Alternate Sites**  
*Todd Creek Wastewater Treatment Plant - Kansas City, Missouri*

										Sample Point:	SW02/SW-1	SW03/SW-1	DUP-02	SW04/SW-1	SW05/SW-1
										Sample Date:	4/11/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024
										Notes:	Field Duplicate Pair				
Parameter	Units	Missouri SWQs						USEPA Primary MCLs	USEPA Secondary MCLs						
		Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW								
		Acute	Chronic												
<b>Metals</b>															
Aluminum	mg/L	0.75	NE	NE	NE	NE	NE	0.05 - 0.2	<b>11.4</b>	<b>1.03 J</b>	<b>0.165 J</b>	<b>0.566</b>	<b>0.036 J</b>		
Antimony	mg/L	NE	NE	4.3	0.006	NE	0.006	0.006	0.00103 U	0.00103 U	0.00103 U	<b>0.00112 J</b>	0.00103 U		
Arsenic	mg/L	0.34	0.15	NE	0.05	0.01	0.05	0.01	<b>0.00925</b>	<b>0.00263</b>	<b>0.00074 J</b>	<b>0.00211</b>	<b>0.00059 J</b>		
Barium	mg/L	NE	NE	NE	2	NE	2	2	<b>0.2530</b>	<b>0.0868</b>	<b>0.0623</b>	<b>0.1080</b>	<b>0.0556</b>		
Beryllium	mg/L	NE	0.005	NE	0.004	0.1	0.004	0.004	<b>0.000871 J</b>	0.000190 U	0.000190 U	0.000190 U	0.000190 U		
Cadmium	mg/L	2.55	0.76	NE	0.005	NE	0.005	0.005	<b>0.000517 J</b>	0.000150 U	0.000150 U	0.000150 U	0.000150 U		
Calcium	mg/L	NE	NE	NE	NE	NE	NE	NE	<b>278</b>	<b>121</b>	<b>109</b>	<b>118</b>	<b>111</b>		
Chromium	mg/L	2.54	4.30	NE	0.1	0.1	0.1	0.1	<b>0.01500</b>	<b>0.00204</b>	0.00124 U	<b>0.00146 J</b>	0.00124 U		
Cobalt	mg/L	NE	NE	NE	NE	1	1	1	<b>0.013200</b>	<b>0.002450 J</b>	<b>0.000367 J</b>	<b>0.004060</b>	<b>0.000130 J</b>		
Copper	mg/L	6.40	5.96	NE	1.3	0.5	1.3	1.3	<b>0.03540</b>	<b>0.00553</b>	<b>0.00172 J</b>	<b>0.00749</b>	0.00151 U		
Iron	mg/L	NE	1	NE	NE	NE	0.3	NE	<b>27.9</b>	<b>3.93 J</b>	<b>0.704 J</b>	<b>3.02</b>	<b>0.091 J</b>		
Lead	mg/L	5.70	3.44	NE	0.015	NE	0.015	0.015	<b>0.023800</b>	<b>0.003960 J</b>	0.000849 UJ	<b>0.002440</b>	0.000849 U		
Magnesium	mg/L	NE	NE	NE	NE	NE	NE	NE	<b>61.9</b>	<b>46.4</b>	<b>47.1</b>	<b>47.0</b>	<b>48.9</b>		
Manganese	mg/L	NE	NE	NE	NE	NE	0.05	NE	<b>1.30</b>	<b>0.307 J</b>	<b>0.075 J</b>	<b>0.469</b>	<b>0.038</b>		
Molybdenum	mg/L	NE	NE	NE	NE	NE	NE	NE	<b>0.00205 J</b>	<b>0.00104 J</b>	<b>0.00205 J</b>	<b>0.00211 J</b>	<b>0.00274 J</b>		
Nickel	mg/L	6.70	4.50	NE	0.1	NE	0.1	NE	<b>0.04100</b>	<b>0.00743 J</b>	<b>0.00183 J</b>	<b>0.00572</b>	<b>0.00138 J</b>		
Potassium	mg/L	NE	NE	NE	NE	NE	NE	NE	<b>6.04</b>	<b>4.70</b>	<b>4.70</b>	<b>4.46</b>	<b>4.62</b>		
Selenium	mg/L	NE	5	NE	0.05	NE	0.05	0.05	<b>0.001360 J</b>	0.000300 U	0.000300 U	<b>0.007550</b>	0.000300 U		
Silver	mg/L	13.31	NE	NE	0.05	NE	0.05	NE	<b>0.0004350 J</b>	0.0000700 U	0.0000700 U	<b>0.0027700</b>	0.0000700 U		
Sodium	mg/L	NE	NE	NE	NE	NE	NE	NE	<b>59.0</b>	<b>52.5</b>	<b>54.0</b>	<b>53.2</b>	<b>53.0</b>		
Thallium	mg/L	NE	NE	0.0063	0.002	NE	0.002	0.002	0.000264 UJ	0.000121 U	0.000121 U	0.000121 U	0.000121 U		
Vanadium	mg/L	NE	NE	NE	NE	NE	NE	NE	<b>0.021300</b>	<b>0.002770 J</b>	<b>0.000748 J</b>	<b>0.001870 J</b>	0.000664 U		
Zinc	mg/L	5.24	5.24	NE	5	NE	5	NE	<b>0.09230</b>	<b>0.01910 J</b>	<b>0.00625 J</b>	<b>0.01580 J</b>	<b>0.00317 J</b>		
Mercury	mg/L	0.0014	0.00077	NE	0.002	NE	0.002	0.002	0.000100 U	0.000100 U	0.000100 U	0.000100 U	0.000100 U		
<b>Semivolatile Organic Compounds</b>															
1,2,4-Trichlorobenzene	µg/L	NE	NE	940	70	NE	70	70	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U		
1,2-Dichlorobenzene	µg/L	NE	NE	2,600	600	NE	600	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U		
1,3-Dichlorobenzene	µg/L	NE	NE	2,600	600	NE	600	600	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U		
1,4-Dichlorobenzene	µg/L	NE	NE	2,600	75	NE	75	75	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U		
2,4,5-Trichlorophenol	µg/L	NE	NE	9,800	2,600	NE	2,600	NE	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U		
2,4,6-Trichlorophenol	µg/L	NE	NE	6.5	2	NE	2	NE	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U		
2,4-Dichlorophenol	µg/L	NE	7	790	93	NE	93	NE	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U		
2,4-Dimethylphenol	µg/L	NE	NE	2,300	540	NE	540	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U		
2,4-Dinitrophenol	µg/L	NE	NE	14,000	70	NE	70	NE	2.4 U	2.5 U	2.5 U	2.5 U	2.5 U		
2,4-Dinitrotoluene	µg/L	NE	NE	9	0.11	NE	0.04	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U		
2,6-Dinitrotoluene	µg/L	NE	NE	NE	NE	NE	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U		
2-Chloronaphthalene	µg/L	NE	4,300	NE	NE	NE	NE	NE	2.0 U	2.1 U	2.0 U	2.1 U	2.1 U		
2-Chlorophenol	µg/L	NE	NE	400	0.1	NE	0.1	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U		
2-Methylnaphthalene	µg/L	NE	NE	NE	NE	NE	NE	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U		
2-Methylphenol(o-Cresol)	µg/L	NE	NE	NE	NE	NE	NE	NE	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U		
2-Nitroaniline	µg/L	NE	NE	NE	NE	NE	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U		
2-Nitrophenol	µg/L	NE	NE	NE	NE	NE	NE	NE	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U		
3&4-Methylphenol(m&p Cresol)	µg/L	NE	NE	NE	NE	NE	NE	NE	1.6 U	1.7 U	1.6 U	1.7 U	1.7 U		
3,3'-Dichlorobenzidine	µg/L	NE	NE	0.08	0.04	NE	0.04	NE	3.8 U	3.9 U	3.9 U	3.9 U	3.9 U		
3-Nitroaniline	µg/L	NE	NE	NE	NE	NE	NE	NE	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U		
4,6-Dinitro-2-methylphenol	µg/L	NE	NE	NE	NE	NE	NE	NE	2.1 U	2.2 U	2.1 U	2.2 U	2.2 U		
4-Bromophenylphenyl ether	µg/L	NE	NE	NE	NE	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U		

**Table 2**  
**Surface Water Sample Results**  
**Limited Phase II Environmental Site Assessment Investigation - Primary and Alternate Sites**  
*Todd Creek Wastewater Treatment Plant - Kansas City, Missouri*

										Sample Point:	SW02/SW-1	SW03/SW-1	DUP-02	SW04/SW-1	SW05/SW-1
										Sample Date:	4/11/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024
										Notes:	Field Duplicate Pair				
Parameter	Units	Missouri SWQs						USEPA Primary MCLs	USEPA Secondary MCLs						
		Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW								
		Acute	Chronic												
<b>Semivolatile Organic Compounds (continued)</b>															
4-Chloro-3-methylphenol	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
4-Chloroaniline	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
4-Chlorophenylphenyl ether	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
4-Nitroaniline	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.1 U	2.2 U	2.2 U	2.2 U	2.2 U	
4-Nitrophenol	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.36 U	0.37 U	0.37 U	0.37 U	0.37 U	
Acenaphthene	µg/L	NE	NE	2,700	1,200	NE	1,200	NE	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	
Acenaphthylene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	
Anthracene	µg/L	NE	NE	110,000	9,600	NE	9,600	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
Benzo(a)anthracene	µg/L	NE	NE	0.049	0.0044	NE	0.0044	NE	NE	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	
Benzo(a)pyrene	µg/L	NE	NE	0.049	0.2	NE	0.2	0.2	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
Benzo(b)fluoranthene	µg/L	NE	NE	0.049	0.0044	NE	0.0044	NE	NE	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	
Benzo(g,h,i)perylene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	
Benzo(k)fluoranthene	µg/L	NE	NE	0.049	0.0044	NE	0.0044	NE	NE	2.1 U	2.2 U	2.1 U	2.2 U	2.2 U	
Benzoic Acid	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	4.3 U	4.4 U	4.4 U	4.4 U	4.4 U	
Benzyl alcohol	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	
Butylbenzylphthalate	µg/L	NE	NE	5,200	3,000	NE	3,000	NE	NE	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	
Carbazole	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
Chrysene	µg/L	NE	NE	0.049	0.0044	NE	0.0044	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
Di-n-butylphthalate	µg/L	NE	NE	12,000	2,700	NE	2,700	NE	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	
Di-n-octylphthalate	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	
Dibenz(a,h)anthracene	µg/L	NE	NE	0.049	0.0044	NE	0.0044	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	
Dibenzofuran	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
Diethylphthalate	µg/L	NE	NE	120,000	23,000	NE	23,000	NE	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	
Dimethylphthalate	µg/L	NE	NE	2,900,000	313,000	NE	313,000	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Fluoranthene	µg/L	NE	NE	370	300	NE	300	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
Fluorene	µg/L	NE	NE	14,000	1,300	NE	1,300	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
Hexachloro-1,3-butadiene	µg/L	NE	NE	0.05	0.00045	NE	0.00045	NE	NE	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	
Hexachlorobenzene	µg/L	NE	NE	0.00074	1	NE	1	1	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	
Hexachlorocyclopentadiene	µg/L	NE	0.5	NE	50	NE	50	50	NE	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	
Hexachloroethane	µg/L	NE	NE	8.7	1.9	NE	1.9	NE	NE	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	
Indeno(1,2,3-cd)pyrene	µg/L	NE	NE	0.049	0.0044	NE	0.0044	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	
Isophorone	µg/L	NE	NE	2,600	36	NE	36	NE	NE	2.0 U	2.1 U	2.1 U	2.1 U	2.1 U	
N-Nitroso-di-n-propylamine	µg/L	NE	NE	1.4	NE	NE	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
N-Nitrosodiphenylamine	µg/L	NE	NE	16	5	NE	5	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
Naphthalene	µg/L	NE	NE	NE	20	NE	20	NE	NE	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	
Nitrobenzene	µg/L	NE	NE	1,900	17	NE	17	NE	NE	2.3 U	2.4 U	2.3 U	2.4 U	2.4 U	
Pentachlorophenol	µg/L	*	*	8	1	NE	1	1	NE	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	
Phenanthrene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	
Phenol	µg/L	5,293	157	NE	100	NE	300	NE	NE	0.81 U	0.83 U	0.82 U	0.83 U	0.83 U	
Pyrene	µg/L	NE	NE	11,000	960	NE	960	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
Pyridine	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	
bis(2-Chloroethoxy)methane	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	
bis(2-Chloroethyl) ether	µg/L	NE	NE	1.4	0.03	NE	0.03	NE	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	
bis(2-Chloroisopropyl) ether	µg/L	NE	NE	4,360	1,400	NE	1,400	NE	NE	2.2 U	2.3 U	2.2 U	2.3 U	2.3 U	
bis(2-Ethylhexyl)phthalate	µg/L	NE	NE	5.9	6	NE	6	6	NE	2.3 U	2.4 U	2.3 U	2.4 U	2.4 U	

**Table 2**  
**Surface Water Sample Results**  
**Limited Phase II Environmental Site Assessment Investigation - Primary and Alternate Sites**  
*Todd Creek Wastewater Treatment Plant - Kansas City, Missouri*

										Sample Point:	SW02/SW-1	SW03/SW-1	DUP-02	SW04/SW-1	SW05/SW-1
										Sample Date:	4/11/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024
										Notes:	Field Duplicate Pair				
Parameter	Units	Missouri SWQs						USEPA Primary MCLs	USEPA Secondary MCLs						
		Aquatic Life Protection		Human Health Protection		DWS	IRR/LWP								GRW
		Acute	Chronic	Fish Consumption											
<b>Total Petroleum Hydrocarbons</b>															
Gasoline Range Organics	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	62.6 U	62.6 U	62.6 U	62.6 U	62.6 U	
Diesel Range Organics	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.45 JU	0.65 JU	0.54 JU	0.49 JU	0.60 JU	
Oil Range Organics	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.61 JU	0.83 JU	0.67 JU	0.56 JU	0.69 JU	
<b>Volatile Organic Compounds</b>															
1,1,1,2-Tetrachloroethane	µg/L	NE	NE	NE	70	NE	70	NE	NE	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	
1,1,1-Trichloroethane	µg/L	NE	NE	NE	200	NE	200	200	NE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	
1,1,2,2-Tetrachloroethane	µg/L	NE	NE	11	0.17	NE	0.17	NE	NE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	
1,1,2-Trichloroethane	µg/L	NE	NE	42	5	NE	5	5	NE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	
1,1-Dichloroethane	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	
1,1-Dichloroethene	µg/L	NE	NE	3.2	7	NE	7	7	NE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	
1,1-Dichloropropene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	
1,2,3-Trichlorobenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	
1,2,3-Trichloropropane	µg/L	NE	NE	NE	40	NE	40	NE	NE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	
1,2,4-Trichlorobenzene	µg/L	NE	NE	940	70	NE	70	70	NE	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	
1,2,4-Trimethylbenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	
1,2-Dibromo-3-chloropropane	µg/L	NE	NE	NE	NE	NE	NE	0.2	NE	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	
1,2-Dibromoethane (EDB)	µg/L	NE	NE	NE	0.05	NE	0.05	0.05	NE	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,2-Dichlorobenzene	µg/L	NE	NE	2,600	600	NE	600	600	NE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	
1,2-Dichloroethane	µg/L	NE	NE	99	5	NE	5	5	NE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	
1,2-Dichloroethene (Total)	µg/L	NE	NE	3.2	7	NE	7	7	NE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	
1,2-Dichloropropane	µg/L	NE	NE	39	0.52	NE	0.52	5	NE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	
1,3,5-Trimethylbenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	
1,3-Dichlorobenzene	µg/L	NE	NE	2,600	600	NE	600	NE	NE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	
1,3-Dichloropropane	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	
1,4-Dichlorobenzene	µg/L	NE	NE	2,600	75	NE	75	75	NE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	
2,2-Dichloropropane	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	
2-Butanone (MEK)	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	
2-Chlorotoluene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	
2-Hexanone	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	
4-Chlorotoluene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	
4-Methyl-2-pentanone (MIBK)	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	
Acetone	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.50 U	2.50 U	2.50 U	2.50 U	2.50 U	
Benzene	µg/L	NE	NE	71	5	NE	5	5	NE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	
Bromobenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	
Bromochloromethane	µg/L	NE	NE	NE	90	NE	90	NE	NE	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
Bromodichloromethane	µg/L	NE	NE	NE	NE	NE	NE	80	NE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	
Bromoform	µg/L	NE	NE	360	4.3	NE	4.3	80	NE	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	
Bromomethane	µg/L	NE	NE	NE	10	NE	10	NE	NE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	
Carbon disulfide	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	
Carbon tetrachloride	µg/L	NE	NE	5	5	NE	5	5	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	
Chlorobenzene	µg/L	NE	NE	21,000	100	NE	100	100	NE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	
Chloroethane	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	
Chloroform	µg/L	NE	NE	470	5.7	NE	5.7	80	NE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	
Chloromethane	µg/L	NE	NE	470	5	NE	5	NE	NE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	
Dibromochloromethane	µg/L	NE	NE	NE	NE	NE	NE	80	NE	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
Dibromomethane	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	
Dichlorodifluoromethane	µg/L	NE	NE	570,000	NE	NE	NE	NE	NE	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	

**Table 2**  
**Surface Water Sample Results**  
**Limited Phase II Environmental Site Assessment Investigation - Primary and Alternate Sites**  
*Todd Creek Wastewater Treatment Plant - Kansas City, Missouri*

										Sample Point:	SW02/SW-1	SW03/SW-1	DUP-02	SW04/SW-1	SW05/SW-1
										Sample Date:	4/11/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024
										Notes:	Field Duplicate Pair				
Parameter	Units	Missouri SWQs						USEPA Primary MCLs	USEPA Secondary MCLs						
		Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW								
		Acute	Chronic												
<b>Volatile Organic Compounds</b>															
Ethylbenzene	µg/L	NE	320	NE	700	NE	700	700	NE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	
Hexachloro-1,3-butadiene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	
Isopropylbenzene (Cumene)	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	
Methyl-tert-butyl ether	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	
Methylene Chloride	µg/L	NE	NE	1,600	4.7	NE	4.7	5	NE	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	
Naphthalene	µg/L	NE	NE	NE	20	NE	20	NE	NE	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	
Styrene	µg/L	NE	NE	NE	100	NE	100	100	NE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	
Tetrachloroethene	µg/L	NE	NE	8.85	0.8	NE	0.8	5	NE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	
Toluene	µg/L	NE	NE	200,000	1,000	NE	1,000	1,000	NE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
Trichloroethene	µg/L	NE	NE	80	5	NE	5	5	NE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	
Trichlorofluoromethane	µg/L	NE	NE	470	5.7	NE	5.7	NE	NE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	
Vinyl chloride	µg/L	NE	NE	525	2	NE	2	2	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	
Xylene (Total)	µg/L	NE	NE	NE	10,000	NE	10,000	10,000	NE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	
cis-1,2-Dichloroethene	µg/L	NE	NE	NE	70	NE	70	70	NE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	
cis-1,3-Dichloropropene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	
n-Butylbenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	
n-Propylbenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	
p-Isopropyltoluene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	
sec-Butylbenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	
tert-Butylbenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	
trans-1,2-Dichloroethene	µg/L	NE	NE	140,000	100	NE	100	100	NE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	
trans-1,3-Dichloropropene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	
<b>Nitrogen</b>															
Ammonia as Nitrogen	mg/L	**	**	NE	NE	NE	NE	NE	NE	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	
Nitrate plus Nitrite as Nitrogen (unpreserved)	mg/L	NE	NE	NE	10	NE	10	10	NE	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	
Nitrate plus Nitrite as Nitrogen (preserved)	mg/L	NE	NE	NE	10	NE	10	10	NE	<b>0.10</b>	0.069 U	0.069 U	0.069 U	0.069 U	
Nitrite as Nitrogen	mg/L	NE	NE	NE	10	NE	10	10	NE	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	
Nitrite as Nitrogen	mg/L	NE	NE	NE	1	NE	1	1	NE	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	
<b>Total Cyanide</b>															
Cyanide	mg/L	0.022	0.0052	NE	NE	NE	NE	0.2	NE	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	
<b>Water Quality</b>															
Alkalinity, total as CaCO3	mg/L	NE	20	NE	NE	NE	NE	NE	NE	<b>361</b>	<b>364</b>	<b>364</b>	<b>364</b>	<b>364</b>	
Oxygen, Dissolved	mg/L	5 (minimum)***	5 (minimum)***	NE	NE	NE	NE	NE	NE	<b>8.4 J</b>	<b>9.0 J</b>	<b>9.4 J</b>	<b>10.7 J</b>	<b>10.7 J</b>	
Sulfide, Total	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.016 U	<b>0.072</b>	<b>0.028 J</b>	<b>0.041 J</b>	<b>0.021 J</b>	
Fluoride	mg/L	NE	NE	NE	4	4	4	4	2	<b>0.63 J+</b>	<b>0.19 J</b>	<b>0.17 J</b>	<b>0.16 J</b>	<b>0.13 J</b>	
Sulfate	mg/L	NE	NE	NE	250	NE	NE	NE	250	<b>145</b>	<b>149</b>	<b>133</b>	<b>129</b>	<b>154</b>	
pH	s.u.	≥6 or ≤9	≥6 or ≤9	NE	NE	NE	NE	NE	≥6.5 or ≤8.5	<b>7.5 J</b>	<b>7.6 J</b>	<b>7.7 J</b>	<b>7.8 J</b>	<b>8.0 J</b>	

**Table 2**  
**Surface Water Sample Results**  
**Limited Phase II Environmental Site Assessment Investigation - Primary and Alternate Sites**  
*Todd Creek Wastewater Treatment Plant - Kansas City, Missouri*

						Sample Point:	SW02/SW-1	SW03/SW-1	DUP-02	SW04/SW-1	SW05/SW-1	
						Sample Date:	4/11/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024	
						Notes:	Field Duplicate Pair					
Parameter	Units	Missouri SWQSS					USEPA Primary MCLs	USEPA Secondary MCLs				
		Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP						GRW
		Acute	Chronic									

**Notes:**  
**Screening Levels**  
- 10 Code of State Regulations 20-7; Rules of Department of Natural Resources; Division 20 – Clean Water Commission; Chapter 7 – Water Quality (i.e., Missouri SWQSSs) (Missouri Secretary of State, 2023)  
- USEPA Primary and Secondary MCLs (USEPA, 2009 and 2011)  
\* Acute =  $e((1.005*(pH))-4.869)$ ; Chronic =  $e((1.005*(pH))-5.134)$   
\*\* See Table B1 and B3 from in MDNR 10 CSR 20-7.  
\*\*\* Based on Coolwater and Warmwater Aquatic Habitats.  
\*\*\*\* MCL is based on total polychlorinated biphenyls

**Bold - compound was detected**  
**Highlighted - concentration exceeds one or more Missouri SWQSS and/or USEPA Primary or Secondary MCL**

°C - degrees Celsius  
DWS - drinking water supply  
GRW - groundwater  
IRR - irrigation  
J - estimated value  
J+ - estimated value, potential high bias  
JU - trace detection qualified as a nondetect during data review  
LWP - livestock and wildlife protection  
µg/L - micrograms per liter  
MCL - maximum contaminant level  
mg/L - milligrams per liter  
NE - not established  
s.u. - standard unit  
SWQSS - surface water quality standard  
U - compound was not detected  
UJ - estimated at the reporting limit  
USEPA - United States Environmental Protection Agency



**Table 2**  
**Surface Water Sample Results**  
**Limited Phase II Environmental Site Assessment Investigation - Primary and Alternate Sites**  
*Todd Creek Wastewater Treatment Plant - Kansas City, Missouri*

										Sample Point:	SW06/SW-1	SW07/SW-1	SW08/SW-1	SW09/SW-1	SW10/SW-1
										Sample Date:	4/10/2024	4/10/2024	4/9/2024	4/9/2024	4/9/2024
										Notes:					
Parameter	Units	Missouri SWQs						USEPA Primary MCLs	USEPA Secondary MCLs						
		Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW								
		Acute	Chronic												
<b>Pesticides</b>															
4,4'-DDD	mg/L	NE	NE	0.0000084	0.0000083	NE	0.0000083	NE	NE	0.0000177 U	0.0000177 U	0.0000177 U	0.0000177 U	0.0000177 U	0.0000177 U
4,4'-DDE	mg/L	NE	NE	0.0000059	0.0000059	NE	0.0000059	NE	NE	0.0000154 U	0.0000154 U	0.0000154 U	0.0000154 U	0.0000154 U	0.0000154 U
4,4'-DDT	mg/L	0.0011	0.000001	0.0000059	0.0000059	NE	0.0000059	NE	NE	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U
Aldrin	mg/L	0.003	NE	0.00000079	0.0000013	NE	0.0000013	0.004	NE	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U
Chlordane (Technical)	mg/L	0.0024	0.0000043	0.00000048	0.002	NE	0.002	0.002	NE	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U	0.0000198 U
Dieldrin	mg/L	0.00024	0.000056	0.00000076	0.0000014	NE	0.0000014	NE	NE	0.0000162 U	0.0000162 U	0.0000162 U	0.0000162 U	0.0000162 U	0.0000162 U
Endosulfan I	mg/L	0.00022	0.000056	NE	NE	NE	NE	NE	NE	0.0000160 U	0.0000160 U	0.0000160 U	0.0000160 U	0.0000160 U	0.0000160 U
Endosulfan II	mg/L	0.00022	0.000056	NE	NE	NE	NE	NE	NE	0.0000164 U	0.0000164 U	0.0000164 U	0.0000164 U	0.0000164 U	0.0000164 U
Endosulfan sulfate	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.0000217 U	0.0000217 U	0.0000217 U	0.0000217 U	0.0000217 U	0.0000217 U
Endrin	mg/L	0.000086	0.000036	0.0000023	0.002	NE	0.002	0.002	NE	0.0000161 U	0.0000161 U	0.0000161 U	0.0000161 U	0.0000161 U	0.0000161 U
Endrin aldehyde	mg/L	NE	NE	0.0000023	0.00075	NE	0.00075	NE	NE	0.0000237 U	0.0000237 U	0.0000237 U	0.0000237 U	0.0000237 U	0.0000237 U
Endrin ketone	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.0000219 U	0.0000219 U	0.0000219 U	0.0000219 U	0.0000219 U	0.0000219 U
Heptachlor	mg/L	0.00052	0.0000038	0.0000002	0.0004	NE	0.0004	0.0004	NE	0.0000148 U	0.0000148 U	0.0000148 U	0.0000148 U	0.0000148 U	0.0000148 U
Heptachlor epoxide	mg/L	0.00052	0.0000038	0.0000001	0.0002	NE	0.0002	0.0002	NE	0.0000183 U	0.0000183 U	0.0000183 U	0.0000183 U	0.0000183 U	0.0000183 U
Hexachlorobenzene	mg/L	NE	NE	0.00000074	0.001	NE	0.001	0.001	NE	0.0000176 U	0.0000176 U	0.0000176 U	0.0000176 U	0.0000176 U	0.0000176 U
Methoxychlor	mg/L	NE	0.00003	NE	0.04	NE	0.04	0.04	NE	0.0000193 U	0.0000193 U	0.0000193 U	0.0000193 U	0.0000193 U	0.0000193 U
Toxaphene	mg/L	0.00073	0.0000002	0.000000073	0.003	NE	0.003	0.003	NE	0.0001680 U	0.0001680 U	0.0001680 U	0.0001680 U	0.0001680 U	0.0001680 U
alpha-BHC	mg/L	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE	0.0000187 J	0.0000172 U	0.0000172 U	0.0000172 U	0.0000172 U	0.0000172 U
beta-BHC	mg/L	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE	0.0000208 U	0.0000208 U	0.0000208 U	0.0000208 U	0.0000208 U	0.0000208 U
delta-BHC	mg/L	NE	NE	0.0000074	0.0000022	NE	0.0000022	NE	NE	0.0000150 U	0.0000150 U	0.0000150 U	0.0000150 U	0.0000150 U	0.0000150 U
gamma-BHC (Lindane)	mg/L	0.00095	NE	0.000062	0.0002	NE	0.0002	0.002	NE	0.0000209 U	0.0000209 U	0.0000209 U	0.0000209 U	0.0000209 U	0.0000209 U
<b>Chlorinated Herbicides</b>															
2,4,5-T	mg/L	NE	NE	NE	0.07	NE	0.07	NE	NE	0.000279 U	0.000271 U	0.000286 U	0.000279 U	0.000271 U	0.000271 U
2,4,5-TP (Silvex)	mg/L	NE	NE	NE	0.05	NE	0.05	0.05	NE	0.000362 U	0.000352 U	0.000372 U	0.000362 U	0.000352 U	0.000352 U
2,4-D	mg/L	NE	NE	NE	0.07	NE	0.07	0.07	NE	0.000591 U	0.000574 U	0.000607 U	0.000591 U	0.000574 U	0.000574 U
2,4-DB	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.000326 U	0.000317 U	0.000335 U	0.000326 U	0.000317 U	0.000317 U
2-(2-methyl-4-chlorophenoxy)pa	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.0713 U	0.0693 U	0.0733 U	0.0713 U	0.0693 U	0.0693 U
Dalapon	mg/L	NE	NE	NE	0.2	NE	0.2	0.2	NE	0.000372 U	0.000361 U	0.000382 U	0.000372 U	0.000361 U	0.000361 U
Dicamba	mg/L	NE	NE	NE	0.2	NE	0.2	NE	NE	0.000265 U	0.000257 U	0.000272 U	0.000265 U	0.000257 U	0.000257 U
Dichlorprop	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.00112 U	0.00109 U	0.00115 U	0.00112 U	0.00109 U	0.00109 U
Dinoseb	mg/L	NE	NE	NE	0.007	NE	0.007	0.007	NE	0.000270 U	0.000263 U	0.000278 U	0.000270 U	0.000263 U	0.000263 U
MCPA	mg/L	NE	NE	NE	0.01	NE	0.01	NE	NE	0.0141 U	0.0138 U	0.0145 U	0.0141 U	0.0141 U	0.0138 U
<b>Polychlorinated Biphenyls</b>															
PCB-1016 (Aroclor 1016)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
PCB-1221 (Aroclor 1221)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
PCB-1232 (Aroclor 1232)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
PCB-1242 (Aroclor 1242)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
PCB-1248 (Aroclor 1248)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
PCB-1254 (Aroclor 1254)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
PCB-1260 (Aroclor 1260)	µg/L	NE	0.014	0.000045	NE	NE	0.00045	0.5****	NE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U

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		Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW								
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<b>Metals</b>															
Aluminum	mg/L	0.75	NE	NE	NE	NE	NE	0.05 - 0.2	<b>0.236</b>	<b>0.085 J</b>	<b>0.133</b>	<b>0.797</b>	<b>0.093 J</b>		
Antimony	mg/L	NE	NE	4.3	0.006	NE	0.006	0.006	NE	0.00103 U	0.00103 U	0.00103 U	0.00103 U	0.00103 U	
Arsenic	mg/L	0.34	0.15	NE	0.05	0.01	0.05	0.01	NE	<b>0.00100 J</b>	<b>0.00088 J</b>	<b>0.00101 J</b>	<b>0.00453</b>	<b>0.00081 J</b>	
Barium	mg/L	NE	NE	NE	2	NE	2	2	NE	<b>0.0599</b>	<b>0.0572</b>	<b>0.0649</b>	<b>0.1230</b>	<b>0.0590</b>	
Beryllium	mg/L	NE	0.005	NE	0.004	0.1	0.004	0.004	NE	0.000190 U	0.000190 U	0.000190 U	0.000190 U	0.000190 U	
Cadmium	mg/L	2.55	0.76	NE	0.005	NE	0.005	0.005	NE	0.000150 U	0.000150 U	0.000150 U	<b>0.000211 J</b>	0.000150 U	
Calcium	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	<b>128</b>	<b>134</b>	<b>135</b>	<b>189</b>	<b>173</b>	
Chromium	mg/L	2.54	4.30	NE	0.1	0.1	0.1	0.1	NE	0.00124 U	0.00124 U	0.00124 U	<b>0.00201</b>	0.00124 U	
Cobalt	mg/L	NE	NE	NE	NE	1	1	1	NE	<b>0.000614 J</b>	<b>0.000389 J</b>	<b>0.000442 J</b>	<b>0.005230</b>	<b>0.000455 J</b>	
Copper	mg/L	6.40	5.96	NE	1.3	0.5	1.3	1.3	1.0	<b>0.00232 J</b>	<b>0.00202 J</b>	<b>0.00230 J</b>	<b>0.00755</b>	<b>0.00151 U</b>	
Iron	mg/L	NE	1	NE	NE	NE	0.3	NE	0.3	<b>0.767</b>	<b>0.399</b>	<b>0.564</b>	<b>4.95</b>	<b>0.430</b>	
Lead	mg/L	5.70	3.44	NE	0.015	NE	0.015	0.015	NE	0.000849 U	0.000849 U	0.000849 U	<b>0.008740</b>	0.000849 U	
Magnesium	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	<b>60.8</b>	<b>66.4</b>	<b>67.6</b>	<b>77.4</b>	<b>86.7</b>	
Manganese	mg/L	NE	NE	NE	NE	NE	0.05	NE	0.05	<b>0.428</b>	<b>0.426</b>	<b>0.391</b>	<b>4.44</b>	<b>0.313</b>	
Molybdenum	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	<b>0.00216 J</b>	<b>0.00228 J</b>	<b>0.00277 J</b>	<b>0.000836 J</b>	<b>0.00183 J</b>	
Nickel	mg/L	6.70	4.50	NE	0.1	NE	0.1	NE	NE	<b>0.00288</b>	<b>0.00214</b>	<b>0.00562</b>	<b>0.0148</b>	<b>0.00287</b>	
Potassium	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	<b>5.68</b>	<b>5.48</b>	<b>5.81</b>	<b>6.19</b>	<b>5.66</b>	
Selenium	mg/L	NE	5	NE	0.05	NE	0.05	0.05	NE	<b>0.000759 J</b>	<b>0.000770 J</b>	<b>0.000768 J</b>	<b>0.000952 J</b>	<b>0.00130 J</b>	
Silver	mg/L	13.31	NE	NE	0.05	NE	0.05	NE	0.1	0.0000700 U	0.0000700 U	0.0000700 U	0.0000700 U	0.0000700 U	
Sodium	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	<b>82.3</b>	<b>84.5</b>	<b>95.1</b>	<b>110</b>	<b>121</b>	
Thallium	mg/L	NE	NE	0.0063	0.002	NE	0.002	0.002	NE	0.000121 U	0.000121 U	0.000121 U	0.000121 U	0.000121 U	
Vanadium	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	<b>0.001010 J</b>	0.000664 U	<b>0.000819 J</b>	<b>0.004780 J</b>	<b>0.000757 J</b>	
Zinc	mg/L	5.24	5.24	NE	5	NE	5	NE	5	<b>0.00581 J</b>	<b>0.00349 J</b>	<b>0.00502 J</b>	<b>0.04000</b>	<b>0.00552 J</b>	
Mercury	mg/L	0.0014	0.00077	NE	0.002	NE	0.002	0.002	NE	0.000100 U	0.000100 U	0.000100 U	0.000100 U	0.000100 U	
<b>Semivolatile Organic Compounds</b>															
1,2,4-Trichlorobenzene	µg/L	NE	NE	940	70	NE	70	70	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
1,2-Dichlorobenzene	µg/L	NE	NE	2,600	600	NE	600	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	
1,3-Dichlorobenzene	µg/L	NE	NE	2,600	600	NE	600	600	NE	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	
1,4-Dichlorobenzene	µg/L	NE	NE	2,600	75	NE	75	75	NE	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	
2,4,5-Trichlorophenol	µg/L	NE	NE	9,800	2,600	NE	2,600	NE	NE	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	
2,4,6-Trichlorophenol	µg/L	NE	NE	6.5	2	NE	2	NE	NE	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	
2,4-Dichlorophenol	µg/L	NE	7	790	93	NE	93	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	
2,4-Dimethylphenol	µg/L	NE	NE	2,300	540	NE	540	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
2,4-Dinitrophenol	µg/L	NE	NE	14,000	70	NE	70	NE	NE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	
2,4-Dinitrotoluene	µg/L	NE	NE	9	0.11	NE	0.04	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
2,6-Dinitrotoluene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
2-Chloronaphthalene	µg/L	NE	4,300	NE	NE	NE	NE	NE	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	
2-Chlorophenol	µg/L	NE	NE	400	0.1	NE	0.1	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	
2-Methylnaphthalene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	
2-Methylphenol(o-Cresol)	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	
2-Nitroaniline	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
2-Nitrophenol	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
3&4-Methylphenol(m&p Cresol)	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	
3,3'-Dichlorobenzidine	µg/L	NE	NE	0.08	0.04	NE	0.04	NE	NE	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	
3-Nitroaniline	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
4,6-Dinitro-2-methylphenol	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	
4-Bromophenylphenyl ether	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	

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Parameter	Units	Missouri SWQs						USEPA Primary MCLs	USEPA Secondary MCLs						
		Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW								
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<b>Semivolatile Organic Compounds (continued)</b>															
4-Chloro-3-methylphenol	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Chloroaniline	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenylphenyl ether	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitroaniline	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
4-Nitrophenol	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Acenaphthene	µg/L	NE	NE	2,700	1,200	NE	1,200	NE	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Acenaphthylene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	µg/L	NE	NE	110,000	9,600	NE	9,600	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Benzo(a)anthracene	µg/L	NE	NE	0.049	0.0044	NE	0.0044	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Benzo(a)pyrene	µg/L	NE	NE	0.049	0.2	NE	0.2	0.2	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Benzo(b)fluoranthene	µg/L	NE	NE	0.049	0.0044	NE	0.0044	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(g,h,i)perylene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Benzo(k)fluoranthene	µg/L	NE	NE	0.049	0.0044	NE	0.0044	NE	NE	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Benzoic Acid	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
Benzyl alcohol	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Butylbenzylphthalate	µg/L	NE	NE	5,200	3,000	NE	3,000	NE	NE	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Carbazole	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chrysene	µg/L	NE	NE	0.049	0.0044	NE	0.0044	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Di-n-butylphthalate	µg/L	NE	NE	12,000	2,700	NE	2,700	NE	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Di-n-octylphthalate	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Dibenz(a,h)anthracene	µg/L	NE	NE	0.049	0.0044	NE	0.0044	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Dibenzofuran	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Diethylphthalate	µg/L	NE	NE	120,000	23,000	NE	23,000	NE	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Dimethylphthalate	µg/L	NE	NE	2,900,000	313,000	NE	313,000	NE	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluoranthene	µg/L	NE	NE	370	300	NE	300	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Fluorene	µg/L	NE	NE	14,000	1,300	NE	1,300	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Hexachloro-1,3-butadiene	µg/L	NE	NE	0.05	0.00045	NE	0.00045	NE	NE	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Hexachlorobenzene	µg/L	NE	NE	0.00074	1	NE	1	1	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Hexachlorocyclopentadiene	µg/L	NE	0.5	NE	50	NE	50	50	NE	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Hexachloroethane	µg/L	NE	NE	8.7	1.9	NE	1.9	NE	NE	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Indeno(1,2,3-cd)pyrene	µg/L	NE	NE	0.049	0.0044	NE	0.0044	NE	NE	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Isophorone	µg/L	NE	NE	2,600	36	NE	36	NE	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
N-Nitroso-di-n-propylamine	µg/L	NE	NE	1.4	NE	NE	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
N-Nitrosodiphenylamine	µg/L	NE	NE	16	5	NE	5	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Naphthalene	µg/L	NE	NE	NE	20	NE	20	NE	NE	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Nitrobenzene	µg/L	NE	NE	1,900	17	NE	17	NE	NE	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Pentachlorophenol	µg/L	*	*	8	1	NE	1	1	NE	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Phenanthrene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Phenol	µg/L	5,293	157	NE	100	NE	300	NE	NE	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
Pyrene	µg/L	NE	NE	11,000	960	NE	960	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Pyridine	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
bis(2-Chloroethoxy)methane	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
bis(2-Chloroethyl) ether	µg/L	NE	NE	1.4	0.03	NE	0.03	NE	NE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
bis(2-Chloroisopropyl) ether	µg/L	NE	NE	4,360	1,400	NE	1,400	NE	NE	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
bis(2-Ethylhexyl)phthalate	µg/L	NE	NE	5.9	6	NE	6	6	NE	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U

**Table 2**  
**Surface Water Sample Results**  
**Limited Phase II Environmental Site Assessment Investigation - Primary and Alternate Sites**  
*Todd Creek Wastewater Treatment Plant - Kansas City, Missouri*

										Sample Point:	SW06/SW-1	SW07/SW-1	SW08/SW-1	SW09/SW-1	SW10/SW-1
										Sample Date:	4/10/2024	4/10/2024	4/9/2024	4/9/2024	4/9/2024
										Notes:					
Parameter	Units	Missouri SWQs						USEPA Primary MCLs	USEPA Secondary MCLs						
		Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW								
		Acute	Chronic												
<b>Total Petroleum Hydrocarbons</b>															
Gasoline Range Organics	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	62.6 U	62.6 U	62.6 U	62.6 U	62.6 U	
Diesel Range Organics	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.51 JU	0.50 JU	0.54 JU	0.56 JU	0.56 JU	
Oil Range Organics	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.66 JU	0.56 JU	0.63 JU	0.82 JU	0.64 JU	
<b>Volatile Organic Compounds</b>															
1,1,1,2-Tetrachloroethane	µg/L	NE	NE	NE	70	NE	70	NE	NE	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	
1,1,1-Trichloroethane	µg/L	NE	NE	NE	200	NE	200	200	NE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	
1,1,2,2-Tetrachloroethane	µg/L	NE	NE	11	0.17	NE	0.17	NE	NE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	
1,1,2-Trichloroethane	µg/L	NE	NE	42	5	NE	5	5	NE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	
1,1-Dichloroethane	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	
1,1-Dichloroethene	µg/L	NE	NE	3.2	7	NE	7	7	NE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	
1,1-Dichloropropene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	
1,2,3-Trichlorobenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	
1,2,3-Trichloropropane	µg/L	NE	NE	NE	40	NE	40	NE	NE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	
1,2,4-Trichlorobenzene	µg/L	NE	NE	940	70	NE	70	70	NE	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	
1,2,4-Trimethylbenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	
1,2-Dibromo-3-chloropropane	µg/L	NE	NE	NE	NE	NE	NE	0.2	NE	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	
1,2-Dibromoethane (EDB)	µg/L	NE	NE	NE	0.05	NE	0.05	0.05	NE	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,2-Dichlorobenzene	µg/L	NE	NE	2,600	600	NE	600	600	NE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	
1,2-Dichloroethane	µg/L	NE	NE	99	5	NE	5	5	NE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	
1,2-Dichloroethene (Total)	µg/L	NE	NE	3.2	7	NE	7	7	NE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	
1,2-Dichloropropane	µg/L	NE	NE	39	0.52	NE	0.52	5	NE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	
1,3,5-Trimethylbenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	
1,3-Dichlorobenzene	µg/L	NE	NE	2,600	600	NE	600	NE	NE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	
1,3-Dichloropropane	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	
1,4-Dichlorobenzene	µg/L	NE	NE	2,600	75	NE	75	75	NE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	
2,2-Dichloropropane	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	
2-Butanone (MEK)	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	
2-Chlorotoluene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	
2-Hexanone	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	
4-Chlorotoluene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	
4-Methyl-2-pentanone (MIBK)	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	
Acetone	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	2.50 U	2.50 U	2.5 U	2.5 U	2.5 U	
Benzene	µg/L	NE	NE	71	5	NE	5	5	NE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	
Bromobenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.09 U	0.09 U	0.088 U	0.088 U	0.088 U	
Bromochloromethane	µg/L	NE	NE	NE	90	NE	90	NE	NE	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
Bromodichloromethane	µg/L	NE	NE	NE	NE	NE	NE	80	NE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	
Bromoform	µg/L	NE	NE	360	4.3	NE	4.3	80	NE	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	
Bromomethane	µg/L	NE	NE	NE	10	NE	10	NE	NE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	
Carbon disulfide	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	
Carbon tetrachloride	µg/L	NE	NE	5	5	NE	5	5	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	
Chlorobenzene	µg/L	NE	NE	21,000	100	NE	100	100	NE	0.09 U	0.09 U	0.089 U	0.089 U	0.089 U	
Chloroethane	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	
Chloroform	µg/L	NE	NE	470	5.7	NE	5.7	80	NE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	
Chloromethane	µg/L	NE	NE	470	5	NE	5	NE	NE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	
Dibromochloromethane	µg/L	NE	NE	NE	NE	NE	NE	80	NE	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
Dibromomethane	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	
Dichlorodifluoromethane	µg/L	NE	NE	570,000	NE	NE	NE	NE	NE	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	

**Table 2**  
**Surface Water Sample Results**  
**Limited Phase II Environmental Site Assessment Investigation - Primary and Alternate Sites**  
*Todd Creek Wastewater Treatment Plant - Kansas City, Missouri*

										Sample Point:	SW06/SW-1	SW07/SW-1	SW08/SW-1	SW09/SW-1	SW10/SW-1
										Sample Date:	4/10/2024	4/10/2024	4/9/2024	4/9/2024	4/9/2024
										Notes:					
Parameter	Units	Missouri SWQs						USEPA Primary MCLs	USEPA Secondary MCLs						
		Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP	GRW								
		Acute	Chronic												
<b>Volatile Organic Compounds</b>															
Ethylbenzene	µg/L	NE	320	NE	700	NE	700	700	NE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Hexachloro-1,3-butadiene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Isopropylbenzene (Cumene)	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.10 U	0.10 U	0.097 U	0.097 U	0.097 U	0.097 U
Methyl-tert-butyl ether	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Methylene Chloride	µg/L	NE	NE	1,600	4.7	NE	4.7	5	NE	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
Naphthalene	µg/L	NE	NE	NE	20	NE	20	NE	NE	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
Styrene	µg/L	NE	NE	NE	100	NE	100	100	NE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Tetrachloroethene	µg/L	NE	NE	8.85	0.8	NE	0.8	5	NE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Toluene	µg/L	NE	NE	200,000	1,000	NE	1,000	1,000	NE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Trichloroethene	µg/L	NE	NE	80	5	NE	5	5	NE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Trichlorofluoromethane	µg/L	NE	NE	470	5.7	NE	5.7	NE	NE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Vinyl chloride	µg/L	NE	NE	525	2	NE	2	2	NE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Xylene (Total)	µg/L	NE	NE	NE	10,000	NE	10,000	10,000	NE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
cis-1,2-Dichloroethene	µg/L	NE	NE	NE	70	NE	70	70	NE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
cis-1,3-Dichloropropene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
n-Butylbenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
n-Propylbenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
p-Isopropyltoluene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
sec-Butylbenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
tert-Butylbenzene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
trans-1,2-Dichloroethene	µg/L	NE	NE	140,000	100	NE	100	100	NE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
trans-1,3-Dichloropropene	µg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
<b>Nitrogen</b>															
Ammonia as Nitrogen	mg/L	**	**	NE	NE	NE	NE	NE	NE	0.069 U	0.069 U	0.069 U	0.48 J	0.069 U	0.069 U
Nitrate plus Nitrite as Nitrogen (unpreserved)	mg/L	NE	NE	NE	10	NE	10	10	NE	0.069 U	0.069 UJ	0.069 U	0.069 U	0.069 U	0.16
Nitrate plus Nitrite as Nitrogen (preserved)	mg/L	NE	NE	NE	10	NE	10	10	NE	0.069 U	0.069 UJ	0.069 U	0.069 U	0.069 U	0.18
Nitrite as Nitrogen	mg/L	NE	NE	NE	10	NE	10	10	NE	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.16
Nitrite as Nitrogen	mg/L	NE	NE	NE	1	NE	1	1	NE	0.069 U	0.069 UJ	0.069 U	0.069 U	0.069 U	0.069 U
<b>Total Cyanide</b>															
Cyanide	mg/L	0.022	0.0052	NE	NE	NE	NE	0.2	NE	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U
<b>Water Quality</b>															
Alkalinity, total as CaCO3	mg/L	NE	20	NE	NE	NE	NE	NE	NE	342	349	327	98.4	356	
Oxygen, Dissolved	mg/L	5 (minimum)***	5 (minimum)***	NE	NE	NE	NE	NE	NE	10.0 J	10.2 J	11.2 J	6.9 J	10.4 J	
Sulfide, Total	mg/L	NE	NE	NE	NE	NE	NE	NE	NE	0.016 U	0.045 J	0.028 J	0.042 J	0.016 UJ	
Fluoride	mg/L	NE	NE	NE	4	4	4	4	2	0.12 U	0.12 U	0.20	0.14 J	0.12 U	
Sulfate	mg/L	NE	NE	NE	250	NE	NE	NE	250	332	324 J	328	431	559	
pH	s.u.	≥6 or ≤9	≥6 or ≤9	NE	NE	NE	NE	NE	≥6.5 or ≤8.5	7.9 J	7.9 J	8.1 J	7.5 J	7.9 J	

**Table 2**  
**Surface Water Sample Results**  
**Limited Phase II Environmental Site Assessment Investigation - Primary and Alternate Sites**  
*Todd Creek Wastewater Treatment Plant - Kansas City, Missouri*

						Sample Point:	SW06/SW-1	SW07/SW-1	SW08/SW-1	SW09/SW-1	SW10/SW-1	
						Sample Date:	4/10/2024	4/10/2024	4/9/2024	4/9/2024	4/9/2024	
						Notes:						
Parameter	Units	Missouri SWQSS					USEPA Primary MCLs	USEPA Secondary MCLs				
		Aquatic Life Protection		Human Health Protection Fish Consumption	DWS	IRR/LWP						GRW
		Acute	Chronic									

**Notes:**  
**Screening Levels**  
- 10 Code of State Regulations 20-7; Rules of Department of Natural Resources; Division 20 – Clean Water Commission; Chapter 7 – Water Quality (i.e., Missouri SWQSSs) (Missouri Secretary of State, 2023)  
- USEPA Primary and Secondary MCLs (USEPA, 2009 and 2011)  
\* Acute =  $e((1.005*(pH))-4.869)$ ; Chronic =  $e((1.005*(pH))-5.134)$   
\*\* See Table B1 and B3 from in MDNR 10 CSR 20-7.  
\*\*\* Based on Coolwater and Warmwater Aquatic Habitats.  
\*\*\*\* MCL is based on total polychlorinated biphenyls

**Bold - compound was detected**  
**Highlighted - concentration exceeds one or more Missouri SWQSS and/or USEPA Primary or Secondary MCL**

°C - degrees Celsius  
DWS - drinking water supply  
GRW - groundwater  
IRR - irrigation  
J - estimated value  
J+ - estimated value, potential high bias  
JU - trace detection qualified as a nondetect during data review  
LWP - livestock and wildlife protection  
µg/L - micrograms per liter  
MCL - maximum contaminant level  
mg/L - milligrams per liter  
NE - not established  
s.u. - standard unit  
SWQSS - surface water quality standard  
U - compound was not detected  
UJ - estimated at the reporting limit  
USEPA - United States Environmental Protection Agency

### TABLE 3 - SEDIMENT SAMPLE RESULTS

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**Table 3**  
**Sediment Sample Results**  
**Limited Phase II Environmental Site Assessment - Primary and Alternate Sites**  
**Todd Creek Wastewater Treatment Plant - Kansas City, Missouri**

		Sample Point:	SD01/SD-1	SD02/SD-1	SD03/SD-1	DUP-03	SD04/SD-1	SD05/SD-1	SD06/SD-1	SD07/SD-1	SD08/SD-1	SD09/SD-1	SD10/SD-1	
		Sample Interval (feet bgs):	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	
		Sample Date:	4/11/2024	4/11/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024	4/9/2024	4/9/2024	4/9/2024	
		Notes:	Field Duplicate Pair											
Parameter	Units	USEPA Residential RSL (HQ 0.1)	USEPA Industrial RSL (HQ 0.1)											
<b>Pesticides</b>														
4,4'-DDD	mg/kg	2.3	9.6	0.00444 U	0.00592 U	0.00444 U	0.00426 U	0.00477 U	0.00478 U	0.00502 U	0.00462 U	0.00437 U	0.00531 U	0.00438 U
4,4'-DDE	mg/kg	2.0	9.3	0.00439 U	0.00585 U	0.00439 U	0.00421 U	0.00472 U	0.00473 U	0.00497 U	0.00457 U	0.00432 U	0.00525 U	0.00433 U
4,4'-DDT	mg/kg	1.9	8.5	0.00752 U	0.01000 U	0.00752 U	0.00722 U	0.00809 U	0.00810 U	0.00851 U	0.00783 U	0.00740 U	0.00900 U	0.00742 U
Aldrin	mg/kg	0.039	0.18	0.00451 U	0.00601 U	0.00451 U	0.00433 U	0.00485 U	0.00486 U	0.00510 U	0.00469 U	0.00444 U	0.00540 U	0.00445 U
Chlordane (Technical)	mg/kg	1.7	7.7	0.124 U	0.165 U	0.123 U	0.119 U	0.133 U	0.133 U	0.140 U	0.129 U	0.122 U	0.148 U	0.122 U
Dieldrin	mg/kg	0.034	0.14	0.00413 U	0.00550 U	0.00412 U	0.00396 U	0.00444 U	0.00444 U	0.00467 U	0.00429 U	0.00406 U	0.00494 U	0.00407 U
Endosulfan I	mg/kg	NE	NE	0.00435 U	0.00580 U	0.00435 U	0.00418 U	0.00468 U	0.00469 U	0.00493 U	0.00453 U	0.00429 U	0.00521 U	0.00430 U
Endosulfan II	mg/kg	NE	NE	0.00402 U	0.00536 U	0.00402 U	0.00386 U	0.00432 U	0.00433 U	0.00455 U	0.00418 U	0.00396 U	0.00481 U	0.00397 U
Endosulfan sulfate	mg/kg	38	490	0.00437 U	0.00582 U	0.00436 U	0.00419 U	0.00470 U	0.00470 U	0.00494 U	0.00454 U	0.00430 U	0.00523 U	0.00431 U
Endrin	mg/kg	1.9	25	0.00420 U	0.00560 U	0.00420 U	0.00403 U	0.00452 U	0.00452 U	0.00475 U	0.00437 U	0.00413 U	0.00503 U	0.00414 U
Endrin aldehyde	mg/kg	NE	NE	0.00407 U	0.00542 U	0.00406 U	0.00390 U	0.00437 U	0.00438 U	0.00460 U	0.00423 U	0.00400 U	0.00487 U	0.00401 U
Endrin ketone	mg/kg	NE	NE	0.00853 U	0.01140 U	0.00852 U	0.00819 U	0.00917 U	0.00918 U	0.00965 U	0.00887 U	0.00840 U	0.01020 U	0.00842 U
Heptachlor	mg/kg	0.13	0.63	0.00513 U	0.00684 U	0.00513 U	0.00493 U	0.00552 U	0.00553 U	0.00581 U	0.00534 U	0.00505 U	0.00615 U	0.00507 U
Heptachlor epoxide	mg/kg	0.07	0.33	0.00407 U	0.00542 U	0.00406 U	0.00390 U	0.00437 U	0.00438 U	0.00460 U	0.00423 U	0.00400 U	0.00487 U	0.00401 U
Hexachlorobenzene	mg/kg	0.078	0.96	0.00415 U	0.00553 U	0.00415 U	0.00398 U	0.00446 U	0.00447 U	0.00470 U	0.00432 U	0.00409 U	0.00497 U	0.00410 U
Methoxychlor	mg/kg	32	410	0.00581 U	0.00774 U	0.00580 U	0.00557 U	0.00624 U	0.00625 U	0.00657 U	0.00604 U	0.00572 U	0.00695 U	0.00573 U
Toxaphene	mg/kg	0.49	2.1	0.149 U	0.198 U	0.149 U	0.143 U	0.160 U	0.160 U	0.168 U	0.155 U	0.146 U	0.178 U	0.147 U
alpha-BHC	mg/kg	0.086	0.36	0.00441 U	0.00588 U	0.00441 U	0.00424 U	0.00475 U	0.00475 U	0.00499 U	0.00459 U	0.00435 U	0.00528 U	0.00436 U
beta-BHC	mg/kg	0.3	0.3	0.00455 U	0.00606 U	0.00454 U	0.00436 U	0.00489 U	0.00490 U	0.00514 U	0.00473 U	0.00448 U	0.00544 U	0.00449 U
delta-BHC	mg/kg	NE	NE	0.00415 U	0.00553 U	0.00415 U	0.00398 U	0.00446 U	0.00447 U	0.00470 U	0.00432 U	0.00409 U	0.00497 U	0.00410 U
gamma-BHC (Lindane)	mg/kg	0.57	2.5	0.00413 U	0.00550 U	0.00412 U	0.00396 U	0.00444 U	0.00444 U	0.00467 U	0.00429 U	0.00406 U	0.00494 U	0.00407 U
<b>Chlorinated Herbicides</b>														
2,4,5-T	mg/kg	63	820	0.0102 U	0.0136 U	0.0102 U	0.0098 U	0.0110 U	0.0110 U	0.0116 U	0.0106 U	0.0101 U	0.0122 U	0.0101 U
2,4,5-TP (Silvex)	mg/kg	51	660	0.0128 U	0.0171 U	0.0128 U	0.0123 U	0.0138 U	0.0138 U	0.0145 U	0.0134 U	0.0126 U	0.0154 U	0.0127 U
2,4-D	mg/kg	70	960	0.00842 U	0.01120 U	0.00842 U	0.00808 U	0.00906 U	0.00907 U	0.00953 U	0.00876 U	0.00829 U	0.01010 U	0.00831 U
2,4-DB	mg/kg	NE	NE	0.0356 U	0.0475 U	0.0356 U	0.0342 U	0.0383 U	0.0384 U	0.0403 U	0.0371 U	0.0351 U	0.0426 U	0.0352 U
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	6.3	82	0.440 U	0.587 U	0.440 U	0.423 U	0.473 U	0.474 U	0.498 U	0.458 U	0.433 U	0.527 U	0.434 U
Dalapon	mg/kg	190	2,500	0.0136 U	0.0181 U	0.0135 U	0.0130 U	0.0146 U	0.0146 U	0.0153 U	0.0141 U	0.0133 U	0.0162 U	0.0134 U
Dicamba	mg/kg	190	2,500	0.0188 U	0.0251 U	0.0188 U	0.0181 U	0.0203 U	0.0203 U	0.0213 U	0.0196 U	0.0185 U	0.0225 U	0.0186 U
Dichlorprop	mg/kg	NE	NE	0.0294 U	0.0392 U	0.0294 U	0.0282 U	0.0316 U	0.0316 U	0.0333 U	0.0306 U	0.0289 U	0.0352 U	0.0290 U
Dinoseb	mg/kg	6.3	82	0.00836 U	0.01110 U	0.00836 U	0.00803 U	0.00899 U	0.00900 U	0.00946 U	0.00870 U	0.00823 U	0.01000 U	0.00825 U
MCPA	mg/kg	3.2	41	0.531 U	0.708 U	0.531 U	0.510 U	0.572 U	0.572 U	0.601 U	0.553 U	0.523 U	0.636 U	0.524 U
<b>Polychlorinated Biphenyls</b>														
PCB-1016 (Aroclor 1016)	µg/kg	410	5,100	10.6 U	18.6 U	11.7 U	11.7 U	10.9 U	11.7 U	11.9 U	10.9 U	12.0 U	11.6 U	119 U
PCB-1221 (Aroclor 1221)	µg/kg	200	830	13.2 U	23.2 U	14.6 U	14.6 U	13.6 U	14.6 U	14.8 U	13.5 U	14.9 U	14.4 U	114 U
PCB-1232 (Aroclor 1232)	µg/kg	170	720	13.2 U	23.2 U	14.6 U	14.6 U	13.6 U	14.6 U	14.8 U	13.5 U	14.9 U	14.4 U	148 U
PCB-1242 (Aroclor 1242)	µg/kg	230	950	13.2 U	23.2 U	14.6 U	14.6 U	13.6 U	14.6 U	14.8 U	13.5 U	14.9 U	14.4 U	148 U
PCB-1248 (Aroclor 1248)	µg/kg	230	940	13.2 U	23.2 U	14.6 U	14.6 U	13.6 U	14.6 U	14.8 U	13.5 U	14.9 U	14.4 U	148 U
PCB-1254 (Aroclor 1254)	µg/kg	120	970	13.2 U	23.2 U	14.6 U	14.6 U	13.6 U	14.6 U	14.8 U	13.5 U	14.9 U	14.4 U	148 U
PCB-1260 (Aroclor 1260)	µg/kg	240	990	13.2 U	23.2 U	14.6 U	14.6 U	13.6 U	14.6 U	14.8 U	13.5 U	14.9 U	14.4 U	148 U



**Table 3**  
**Sediment Sample Results**  
**Limited Phase II Environmental Site Assessment - Primary and Alternate Sites**  
**Todd Creek Wastewater Treatment Plant - Kansas City, Missouri**

		Sample Point:	SD01/SD-1	SD02/SD-1	SD03/SD-1	DUP-03	SD04/SD-1	SD05/SD-1	SD06/SD-1	SD07/SD-1	SD08/SD-1	SD09/SD-1	SD10/SD-1	
		Sample Interval (feet bgs):	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	
		Sample Date:	4/11/2024	4/11/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024	4/9/2024	4/9/2024	4/9/2024	
		Notes:	Field Duplicate Pair											
Parameter	Units	USEPA Residential RSL (HQ 0.1)	USEPA Industrial RSL (HQ 0.1)											
<b>Metals</b>														
Aluminum	mg/kg	7,700	110,000	21,300	7,240	1,780	1,940	1,900	3,030	4,510	4,290 J+	6,520	13,100	3,870
Antimony	mg/kg	3.1	47	0.496 JU	0.498 JU	0.290 JU	0.191 U	0.395 JU	0.349 JU	0.485 JU	0.499 JU	0.329 JU	0.569 UJ	0.217 JU
Arsenic	mg/kg	0.68	3.0	10.7	4.43	4.54	3.45	5.46	8.31	8.93	6.94	14.8	6.35	5.76
Barium	mg/kg	1,500	22,000	191	50.8	24.5	21.0	33.6	34.9	124	90.4	203	168 J	92
Beryllium	mg/kg	16	230	1.03 J	0.591 J	0.216 J	0.241 J	0.279 J	0.323 J	0.485 J	0.405 J	0.620 J	0.781 J	0.306 J
Cadmium	mg/kg	0.71	10	0.214 J	0.150 J	0.140 J	0.099 U	0.134 J	0.580 J	0.518 J	0.529 J	0.448 J	0.493 J	0.353 J
Calcium	mg/kg	NE	NE	63,300	188,000	264,000	274,000	245,000	254,000	149,000	151,000 J	125,000	84,600 J	208,000
Chromium	mg/kg	NE	NE	27.0	11.4	4.25 J	4.34 J	4.98 J	8.84	11.2	10.0	13.3	24.1	9.71
Cobalt	mg/kg	2.3	35	10.4	3.97	2.60	2.46	3.39	5.06	9.09	6.82	18.1	11.2	6.16
Copper	mg/kg	310	4,700	15.6	8.55	4.82 J	4.56 J	5.92 J	12.9	12.6	12.4	10.4	16.1	5.86 J
Iron	mg/kg	5,500	82,000	26,300	11,200	8,190	9,370	9,460	13,300	16,700	12,400 J	22,700	17,700 J	11,500
Lead	mg/kg	200	800	14.2	5.85	4.54	4.44	5.46	14.9	15.3	14.6	18.5	17.3 J	11.3
Magnesium	mg/kg	NE	NE	8,820	6,050	6,090	6,460	5,760	7,020	5,580	5,490	4,840	6,540	8,630
Manganese	mg/kg	180	2,600	1,050	414	691	720	651	836	1,520	831 J	2,020	1,110 J	1,460
Molybdenum	mg/kg	39	580	0.87 J	1.09 J	0.518 J	0.890 J	0.644 J	1.30 J	1.20 J	0.962 J	1.32 J	1.73 J	0.938 J
Nickel	mg/kg	140	1,800	27.5	13.7	8.91	8.64	10.7	24.4	21.9	21.5	22.3	29.3	13.2
Potassium	mg/kg	NE	NE	3,810	2,080	589 J	626	578 J	851	837	940	1,510	3,010 J	1,190
Selenium	mg/kg	39	580	0.513 J	0.522 J	0.325 J	0.225 J	0.398 J	1.69 J	1.14 J	1.21 J	1.05 J	1.72 J	1.25 J
Silver	mg/kg	39	580	0.104 U	0.138 U	0.104 U	0.100 U	0.112 U	0.208 J	0.117 U	0.108 U	0.102 U	0.124 U	0.102 U
Sodium	mg/kg	NE	NE	128 J	214 J	184 J	149 J	159 J	191 J	164 J	204 J	199 J	315 J	205 J
Thallium	mg/kg	0.078	1.2	0.264 J	0.243 J	0.078 U	0.075 U	0.135 J	0.112 J	0.171 J	0.149 J	0.123 J	0.320 J	0.0922 J
Vanadium	mg/kg	39	580	37.6	14.1	5.30	4.82	6.01	8.28	14.2	12.9	32.0	28.7	12.7
Zinc	mg/kg	2,300	35,000	55.5	31.4 J	17.6 J	17.3 J	24.8 J	83.1	76.6	62.8	56.3	74.8 J	36.9
Mercury	mg/kg	1.1	4.6	0.0216 U	0.0288 U	0.0216 U	0.0207 U	0.0232 U	0.0233 U	0.0244 U	0.0339 J	0.0213 U	0.0258 U	0.0213 U
<b>Semivolatile Organic Compounds</b>														
1,2,4-Trichlorobenzene	µg/kg	5,800	260,000	165 U	144 U	91.6 U	89.9 U	84.7 U	181 U	187 U	170 U	185 U	458 U	916 U
1,2-Dichlorobenzene	µg/kg	180,000	930,000	157 U	137 U	87.1 U	85.5 U	80.5 U	172 U	177 U	161 U	176 U	436 U	871 U
1,3-Dichlorobenzene	µg/kg	NE	NE	154 U	135 U	85.5 U	83.9 U	79.1 U	169 U	174 U	158 U	172 U	428 U	855 U
1,4-Dichlorobenzene	µg/kg	2,600	11,000	152 U	133 U	84.3 U	82.7 U	78.0 U	166 U	172 U	156 U	170 U	422 U	844 U
2,4,5-Trichlorophenol	µg/kg	630,000	8,200,000	162 U	141 U	89.6 U	87.9 U	82.9 U	177 U	183 U	166 U	181 U	448 U	897 U
2,4,6-Trichlorophenol	µg/kg	6,300	82,000	146 U	127 U	80.9 U	79.4 U	74.8 U	159 U	165 U	150 U	163 U	405 U	809 U
2,4-Dichlorophenol	µg/kg	19,000	250,000	158 U	138 U	87.6 U	86.0 U	81.0 U	173 U	179 U	162 U	177 U	438 U	877 U
2,4-Dimethylphenol	µg/kg	130,000	1,600,000	115 U	100 U	63.6 U	62.4 U	58.8 U	125 U	130 U	118 U	128 U	318 U	637 U
2,4-Dinitrophenol	µg/kg	13,000	160,000	239 U	208 U	132 U	130 U	122 U	260 U	269 U	245 UJ	267 U	661 U	1,320 U
2,4-Dinitrotoluene	µg/kg	1,700	7,400	178 U	155 U	98.5 U	96.7 U	91.1 U	194 U	201 U	182 U	199 U	493 U	985 U
2,6-Dinitrotoluene	µg/kg	360	1,500	154 U	134 U	85.3 U	83.6 U	78.8 U	168 U	174 U	158 U	172 U	426 U	853 U
2-Chloronaphthalene	µg/kg	480,000	6,000,000	166 U	145 U	92.1 U	90.4 U	85.2 U	182 U	188 U	171 U	186 U	461 U	922 U
2-Chlorophenol	µg/kg	39,000	580,000	161 U	141 U	89.4 U	87.7 U	82.6 U	176 U	182 U	165 U	180 U	447 U	894 U
2-Methylnaphthalene	µg/kg	24,000	300,000	160 U	140 U	88.7 U	87.0 U	82.0 U	175 U	181 U	164 U	179 U	444 U	887 U
2-Methylphenol(o-Cresol)	µg/kg	320,000	4,100,000	144 U	125 U	79.7 U	78.2 U	73.7 U	157 U	162 U	147 U	161 U	399 U	797 U
2-Nitroaniline	µg/kg	63,000	800,000	131 U	114 U	72.5 U	71.2 U	67.1 U	143 U	148 U	134 U	146 U	363 U	725 U
2-Nitrophenol	µg/kg	NE	NE	124 U	108 U	68.4 U	67.1 U	63.3 U	135 U	139 U	127 U	138 U	342 U	684 U
3&4-Methylphenol(m&p Cresol)	µg/kg	NE	NE	147 U	128 U	81.3 U	79.7 U	75.2 U	160 U	166 U	150 U	164 U	407 U	813 U
3,3'-Dichlorobenzidine	µg/kg	1,200	5,100	77.6 U	67.6 U	43.0 U	42.1 U	39.7 U	84.6 U	87.5 U	79.5 U	86.6 U	215 U	430 U
3-Nitroaniline	µg/kg	NE	NE	123 U	107 U	68.2 U	66.9 U	63.0 U	134 U	139 U	126 U	137 U	341 U	682 U
4,6-Dinitro-2-methylphenol	µg/kg	510	6,600	137 U	119 U	75.7 U	74.3 U	70.0 U	149 U	154 U	140 U	153 U	379 U	757 U
4-Bromophenylphenyl ether	µg/kg	NE	NE	170 U	149 U	94.4 U	92.6 U	87.3 U	186 U	192 U	175 U	190 U	472 U	944 U

**Table 3**  
**Sediment Sample Results**  
**Limited Phase II Environmental Site Assessment - Primary and Alternate Sites**  
**Todd Creek Wastewater Treatment Plant - Kansas City, Missouri**

				Sample Point: Sample Interval (feet bgs): Sample Date: Notes:	SD01/SD-1 0-0.5 4/11/2024	SD02/SD-1 0-0.5 4/11/2024	SD03/SD-1 0-0.5 4/10/2024	DUP-03 0-0.5 4/10/2024	SD04/SD-1 0-0.5 4/10/2024	SD05/SD-1 0-0.5 4/10/2024	SD06/SD-1 0-0.5 4/10/2024	SD07/SD-1 0-0.5 4/10/2024	SD08/SD-1 0-0.5 4/9/2024	SD09/SD-1 0-0.5 4/9/2024	SD10/SD-1 0-0.5 4/9/2024
					Field Duplicate Pair										
Parameter	Units	USEPA Residential RSL (HQ 0.1)	USEPA Industrial RSL (HQ 0.1)												
<b>Semivolatile Organic Compounds (continued)</b>															
4-Chloro-3-methylphenol	µg/kg	630,000	8,200,000	166 U	144 U	91.8 U	90.0 U	84.8 U	181 U	187 U	170 U	185 U	459 U	918 U	
4-Chloroaniline	µg/kg	2,700	11,000	124 U	108 U	68.5 U	67.3 U	63.4 U	135 U	140 U	127 U	138 U	343 U	686 U	
4-Chlorophenylphenyl ether	µg/kg	NE	NE	170 U	148 U	93.9 U	92.1 U	86.8 U	185 U	191 U	174 U	189 U	470 U	939 U	
4-Nitroaniline	µg/kg	25,000	110,000	135 U	118 U	74.9 U	73.5 U	69.3 U	148 U	153 U	139 U	151 U	375 U	749 U	
4-Nitrophenol	µg/kg	NE	NE	116 U	101 U	64.4 U	63.2 U	59.6 U	127 U	131 U	119 U	130 U	322 U	645 U	
Acenaphthene	µg/kg	360,000	4,500,000	170 U	148 U	94.0 U	92.2 U	86.9 U	185 U	191 U	174 U	190 U	470 U	940 U	
Acenaphthylene	µg/kg	NE	NE	129 U	113 U	71.6 U	70.2 U	66.2 U	141 U	146 U	133 U	144 U	358 U	716 U	
Anthracene	µg/kg	1,800,000	23,000,000	165 U	144 U	91.5 U	89.8 U	84.6 U	180 U	186 U	169 U	185 U	458 U	915 U	
Benzo(a)anthracene	µg/kg	1,100	21,000	167 U	146 U	92.5 U	90.8 U	85.6 U	182 U	189 U	171 U	187 U	463 U	926 U	
Benzo(a)pyrene	µg/kg	110	2,100	170 U	148 U	94.1 U	92.4 U	87.0 U	185 U	192 U	174 U	190 U	471 U	942 U	
Benzo(b)fluoranthene	µg/kg	1,100	21,000	193 U	168 U	107 U	105 U	98.7 U	210 U	217 U	198 U	215 U	534 U	1,070 U	
Benzo(g,h,i)perylene	µg/kg	NE	NE	137 U	120 U	76.0 U	74.5 U	70.3 U	150 U	155 U	141 U	153 U	380 U	760 U	
Benzo(k)fluoranthene	µg/kg	11,000	210,000	170 U	148 U	94.1 U	92.4 U	87.0 U	185 U	192 U	174 U	190 U	471 U	942 U	
Benzoic Acid	µg/kg	25,000,000	330,000,000	431 U	376 U	239 U	234 U	221 U	470 U	486 U	442 U	481 U	1,190 U	2,390 U	
Benzyl alcohol	µg/kg	630,000	8,200,000	145 U	127 U	80.3 U	78.8 U	74.3 U	158 U	164 U	149 U	162 U	402 U	804 U	
Butylbenzylphthalate	µg/kg	290,000	1,200,000	161 U	140 U	89.1 U	87.4 U	82.4 U	176 U	181 U	165 U	180 U	446 U	891 U	
Carbazole	µg/kg	NE	NE	163 U	142 U	90.0 U	88.3 U	83.2 U	177 U	183 U	167 U	182 U	450 U	901 U	
Chrysene	µg/kg	110,000	2,100,000	176 U	153 U	97.5 U	95.6 U	90.1 U	192 U	199 U	180 U	197 U	487 U	975 U	
Di-n-butylphthalate	µg/kg	630,000	8,200,000	187 U	163 U	104.0 U	102.0 U	95.8 U	204 U	211 U	192 U	209 U	518 U	1,040 U	
Di-n-octylphthalate	µg/kg	63,000	820,000	192 U	168 U	106.0 U	104.0 U	98.4 U	210 U	217 U	197 U	215 U	533 U	1,070 U	
Dibenz(a,h)anthracene	µg/kg	110	2,100	142 U	124 U	78.6 U	77.1 U	72.7 U	155 U	160 U	146 U	159 U	393 U	787 U	
Dibenzofuran	µg/kg	7,800	120,000	169 U	147 U	93.5 U	91.7 U	86.4 U	184 U	190 U	173 U	189 U	468 U	935 U	
Diethylphthalate	µg/kg	5,100,000	66,000,000	181 U	157 U	100.0 U	98.1 U	92.4 U	197 U	204 U	185 U	202 U	500 U	1,000 U	
Dimethylphthalate	µg/kg	NE	NE	164 U	143 U	90.8 U	89.1 U	84.0 U	179 U	185 U	168 U	183 U	454 U	909 U	
Fluoranthene	µg/kg	240,000	3,000,000	174 U	152 U	96.4 U	94.6 U	89.1 U	190 U	196 U	178 U	194 U	482 U	964 U	
Fluorene	µg/kg	240,000	3,000,000	168 U	147 U	93.1 U	91.3 U	86.1 U	183 U	190 U	172 U	188 U	466 U	931 U	
Hexachloro-1,3-butadiene	µg/kg	1,200	5,300	169 U	148 U	93.7 U	92.0 U	86.7 U	185 U	191 U	174 U	189 U	469 U	938 U	
Hexachlorobenzene	µg/kg	78	960	165 U	144 U	91.5 U	89.8 U	84.6 U	180 U	186 U	169 U	185 U	458 U	915 U	
Hexachlorocyclopentadiene	µg/kg	180	750	486 U	424 U	269 U	264 U	249 U	530 U	548 U	498 UR	543 U	1,350 U	2,690 U	
Hexachloroethane	µg/kg	1,800	8,000	145 U	126 U	80.2 U	78.7 U	74.2 U	158 U	163 U	148 U	162 U	401 U	802 U	
Indeno(1,2,3-cd)pyrene	µg/kg	1,100	21,000	162 U	141 U	89.5 U	87.8 U	82.8 U	176 U	182 U	166 U	181 U	448 U	895 U	
Isophorone	µg/kg	570,000	2,400,000	153 U	133 U	84.6 U	83.0 U	78.2 U	167 U	172 U	157 U	171 U	423 U	846 U	
N-Nitroso-di-n-propylamine	µg/kg	78	330	151 U	131 U	83.4 U	81.8 U	77.1 U	164 U	170 U	154 U	168 U	417 U	834 U	
N-Nitrosodiphenylamine	µg/kg	110,000	470,000	157 U	137 U	87.0 U	85.3 U	80.4 U	171 U	177 U	161 U	175 U	435 U	870 U	
Naphthalene	µg/kg	2,000	8,600	170 U	148 U	94.1 U	92.4 U	87.0 U	185 U	192 U	174 U	190 U	471 U	942 U	
Nitrobenzene	µg/kg	5,100	22,000	167 U	146 U	92.7 U	90.9 U	85.7 U	183 U	189 U	172 U	187 U	464 U	927 U	
Pentachlorophenol	µg/kg	1,000	4,000	261 U	228 U	145 U	142 U	134 U	285 U	294 U	268 U	291 U	723 U	1,450 U	
Phenanthrene	µg/kg	NE	NE	169 U	147 U	93.5 U	91.7 U	86.4 U	184 U	190 U	173 U	189 U	468 U	935 U	
Phenol	µg/kg	1,900,000	25,000,000	149 U	130 U	82.3 U	80.8 U	76.1 U	162 U	168 U	152 U	166 U	412 U	824 U	
Pyrene	µg/kg	180,000	2,300,000	169 U	147 U	93.3 U	91.6 U	86.3 U	184 U	190 U	173 U	188 U	467 U	934 U	
Pyridine	µg/kg	7,800	120,000	117 U	102 U	64.8 U	63.6 U	60.0 U	128 U	132 U	120 U	131 U	324 U	649 U	
bis(2-Chloroethoxy)methane	µg/kg	19,000	250,000	157 U	137 U	87.0 U	85.3 U	80.4 U	171 U	177 U	161 U	175 U	435 U	870 U	
bis(2-Chloroethyl) ether	µg/kg	230	1,000	159 U	139 U	88.3 U	86.6 U	81.7 U	174 U	180 U	163 U	178 U	442 U	883 U	
bis(2-Chloroisopropyl) ether	µg/kg	310,000	4,700,000	171 U	149 U	94.8 U	93.0 U	87.7 U	187 U	193 U	175 U	191 U	474 U	948 U	
bis(2-Ethylhexyl)phthalate	µg/kg	39,000	160,000	177 U	155 U	98.2 U	96.4 U	90.8 U	194 U	200 U	182 U	198 U	491 U	983 U	

**Table 3**  
**Sediment Sample Results**  
**Limited Phase II Environmental Site Assessment - Primary and Alternate Sites**  
**Todd Creek Wastewater Treatment Plant - Kansas City, Missouri**

				Sample Point: Sample Interval (feet bgs): Sample Date: Notes:	SD01/SD-1 0-0.5 4/11/2024	SD02/SD-1 0-0.5 4/11/2024	SD03/SD-1 0-0.5 4/10/2024	DUP-03 0-0.5 4/10/2024	SD04/SD-1 0-0.5 4/10/2024	SD05/SD-1 0-0.5 4/10/2024	SD06/SD-1 0-0.5 4/10/2024	SD07/SD-1 0-0.5 4/10/2024	SD08/SD-1 0-0.5 4/9/2024	SD09/SD-1 0-0.5 4/9/2024	SD10/SD-1 0-0.5 4/9/2024
					Field Duplicate Pair										
Parameter	Units	USEPA Residential RSL (HQ 0.1)	USEPA Industrial RSL (HQ 0.1)												
<b>Total Petroleum Hydrocarbons</b>															
Gasoline Range Organics	mg/kg	385*	NE	0.10 U	0.43 U	0.071 U	0.089 U	0.069 U	0.059 U	0.077 U	0.066 U	0.074 U	0.33 J	0.33 J	
Diesel Range Organics	mg/kg	4,150*	NE	21.5	45.4	6.7 U	6.6 U	39.4	38.1	41.8	27.5	27.7 J	8.6 J	68.2 U	
Oil Range Organics	mg/kg	124,000*	NE	113	132	8.5 J	11.5 J	69.1	86.1	92.5	77.5	55.5	34.1	175 J	
<b>Volatile Organic Compounds</b>															
1,1,1,2-Tetrachloroethane	µg/kg	2,000	8,800	1.0 U	2.8 U	1.1 U	1.0 U	1.6 U	1.0 U	1.1 U	1.0 U	1.2 U	1.0 U	1.1 U	
1,1,1-Trichloroethane	µg/kg	810,000	3,600,000	1.4 U	4.1 U	1.6 U	1.4 U	2.3 U	1.5 U	1.5 U	1.5 U	1.7 U	1.4 U	1.5 U	
1,1,2,2-Tetrachloroethane	µg/kg	600	2,700	1.0 U	2.8 U	1.1 U	1.0 U	1.6 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	
1,1,2-Trichloroethane	µg/kg	150	630	1.0 U	2.9 U	1.1 U	1.0 U	1.6 U	1.0 U	1.1 U	1.0 U	1.2 U	1.0 U	1.1 U	
1,1-Dichloroethane	µg/kg	3,600	16,000	1.6 U	4.6 U	1.8 U	1.6 U	2.5 U	1.7 U	1.7 U	1.7 U	1.9 U	1.6 U	1.7 U	
1,1-Dichloroethene	µg/kg	23,000	100,000	2.8 U	8.1 U	3.2 U	2.7 U	4.5 U	2.9 U	3.0 U	3.0 U	3.3 U	2.9 U	3.0 U	
1,1-Dichloropropene	µg/kg	NE	NE	1.5 U	4.3 U	1.7 U	1.5 U	2.4 U	1.6 U	1.6 U	1.6 U	1.8 U	1.5 U	1.6 U	
1,2,3-Trichlorobenzene	µg/kg	6,300	93,000	0.79 U	2.3 U	0.92 U	0.79 U	1.3 U	0.84 U	0.87 U	0.85 U	0.95 U	0.83 U	0.86 U	
1,2,3-Trichloropropane	µg/kg	5.1	110	2.1 U	6.2 U	2.4 U	2.1 U	3.4 U	2.2 U	2.3 U	2.2 U	2.5 U	2.2 U	2.3 U	
1,2,4-Trichlorobenzene	µg/kg	5,800	26,000	0.66 U	2.0 U	0.78 U	0.66 U	1.1 U	0.70 U	0.73 U	0.71 U	0.80 U	0.70 U	0.73 U	
1,2,4-Trimethylbenzene	µg/kg	30,000	180,000	0.93 U	2.8 U	1.1 U	0.93 U	1.5 U	5.5 J	1.0 U	1.4 J	1.1 U	0.98 U	1.0 U	
1,2-Dibromo-3-chloropropane	µg/kg	5.3	64	4.5 U	13.3 U	5.3 U	4.5 U	7.4 U	4.8 U	5.0 U	4.8 U	5.4 U	4.7 U	4.9 U	
1,2-Dibromoethane (EDB)	µg/kg	36	160	0.71 U	2.1 U	0.83 U	0.71 U	1.2 U	0.76 U	0.78 U	0.76 U	0.86 U	0.75 U	0.78 U	
1,2-Dichlorobenzene	µg/kg	180,000	930,000	1.1 U	3.3 U	1.3 U	1.1 U	1.9 U	1.2 U	1.2 U	1.2 U	1.4 U	1.2 U	1.2 U	
1,2-Dichloroethane	µg/kg	460	2,000	1.3 U	3.9 U	1.5 U	1.3 U	2.1 U	1.4 U	1.4 U	1.4 U	1.6 U	1.4 U	1.4 U	
1,2-Dichloroethene (Total)	µg/kg	NE	NE	2.6 U	7.6 U	3.0 U	2.6 U	4.2 U	2.7 U	2.8 U	2.7 U	3.1 U	2.7 U	2.8 U	
1,2-Dichloropropane	µg/kg	1,600	6,600	1.4 U	4.2 U	1.6 U	1.4 U	2.3 U	1.5 U	1.6 U	1.5 U	1.7 U	1.5 U	1.5 U	
1,3,5-Trimethylbenzene	µg/kg	27,000	150,000	0.59 U	1.7 U	0.69 U	0.59 U	0.96 U	2.3 J	0.65 U	0.63 U	0.71 U	0.62 U	0.64 U	
1,3-Dichlorobenzene	µg/kg	NE	NE	0.86 U	2.5 U	1.0 U	0.9 U	1.4 U	0.9 U	0.94 U	1.2 J	1.0 U	0.90 U	0.94 U	
1,3-Dichloropropane	µg/kg	160,000	2,300,000	0.26 U	0.78 U	0.31 U	0.26 U	0.43 U	0.28 U	332	0.28 U	0.32 U	0.28 U	0.29 U	
1,4-Dichlorobenzene	µg/kg	2,600	11,000	1.2 U	3.5 U	1.4 U	1.2 U	1.9 U	1.3 U	1.3 U	1.3 U	1.4 U	1.2 U	1.3 U	
2,2-Dichloropropane	µg/kg	NE	NE	2.0 U	6.0 U	2.4 U	2.0 U	3.3 U	2.2 U	2.3 U	2.2 U	2.5 U	2.1 U	2.2 U	
2-Butanone (MEK)	µg/kg	2,700,000	19,000,000	43.3 U	127 U	50.5 U	43.1 U	70.6 U	45.9 U	47.6 U	46.4 U	52.2 U	45.3 U	47.3 U	
2-Chlorotoluene	µg/kg	160,000	2,300,000	1.0 U	2.8 U	1.1 U	0.94 U	1.5 U	1.0 U	1.0 U	1.0 U	1.1 U	0.99 U	1.0 U	
2-Hexanone	µg/kg	20,000	130,000	14.1 U	41.6 U	16.5 U	26.7 J	23.0 U	15.0 U	15.5 U	15.1 U	17.0 U	14.8 U	15.4 U	
4-Chlorotoluene	µg/kg	160,000	2,300,000	0.53 U	1.6 U	0.62 U	0.53 U	0.87 U	0.57 U	0.59 U	0.57 U	0.64 U	0.56 U	0.58 U	
4-Methyl-2-pentanone (MIBK)	µg/kg	3,300,000	14,000,000	9.5 U	28.0 U	11.1 U	9.5 U	15.5 U	10.1 U	10.4 U	10.2 U	11.5 U	9.9 U	10.4 U	
Acetone	µg/kg	7,000,000	110,000,000	81.5 U	240 U	95.2 U	81.2 U	133 U	86.4 U	89.6 U	87.4 U	98.3 U	85.4 U	89.2 U	
Benzene	µg/kg	1,200	5,100	0.62 U	1.8 U	0.72 U	0.62 U	1.0 U	0.66 U	0.68 U	0.66 U	0.75 U	0.65 U	0.68 U	
Bromobenzene	µg/kg	29,000	180,000	0.84 U	2.5 U	1.0 U	0.84 U	1.4 U	0.89 U	0.93 U	0.90 U	1.0 U	0.88 U	0.92 U	
Bromochloromethane	µg/kg	15,000	63,000	1.0 U	3.0 U	1.2 U	1.0 U	1.6 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	
Bromodichloromethane	µg/kg	290	1,300	1.1 U	3.4 U	1.3 U	1.1 U	1.9 U	1.2 U	1.3 U	1.2 U	1.4 U	1.2 U	1.3 U	
Bromoform	µg/kg	19,000	86,000	0.53 U	1.6 U	0.61 U	0.52 U	0.86 U	0.56 U	0.58 U	0.56 U	0.63 U	0.55 U	0.58 U	
Bromomethane	µg/kg	680	3,000	8.4 U	24.7 U	9.8 U	8.3 U	13.7 U	8.9 U	9.2 U	9.0 U	10.1 U	8.8 U	9.2 U	
Carbon disulfide	µg/kg	77,000	350,000	3.1 U	31.7	3.7 U	3.1 U	5.1 U	5.9 J	10.7	19.2	4.0 J	3.3 U	10.9	
Carbon tetrachloride	µg/kg	650	2,900	2.3 U	6.7 U	2.6 U	2.3 U	3.7 U	2.4 U	2.5 U	2.4 U	2.7 U	2.4 U	2.5 U	
Chlorobenzene	µg/kg	28,000	130,000	0.40 U	1.2 U	0.46 U	0.39 U	0.65 U	0.42 U	0.44 U	0.42 U	0.48 U	0.41 U	0.43 U	
Chloroethane	µg/kg	540,000	2,300,000	11.2 U	33.1 U	13.1 U	11.2 U	18.4 U	11.9 U	12.4 U	12.0 U	13.6 U	11.8 U	12.3 U	
Chloroform	µg/kg	320	1,400	2.5 U	7.4 U	3.4 J	2.5 U	4.1 U	2.6 U	2.7 U	2.7 U	3.0 U	2.6 U	2.7 U	
Chloromethane	µg/kg	11,000	4,600	1.7 U	4.9 U	1.9 U	1.7 U	2.7 U	1.8 U	1.8 U	1.8 U	2.0 U	1.7 U	1.8 U	
Dibromochloromethane	µg/kg	8,300	39,000	0.41 U	1.2 U	0.48 U	0.41 U	0.67 U	0.43 U	0.45 U	0.44 U	0.49 U	0.43 U	0.45 U	
Dibromomethane	µg/kg	2,400	9,900	2.0 U	5.9 U	2.3 U	2.0 U	3.3 U	2.1 U	2.2 U	2.1 U	2.4 U	2.1 U	2.2 U	
Dichlorodifluoromethane	µg/kg	8,700	37,000	1.3 U	3.8 U	1.5 U	1.3 U	2.1 U	1.4 U	1.4 U	1.4 U	1.5 U	1.3 U	1.4 U	

**Table 3**  
**Sediment Sample Results**  
**Limited Phase II Environmental Site Assessment - Primary and Alternate Sites**  
**Todd Creek Wastewater Treatment Plant - Kansas City, Missouri**

				Sample Point:	SD01/SD-1	SD02/SD-1	SD03/SD-1	DUP-03	SD04/SD-1	SD05/SD-1	SD06/SD-1	SD07/SD-1	SD08/SD-1	SD09/SD-1	SD10/SD-1
				Sample Interval (feet bgs):	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
				Sample Date:	4/11/2024	4/11/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024	4/10/2024	4/9/2024	4/9/2024	4/9/2024
				Notes:	Field Duplicate Pair										
Parameter	Units	USEPA Residential RSL (HQ 0.1)	USEPA Industrial RSL (HQ 0.1)												
<b>Volatile Organic Compounds (continued)</b>															
Ethylbenzene	µg/kg	5,800	25,000	1.2 U	3.5 U	1.4 U	1.2 U	1.9 U	1.2 U	1.3 U	1.3 U	1.4 U	1.2 U	1.3 U	1.3 U
Hexachloro-1,3-butadiene	µg/kg	1,200	5,300	1.2 U	3.6 U	1.4 U	1.2 U	2.0 U	1.3 U	1.3 U	1.3 U	1.5 U	1.3 U	1.3 U	1.3 U
Isopropylbenzene (Cumene)	µg/kg	190,000	990,000	0.43 U	1.3 U	0.50 U	0.43 U	0.70 U	0.45 U	0.47 U	0.46 U	0.52 U	0.45 U	0.47 U	0.47 U
Methyl-tert-butyl ether	µg/kg	47,000	210,000	1.3 U	3.8 U	1.5 U	1.3 U	2.1 U	1.4 U	1.4 U	1.4 U	1.6 U	1.4 U	1.4 U	1.4 U
Methylene Chloride	µg/kg	35,000	320,000	26.3 U	77.5 U	30.7 U	26.2 U	43.0 U	27.9 U	28.9 U	28.2 U	31.7 U	27.6 U	28.8 U	28.8 U
Naphthalene	µg/kg	2,000	8,600	1.0 U	2.9 U	1.2 U	1.0 U	1.6 U	<b>8.7 J</b>	1.1 U	1.1 U	1.2 U	1.0 U	1.1 U	1.1 U
Styrene	µg/kg	600,000	3,500,000	0.55 U	1.6 U	0.64 U	0.55 U	0.89 U	0.58 U	0.60 U	0.59 U	0.66 U	0.57 U	0.60 U	0.60 U
Tetrachloroethene	µg/kg	8,100	39,000	0.72 U	2.1 U	0.84 U	0.72 U	1.2 U	0.77 U	0.80 U	0.77 U	0.87 U	0.76 U	0.79 U	0.79 U
Toluene	µg/kg	490,000	4,700,000	6.0 U	17.8 U	7.0 U	6.0 U	9.9 U	6.4 U	6.6 U	6.5 U	7.3 U	6.3 U	6.6 U	6.6 U
Trichloroethene	µg/kg	410	1,900	2.6 U	7.6 U	3.0 U	2.6 U	4.2 U	2.7 U	2.8 U	2.7 U	3.1 U	2.7 U	2.8 U	2.8 U
Trichlorofluoromethane	µg/kg	2,300,000	35,000,000	13.0 U	38.4 U	15.2 U	13.0 U	21.3 U	13.8 U	14.3 U	14.0 U	15.7 U	13.6 U	14.2 U	14.2 U
Vinyl chloride	µg/kg	59	1,700	1.3 U	3.7 U	1.5 U	1.3 U	2.1 U	1.3 U	1.4 U	1.3 U	1.5 U	1.3 U	1.4 U	1.4 U
Xylene (Total)	µg/kg	58,000	250,000	5.0 U	14.7 U	5.8 U	5.0 U	8.1 U	5.3 U	5.5 U	5.3 U	6.0 U	5.2 U	5.5 U	5.5 U
cis-1,2-Dichloroethene	µg/kg	6,300	37,000	1.3 U	3.7 U	1.5 U	1.3 U	2.1 U	1.3 U	1.4 U	1.4 U	1.5 U	1.3 U	1.4 U	1.4 U
cis-1,3-Dichloropropene	µg/kg	NE	NE	1.0 U	3.0 U	1.2 U	1.0 U	1.7 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U
n-Butylbenzene	µg/kg	390,000	5,800,000	0.65 U	1.9 U	0.76 U	0.65 U	1.1 U	0.69 U	0.72 U	0.70 U	0.79 U	0.68 U	0.71 U	0.71 U
n-Propylbenzene	µg/kg	380,000	2,400,000	0.82 U	2.4 U	0.96 U	0.82 U	1.3 U	<b>1.2 J</b>	0.91 U	0.88 U	0.99 U	0.86 U	0.90 U	0.90 U
p-Isopropyltoluene	µg/kg	NE	NE	<b>2.3 J</b>	1.7 U	0.69 U	0.59 U	0.96 U	<b>9.5</b>	0.65 U	<b>2.7 J</b>	0.71 U	0.62 U	0.65 U	0.65 U
sec-Butylbenzene	µg/kg	780,000	12,000,000	<b>2.2 J</b>	2.0 U	0.78 U	0.67 U	1.1 U	<b>1.4 J</b>	0.74 U	0.72 U	0.81 U	0.70 U	0.73 U	0.73 U
tert-Butylbenzene	µg/kg	780,000	12,000,000	0.44 U	1.3 U	0.51 U	0.44 U	0.72 U	0.47 U	0.48 U	0.47 U	0.53 U	0.46 U	0.48 U	0.48 U
trans-1,2-Dichloroethene	µg/kg	7,000	30,000	1.5 U	4.4 U	1.8 U	1.5 U	2.5 U	1.6 U	1.7 U	1.6 U	1.8 U	1.6 U	1.6 U	1.6 U
trans-1,3-Dichloropropene	µg/kg	NE	NE	0.82 U	2.4 U	0.95 U	0.81 U	1.3 U	0.86 U	0.90 U	0.87 U	0.98 U	0.85 U	0.89 U	0.89 U
<b>Nitrogen</b>															
Ammonia as Nitrogen	mg/kg	NE	NE	<b>2.3</b>	<b>5.5</b>	<b>3.2 J</b>	<b>1.6 J</b>	<b>1.6</b>	1.1 U	1.0 U	0.95 U	1.0 U	1.1 U	0.99 U	0.99 U
Nitrate as Nitrogen	mg/kg	13,000	190,000	<b>8.1 J</b>	12.0 U	7.4 U	7.4 U	6.9 U	7.4 U	7.7 U	6.9 U	8.0 U	7.4 U	8.2 U	8.2 U
Nitrite as Nitrogen	mg/kg	780	12,000	6.2 U	11.1 U	6.9 U	6.8 U	6.4 U	6.9 U	7.1 U	6.4 U	7.4 U	6.8 U	7.6 U	7.6 U
<b>Total Cyanide</b>															
Cyanide	mg/kg	2.3	15	<b>0.19</b>	<b>0.32 J</b>	0.15 U	0.17 U	0.14 U	0.15 U	0.16 U	0.16 U	0.16 U	0.15 U	0.16 U	0.16 U

**Notes:**

Screening Levels

- USEPA Residential and Industrial RSLs (HQ = 01) (USEPA, 2024)

- \* MRBCA Petroleum Storage Tank Guidance (MDNR, 2013)

**Bold - compound was detected**

Highlighted - concentration exceeds USEPA Residential RSL

Highlighted - concentration exceeds USEPA Industrial RSL

bgs - below ground surface

HQ - hazard quotient

J - estimated value

J+ - estimated value, potential high bias

JU - trace detection qualified as a nondetect during data review

MDNR - Missouri Department of Natural Resources

µg/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

MRBCA - Missouri Risk-Based Corrective Action

NE - not established

RSL - regional screening level

U - compound was not detected

UU - estimated at the reporting limit

UR - nondetect result, data rejected

USEPA - United States Environmental Protection Agency

**ATTACHMENT A - FIELD LOGBOOK**

---

2 4/8/24

170011

E. Brown

Monday April 7, 2024

Eric Brown

Soil/Sed/SW Sampling

Sunny, 45°-70°, wind 2 mph E

0650 Arrive at office. Finish loading truck

0710 Depart office.

0720 Buy Ice.

0810 Arrive on Site. Meet Garret from Genesis.

0820 Discuss plans for field work

0830 Fill safety forms/safety meeting

0845 Contact Water Treatment employee for gate access.

0850 Drop off 2 drums.

0920 Arrive at SS03. Set up for sampling.

0940 Collect SS03/SS-1 from 0-2' ft bgs0950 Collect SS03/SS-2 from 2-4 ft bgs

1025 Arrive at SS02. Begin sampling

1035 Shallow refusal. Offset ~5 ft NE.

1045 Shallow refusal. Offset ~25 ft W.

1055 Shallow refusal. Unable to collect 2-4 ft bgs sample.

1100 Collect SS02/SS-1 from 0-2 ft bgs.2x DUP-01

1130 Arrive at SS-01. Area is a depression /

4/8/24

170011

E. Brown 3

low-lying area with standing water

1150 Collect ~~SS02~~ SS01/SS-1 from 0-1 ft bgs. Unable to collect SS-2 due to rocky subsurface / shallow refusal.

1215 Arrive at SS05. Break for lunch.

1230 Begin digging SS05.

1240 Collect SS05/SS-1 from 0-2 ft bgs1250 Collect SS05/SS-2 from 2-4 ft bgs

1325 Set up at SS04. Begin digging.

1400 Collect SS04/SS-1, SS04/SS-1MSand SS04/SS-1MSD from 0-2 ft bgs.1430 Collect SS04/SS-2 from 2-4 ft bgs.~~1430~~ EB 4/8/24

1445 Begin digging at SS08.

1500 Collect SS08/SS-1 from 0-2 ft bgs.1510 Collect SS08/SS-2 from 2-3 ft. bgs. Refusal at ~3 ft bgs.

1520 Begin digging at SS07

1530 Collect SS07/SS-1 from 0-2 ft bgs1540 Collect SS07/SS-2 from 2-4 ft bgs.

1600 Done for the day. Pack equipment

1620 Dump IDW decan water in drums.

1625 Fill COC.

1635 Drive to Pace.

1735 Relinquish sample coolers at Pace.

4-8-2024

Return to the Rain

4/9/2024

170011

E. Brown

April 9<sup>th</sup>, 2024 Tuesday

Eric Brown

Soil/Sed/SW sampling

Sunny, 47°-68°, wind Omph N

0710 Arrive at BMCD office. Pack and load coolers/sample bottles.

0750 Depart BMCD office.

0835 Arrive at Treatment Center.

0840 Genesis on Site. Discuss plan for day.

0850 Safety meeting.

0910 Arrive at SS06. Begin sampling.

0940 Collect SS06/SS-1 from 0-2 ft bgs.

0950 Collect SS06/SS-2 from 2-4 ft bgs.

1100 Collect Rinsate-24-04-09

1105 Insert Trip Blank <sup>EB 4-9-24</sup> ~~IDW~~ TB-24-04-09/1

1130 Finished soil sampling. Set up to begin sediment/surface water sampling.

1150 Collect SD10/SD-1 from 0 to 0.5 ft bgs.

1200 Collect SW10/SW-1

1220 OFF Site for Lunch/Ice.

1300 Return to Site.

1330 Collect SD09/SD-1 from 0 to 0.5 ft. bgs

1340 Collect SW09/SW-1

1410 Collect <sup>EB 4-9-24</sup> ~~SW08~~ SD08/SD-1 from 0 to 0.5 ft.

1420 Collect SW08/SW-1

1450 Empty IDW water in drum.

1500 OFF site

4/9/24

170011

E. Brown. 5

1550 Arrive at Pace. Fill COC.

1630 Relinquished samples at Pace

1720 Return to BMCD office. Pick up remaining coolers.

*Eric Brown*  
4-9-2024

6/4/10/24

170011

E. Brown

Wednesday April 10, 2024

Eric Brown

Sed/SW Sampling

46-66°, Partly Cloudy, Wind 3mph NE

0700 Drive to Site.

0730 Stop for ice and DI water

0800 Arrive on Site. Meet Garrett  
and discuss plans for the day.

0805 Safety Meeting

0810 Set up at SW07/SD07

~~0820~~ Collect SW07/SW-1~~0825~~ Collect SW07/SW-1MS~~0830~~ Collect SW07/SW-1MSD

0850 Collect SD07/SD-1

~~0855~~ Collect SD07/SD-1MS~~0900~~ Collect SD07/SD-1MSD

} time: 0820

} time: 0850

0955 Finished with SW07/SD07. Move to next.

1010 Collect SD06/SD-1

1020 Collect SW06/SW-1

1030 Collect Rinsate-24-04-10

1045 Move to next location

1115 Collect SW05/SW-1

1130 Collect ~~SW~~SD05/SD-1

1150 Off Site for lunch/ice.

1240 Return from lunch. On Site

Set up to collect SW04/SD04.

X X X X

4/10/24

170011

E. Brown

1300 Collect ~~SW05/SW-1~~ SW04/SW-1  
~~EB 4-10-24~~1310 Collect ~~SD05~~ SW04/SW SD04/SD-1

1330 Move to next location.

1350 Collect SW03/SW-1 and DUP-02

1400 Collect SD03/SD-1 and DUP-03

directly  
south of  
berm

1445 Finished SD03/SW03.

1500 Attempt to collect sample >2 ft bgs at  
SS01 location.1515 Multiple locations within the depression  
met refusal at ~1 to 1.5 ft bgs. The  
subsurface appears to be comprised of  
large limestone rocks and debris. Various  
metal trash and other debris is visible.

1520 Off Site. Drive to Pace.

1600 Arrive at Pace. Fill COCs.

1630 Relinquish samples at Pace.

Eric Brown  
4-10-2024

Rite in the Rain



8 4/11/2024

170011

E. Brown

Thursday April 11<sup>th</sup>, 2024

Eric Brown

SW/Sed/Soil Sampling

Sunny, 41°-62°, wind 13 mph NW

0745 Arrive on Site.

0750 Garry from Genesis on Site. Discuss plan for the day.

0755 Safety meeting

0800 Set up for creek sampling near SW02/SD02.

0810 Insect Trip Blocks into cooler.

TB-24-04-11/HCL and TB-24-04-11/TSP

0820 Collect SW02/SW-1 } directly north  
of berm

0830 Collect SD02/SD-1

0845 Set up to collect SW01/SD01

0910 Unable to collect SW01. Dry.

0915 Collect SD01/SD-1

0930 Return to Water Treatment Center to collect IDW sample.

0940 Collect IDW-01 for liquid IDW.

0950 Label and secure drum.

1000 Off Site.

1100 Arrive at Pace. Fill COCs.

1130 Relinquish sample coolers at Pace.

1145 Break for lunch.

1215 Return from lunch.

1245 Return to BMCD office.

4/11/2024

170011

E. Brown

1300 Unload Truck / Equipment

*Eric Brown*  
4-11-2024

## ATTACHMENT B - DRILLING LOGS

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# Drilling Log

Project Name <i>Todd Creek Phase II ESA</i>		Project Number <i>170011</i>		Boring Number <i>SS01</i>	
Ground Elevation <i>N/A</i>		Location <i>SS01</i>		Page <i>1 of 1</i>	
Air Monitoring Equipment <i>PID</i>				Total Footage <i>~1 ft</i>	
Drilling Type	Hole Size	Overburden Footage	Bedrock Footage	No. of Samples	No. of Core Boxes
<i>Hand Auger Shovel</i>	<i>N/A</i>	<i>~1 ft</i>	<i>N/A</i>	<i>1</i>	<i>N/A</i>
Drilling Company <i>N/A</i>			Driller(s) <i>N/A</i>		
Drilling Rig <i>N/A</i>			Type of Sampler <i>Shovel</i>		
Date <i>4/8/24</i>		To <i>4/8/24</i>		Field Observer(s) <i>Eric Brown, Garrett Thomas</i>	

Depth (feet)	Description	Class	Blow Count	Recov.	Run/Time	Sample Desig.	PID (ppm)			Remarks/ Water Levels
							BZ	BH	S	
1	<i>CL AY, brown, 10YR 3/4, trace plasticity, soft, damp</i>	<i>CL</i>				<del><i>SS02</i></del> <del><i>SS</i></del> <i>SS01</i> <del><i>SS-1</i></del>			<i>0</i>	
2	<i>Shallow Refusal @ ~1 ft bgs</i>									
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

BZ=Breathing Zone    BH=Bore Hole    S=Sample

051601 Form WCD-2-1



# Drilling Log

Project Name <b>Todd Creek Phase II</b>		Project Number <b>170011</b>		Boring Number <b>SS02</b>	
Ground Elevation <b>N/A</b>		Location <b>SS02</b>		Page <b>1 of 1</b>	
Air Monitoring Equipment <b>PID</b>				Total Footage <b>~2 ft</b>	
Drilling Type	Hole Size	Overburden Footage	Bedrock Footage	No. of Samples	No. of Core Boxes
<b>Hand Auger</b>	<b>3"</b>	<b>~2 ft</b>	<b>N/A</b>	<b>2</b>	<b>N/A</b>
Drilling Company <b>N/A</b>			Driller(s) <b>N/A</b>		
Drilling Rig <b>N/A</b>			Type of Sampler <b>Hand Auger</b>		
Date <b>4/8/24</b>		To <b>4/8/24</b>		Field Observer(s) <b>Eric Brown, Garrett Thomas</b>	

Depth (feet)	Description	Class	Blow Count	Recov.	Run/Time	Sample Desig.	PID (ppm)			Remarks/ Water Levels
							BZ	BH	S	
	<b>organics</b>									
	<b>CLAY, brown, 10YR 4/2, med plastic, medium</b>	<b>CL</b>			<b>1025</b>	<b>SS02/SS-1</b>				<b>0</b>
<b>1</b>	<b>SILT with v. fine sand, 10YR 3/5, loose</b>	<b>SM</b>				<b>1100</b>				<b>0</b>
<b>2</b>						<b>8</b>				<b>0</b>
<b>2</b>	<b>Refusal @ ~2 ft bgs offset about 5 ft NE. Refusal at ~1.5 ft bgs.</b>					<b>DUP-01</b>				
<b>3</b>										
<b>4</b>	<b>offset ~25 ft west. Refusal at ~1.0 ft bgs.</b>									
<b>5</b>										
<b>6</b>										
<b>7</b>										
<b>8</b>										
<b>9</b>										
<b>10</b>										
<b>11</b>										
<b>12</b>										
<b>13</b>										
<b>14</b>										

BZ=Breathing Zone    BH=Bore Hole    S=Sample

051601 Form WCD-2-1

# Drilling Log

Project Name <i>Todd Creek Phase II</i>		Project Number <i>170011</i>		Boring Number <i>SS03</i>	
Ground Elevation <i>N/A</i>		Location <i>SS03</i>		Page <i>1 of 1</i>	
Air Monitoring Equipment <i>PID</i>				Total Footage <i>~4 ft</i>	
Drilling Type	Hole Size	Overburden Footage	Bedrock Footage	No. of Samples	No. of Core Boxes
<i>Hand Auger</i>	<i>3"</i>	<i>~4ft N/A</i>	<i>N/A</i>	<i>2</i>	<i>N/A</i>
Drilling Company <i>N/A</i>			Driller(s) <i>N/A</i>		
Drilling Rig <i>N/A</i>			Type of Sampler <i>Hand Auger</i>		
Date <i>4/8/24</i>		To <i>4/8/24</i>		Field Observer(s) <i>Eric Brown</i>	

Depth (feet)	Description	Class	Blow Count	Recov.	Run/Time	Sample Desig.	PID (ppm)			Remarks/ Water Levels
							BZ	BH	S	
1	<i>CLAY with Silt, brown 10YR 6/4, <del>trace</del> plastic, medium, dry</i>	<i>CL</i>	<i>N/A</i>		<i>0925</i>	<i>SS03/</i>			<i>0</i>	
2						<i>-SS1</i>			<i>0</i>	
3	<i>CLAY with Silt, brown. 10YR 6/4, trace plastic, medium, dry</i>					<i>0940</i>			<i>0</i>	
4						<i>SS03/</i>			<i>11.2</i>	
5	<i>End of Boring @ 4' Lgs</i>									
6										
7										
8										
9										
10										
11										
12										
13										
14										

# Drilling Log

Project Name <b>Todd Creek Phase II</b>		Project Number <b>170011</b>		Boring Number <b>SS04</b>	
Ground Elevation <b>N/A</b>		Location <b>SS04</b>		Page <b>1 of 1</b>	
Air Monitoring Equipment <b>PID</b>				Total Footage <b>~4 ft</b>	
Drilling Type	Hole Size	Overburden Footage	Bedrock Footage	No. of Samples	No. of Core Boxes
<b>Hand Auger</b>	<b>3"</b>	<b>~4 ft</b>	<b>N/A</b>	<b>2</b>	<b>N/A</b>
Drilling Company <b>N/A</b>			Driller(s) <b>N/A</b>		
Drilling Rig <b>N/A</b>			Type of Sampler <b>Hand Auger</b>		
Date <b>4/8/24</b>		To <b>4/8/24</b>		Field Observer(s) <b>Eric Brown, Garrett Thomas</b>	

Depth (feet)	Description	Class	Blow Count	Recov.	Run/Time	Sample Desig.	PID (ppm)			Remarks/ Water Levels
							BZ	BH	S	
1	CLAY with Silt, dark brown 10YR 3/3 damp, soft, trace plasticity, becomes CLAY trace Silt, highly plastic	CL				SS04/SS-1 1400			○	ms/msd
2		CH				SS04/SS-2 1430			○	
3									○	
4	End of boring @ 4 ft bgs								○	
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

BZ=Breathing Zone    BH=Bore Hole    S=Sample

# Drilling Log

Project Name <b>Todd Creek Phase II</b>		Project Number <b>170011</b>		Boring Number <b>SS05</b>	
Ground Elevation <b>N/A</b>		Location <b>SS05</b>		Page <b>1 of 1</b>	
Air Monitoring Equipment <b>PID</b>				Total Footage <b>~4 ft</b>	
Drilling Type	Hole Size	Overburden Footage	Bedrock Footage	No. of Samples	No. of Core Boxes
<b>Hand Auger</b>	<b>3"</b>	<b>~4 ft</b>	<b>N/A</b>	<b>2</b>	<b>N/A</b>
Drilling Company <b>N/A</b>			Driller(s) <b>N/A</b>		
Drilling Rig <b>N/A</b>			Type of Sampler <b>Hand Auger</b>		
Date <b>4/8/24</b>		To <b>4/8/24</b>		Field Observer(s) <b>Eric Brown, Garrett Thomas</b>	

Depth (feet)	Description	Class	Blow Count	Recov.	Run/Time	Sample Desig.	PID (ppm)			Remarks/ Water Levels
							BZ	BH	S	
1	CLAY some silt, dark brown, 10YR 3/4, damp, medium plastic, soft  becomes stiff	CL				SS05/ SS-1			0	
2						<del>1235</del> 1240			0	
3	becomes highly plastic					SS05/ SS-2			0	
4	End of boring @ 4 ft bgs.									
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

BZ=Breathing Zone    BH=Bore Hole    S=Sample

051601 Form WCD-2-1

# Drilling Log

Project Name <b>Todd Creek Phase II ESA</b>		Project Number <b>170011</b>		Boring Number <b>SS06</b>	
Ground Elevation <b>N/A</b>		Location <b>SS06</b>		Page <b>1 of 1</b>	
Air Monitoring Equipment <b>PID</b>				Total Footage <b>~4 ft</b>	
Drilling Type	Hole Size	Overburden Footage	Bedrock Footage	No. of Samples	No. of Core Boxes
<b>Hard Auger</b>	<b>3"</b>	<b>~4 ft</b>	<b>N/A</b>	<b>2</b>	<b>N/A</b>
Drilling Company <b>N/A</b>			Driller(s) <b>N/A</b>		
Drilling Rig <b>N/A</b>			Type of Sampler <b>Hard Auger</b>		
Date <b>4/9/24</b>		To <b>4/9/24</b>		Field Observer(s) <b>Eric Brown, Garrett Thomas</b>	

Depth (feet)	Description	Class	Blow Count	Recov.	Run/Time	Sample Desig.	PID (ppm)			Remarks/ Water Levels
							BZ	BH	S	
0	highly organic soil, black, 10YR 2/1, loose	PT				SS06/ SS-1				0
1	CLAY, yellow-brown, 10YR 5/6, moist, medium, highly plastic					<del>0960</del> 0940				0
2	becomes 10YR 4/4, damp, medium plastic, stiff	CH				SS06/ SS-2				0
3						0960				0
4	End of boring at 4 ft bgs.									
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

BZ=Breathing Zone    BH=Bore Hole    S=Sample

051601 Form WCD-2-1





# Drilling Log

Project Name <i>Todd Creek Phase II</i>		Project Number <i>170011</i>		Boring Number <i>SS07</i>						
Ground Elevation <i>N/A</i>		Location <i>SS07</i>		Page <i>1 of 1</i>						
Air Monitoring Equipment <i>PFD</i>				Total Footage <i>~4 ft</i>						
Drilling Type	Hole Size	Overburden Footage	Bedrock Footage	No. of Samples	No. of Core Boxes					
<i>Hand Auger</i>	<i>3"</i>	<i>~4 ft.</i>	<i>N/A</i>	<i>2</i>	<i>N/A</i>					
Drilling Company <i>N/A</i>			Driller(s) <i>N/A</i>							
Drilling Rig <i>N/A</i>			Type of Sampler <i>Hand Auger</i>							
Date <i>4/8/24</i>		To <i>4/8/24</i>		Field Observer(s) <i>Eric Brown, Garrett Thomas</i>						
Depth (feet)	Description	Class	Blow Count	Recov.	Run/Time	Sample Desig.	PID (ppm)			Remarks/ Water Levels
							BZ	BH	S	
1	<i>CLAY trace silt, pale brown 10YR 6/3, damp, soft, medium plasticity</i>	<i>CL</i>				<i>SS07/</i>			<i>0</i>	
2						<i>SS-1</i>			<i>0</i>	
3	<i>becomes brown 10YR 4/4, medium</i>	<i>CL</i>				<i>1530</i>			<i>0</i>	
4						<i>SS07/</i>			<i>0</i>	
5	<i>becomes stiff</i>	<i>CL</i>				<i>SS-2</i>			<i>0</i>	
6						<i>1540</i>			<i>0</i>	
7	<i>End of boring at ~4 ft bgs.</i>									
8										
9										
10										
11										
12										
13										
14										

BZ=Breathing Zone    BH=Bore Hole    S=Sample

051601 Form WCD-2-1

# Drilling Log

Project Name <i>Todd Creek Phase II</i>		Project Number <i>170011</i>		Boring Number <i>SS08</i>	
Ground Elevation <i>N/A</i>		Location <i>SS08</i>		Page <i>1 of 1</i>	
Air Monitoring Equipment <i>PID</i>				Total Footage <i>~3 ft</i>	
Drilling Type	Hole Size	Overburden Footage	Bedrock Footage	No. of Samples	No. of Core Boxes
<i>Hand Auger</i>	<i>3"</i>	<i>~3 ft</i>	<i>N/A</i>	<i>2</i>	<i>N/A</i>
Drilling Company <i>N/A</i>			Driller(s) <i>N/A</i>		
Drilling Rig <i>N/A</i>			Type of Sampler <i>Hand Auger</i>		
Date <i>4/8/24</i>		To <i>4/8/24</i>		Field Observer(s) <i>Eric Brown, Garrett Thomas</i>	

Depth (feet)	Description	Class	Blow Count	Recov.	Run/Time	Sample Desig.	PID (ppm)			Remarks/ Water Levels
							BZ	BH	S	
1	<i>CLAY with Silt, dark black 10YR 2/1, damp, soft, trace plasticity</i>	CL				<i>SS08/SS-1</i>			0	
	<i>CLAY trace Silt, light brown, 10YR 4/6, stiff, medium plasticity, damp</i>					<i>1500</i>			0	
2						<i>SS08/SS-2</i>			0	
3	<i>End of boring at ~3 ft bgs Refusal</i>									
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

BZ=Breathing Zone    BH=Bore Hole    S=Sample

051601 Form WCD-2-1



**ATTACHMENT C - LABORATORY ANALYTICAL REPORTS  
(SOIL, SURFACE WATER, AND SEDIMENT)**

---



May 20, 2024

Justin Carter  
Burns & McDonnell  
9400 Ward Parkway  
Kansas City, MO 64114

RE: Project: KC Water Treatment Soils-Revised Report  
Pace Project No.: 60450516

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on April 08, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Kansas City

REVISION\_2 to report 9056 NO2/NO3 reanalysis data for sample 60450516003 & 60450516002 \*see narrative

REVISION\_3 to correct 9056 NO2/NO3 data with the correct dilution factor referenced for sample 60450516002

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller  
alice.spiller@pacelabs.com  
(913)599-5665  
PM Lab Management

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL  
Jacquelin Lee, Burns & McDonnell



## REPORT OF LABORATORY ANALYSIS

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### CERTIFICATIONS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

#### Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219  
 Arkansas Inorganic Drinking Water Certification  
 Arkansas Certification #: 88-00679  
 Illinois Certification #: 2000302023-6  
 Colorado Division of Oil and Public Safety  
 Iowa Certification #: 118  
 Kansas Field Laboratory Certification #: E-92587

Kansas/NELAP Certification #: E-10116  
 Louisiana Certification #: 03055  
 Missouri Inorganic Drinking Water Certification  
 Nevada Certification #: KS000212024-1  
 Oklahoma Certification #: 2023-073  
 Texas Certification #: T104704407-23-17  
 Utah Certification #: KS000212022-13

#### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122  
 Alabama Certification #: 40660  
 Alaska Certification 17-026  
 Arizona Certification #: AZ0612  
 Arkansas Certification #: 88-0469  
 California Certification #: 2932  
 Canada Certification #: 1461.01  
 Colorado Certification #: TN00003  
 Connecticut Certification #: PH-0197  
 DOD Certification: #1461.01  
 EPA# TN00003  
 Florida Certification #: E87487  
 Georgia DW Certification #: 923  
 Georgia Certification: NELAP  
 Idaho Certification #: TN00003  
 Illinois Certification #: 200008  
 Indiana Certification #: C-TN-01  
 Iowa Certification #: 364  
 Kansas Certification #: E-10277  
 Kentucky UST Certification #: 16  
 Kentucky Certification #: 90010  
 Louisiana Certification #: AI30792  
 Louisiana DW Certification #: LA180010  
 Maine Certification #: TN0002  
 Maryland Certification #: 324  
 Massachusetts Certification #: M-TN003  
 Michigan Certification #: 9958  
 Minnesota Certification #: 047-999-395  
 Mississippi Certification #: TN00003  
 Missouri Certification #: 340  
 Montana Certification #: CERT0086  
 Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34  
 New Hampshire Certification #: 2975  
 New Jersey Certification #: TN002  
 New Mexico DW Certification  
 New York Certification #: 11742  
 North Carolina Aquatic Toxicity Certification #: 41  
 North Carolina Drinking Water Certification #: 21704  
 North Carolina Environmental Certificate #: 375  
 North Dakota Certification #: R-140  
 Ohio VAP Certification #: CL0069  
 Oklahoma Certification #: 9915  
 Oregon Certification #: TN200002  
 Pennsylvania Certification #: 68-02979  
 Rhode Island Certification #: LAO00356  
 South Carolina Certification #: 84004  
 South Dakota Certification  
 Tennessee DW/Chem/Micro Certification #: 2006  
 Texas Mold Certification #: LAB0152  
 Texas Certification #: T 104704245-17-14  
 USDA Soil Permit #: P330-15-00234  
 Utah Certification #: TN00003  
 Virginia Certification #: VT2006  
 Vermont Dept. of Health: ID# VT-2006  
 Virginia Certification #: 460132  
 Washington Certification #: C847  
 West Virginia Certification #: 233  
 Wisconsin Certification #: 998093910  
 Wyoming UST Certification #: via A2LA 2926.01  
 A2LA-ISO 17025 Certification #: 1461.01  
 A2LA-ISO 17025 Certification #: 1461.02  
 AIHA-LAP/LLC EMLAP Certification #:100789

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60450516001	SS03/SS-1	Solid	04/08/24 09:40	04/08/24 17:34
60450516002	SS03/SS-2	Solid	04/08/24 09:50	04/08/24 17:34
60450516003	SS02/SS-1	Solid	04/08/24 11:00	04/08/24 17:34
60450516004	DUP-01	Solid	04/08/24 00:00	04/08/24 17:34
60450516005	SS01/SS-1	Solid	04/08/24 11:50	04/08/24 17:34
60450516006	SS05/SS-1	Solid	04/08/24 12:40	04/08/24 17:34
60450516007	SS05/SS-2	Solid	04/08/24 12:50	04/08/24 17:34
60450516008	SS04/SS-1	Solid	04/08/24 14:00	04/08/24 17:34
60450516009	SS04/SS-2	Solid	04/08/24 14:30	04/08/24 17:34
60450516010	SS08/SS-1	Solid	04/08/24 15:00	04/08/24 17:34
60450516011	SS08/SS-2	Solid	04/08/24 15:10	04/08/24 17:34
60450516012	SS07/SS-1	Solid	04/08/24 15:30	04/08/24 17:34
60450516013	SS07/SS-2	Solid	04/08/24 15:40	04/08/24 17:34

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60450516001	SS03/SS-1	EPA 8081B	MFM	23	PAN
		EPA 8151A	LJD	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	LD	23	PAN
		EPA 7471B	NDL	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	KDW	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K
		60450516002	SS03/SS-2	EPA 8081B	MFM
EPA 8151A	JMB			11	PAN
EPA 8082	JDS			8	PASI-K
EPA 6020B	LD			23	PAN
EPA 7471B	NDL			1	PAN
EPA 8270	WFG			73	PASI-K
EPA 8270	WDC			5	PASI-K
EPA 8260C	RAD			68	PASI-K
EPA 8260	RAD			4	PASI-K
ASTM D2974	DWC			1	PASI-K
SM 2540G	KDW			1	PAN
EPA 350.1	RKA			1	PASI-K
SM 4500-CN-E	ECF			1	PASI-K
EPA 9056	PL			2	PASI-K
60450516003	SS02/SS-1			EPA 8081B	MFM
		EPA 8151A	JMB	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	LD	23	PAN
		EPA 7471B	NDL	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K

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### SAMPLE ANALYTE COUNT

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60450516004	DUP-01	ASTM D2974	DWC	1	PASI-K
		SM 2540G	KDW	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K
		EPA 8081B	MFM	23	PAN
		EPA 8151A	JMB	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	LD	23	PAN
		EPA 7471B	NDL	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
		60450516005	SS01/SS-1	ASTM D2974	DWC
SM 2540G	KDW			1	PAN
EPA 350.1	RKA			1	PASI-K
SM 4500-CN-E	ECF			1	PASI-K
EPA 9056	PL			2	PASI-K
EPA 8081B	MFM			23	PAN
EPA 8151A	JMB			11	PAN
EPA 8082	JDS			8	PASI-K
EPA 6020B	LD			23	PAN
EPA 7471B	NDL			1	PAN
EPA 8270	WFG			73	PASI-K
EPA 8270	WDC			5	PASI-K
EPA 8260C	RAD			68	PASI-K
EPA 8260	RAD			4	PASI-K
60450516006	SS05/SS-1			ASTM D2974	DWC
		SM 2540G	KDW	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K
		EPA 8081B	MFM	23	PAN
		EPA 8151A	JMB	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	LD	23	PAN

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**SAMPLE ANALYTE COUNT**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7471B	NDL	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K
60450516007	SS05/SS-2	EPA 8081B	MFM	23	PAN
		EPA 8151A	JMB	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	LD	23	PAN
		EPA 7471B	LAS	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K
60450516008	SS04/SS-1	EPA 8081B	MFM	23	PAN
		EPA 8151A	JMB	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD, LD	23	PAN
		EPA 7471B	LAS	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K

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### SAMPLE ANALYTE COUNT

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60450516009	SS04/SS-2	EPA 9056	PL	2	PASI-K
		EPA 8081B	MFM	23	PAN
		EPA 8151A	JMB	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD, LD	23	PAN
		EPA 7471B	LAS	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
60450516010	SS08/SS-1	EPA 9056	PL	2	PASI-K
		EPA 8081B	MFM	23	PAN
		EPA 8151A	JMB	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN
		EPA 7471B	LAS	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
60450516011	SS08/SS-2	EPA 9056	PL	2	PASI-K
		EPA 8081B	MFM	23	PAN
		EPA 8151A	JMB	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD, LD	23	PAN
		EPA 7471B	LAS	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K

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**SAMPLE ANALYTE COUNT**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60450516012	SS07/SS-1	EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K
		EPA 8081B	MFM	23	PAN
		EPA 8151A	JMB	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD, LD	23	PAN
		EPA 7471B	LAS	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
		60450516013	SS07/SS-2	ASTM D2974	DWC
SM 2540G	CMB			1	PAN
EPA 350.1	RKA			1	PASI-K
SM 4500-CN-E	ECF			1	PASI-K
EPA 9056	PL			2	PASI-K
EPA 8081B	MFM			23	PAN
EPA 8151A	JMB			11	PAN
EPA 8082	JDS			8	PASI-K
EPA 6020B	JPD, LD			23	PAN
EPA 7471B	LAS			1	PAN
EPA 8270	WFG			73	PASI-K
EPA 8270	WDC			5	PASI-K
EPA 8260C	RAD			68	PASI-K
EPA 8260	RAD			4	PASI-K
ASTM D2974	DWC			1	PASI-K
SM 2540G	CMB			1	PAN
EPA 350.1	RKA	1	PASI-K		
SM 4500-CN-E	ECF	1	PASI-K		
EPA 9056	PL	2	PASI-K		

PAN = Pace National - Mt. Juliet

PASI-K = Pace Analytical Services - Kansas City

**REPORT OF LABORATORY ANALYSIS**

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Date:** May 20, 2024

Amended report to reflect updated 9056 NO<sub>2</sub>/NO<sub>3</sub> data for sample 60450516003 & 60450516002.  
On second review, it was found that the original sample was erroneously spiked as an matrix spike sample.  
Sample was repped and reanalyzed, new data provided on this revised report.

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

---

**Method:** EPA 8081B

**Description:** Pesticides (GC) 8081B

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

**General Information:**

13 samples were analyzed for EPA 8081B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 2268118

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: R4058815-5)
- Endrin

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Method:** EPA 8151A

**Description:** Chlorinated Herb. (GC) 8151A

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

**General Information:**

13 samples were analyzed for EPA 8151A by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 2265407

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450516008

R1: RPD value was outside control limits.

- MSD (Lab ID: R4058398-4)
- MCPA

**Additional Comments:**

Analyte Comments:

QC Batch: 2265407

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MSD (Lab ID: R4058398-4)
- MCPA

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Method:** EPA 8082

**Description:** 8082 GCS PCB SW

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

**General Information:**

13 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Method:** EPA 6020B

**Description:** Metals (ICPMS) 6020B

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

**General Information:**

13 samples were analyzed for EPA 6020B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 2265034

B: Analyte was detected in the associated method blank.

- R4060688-1 (Lab ID: R4060688-1)
- Antimony

QC Batch: 2266071

B: Analyte was detected in the associated method blank.

- R4058979-1 (Lab ID: R4058979-1)
- Antimony

QC Batch: 2267954

B: Analyte was detected in the associated method blank.

- R4060105-1 (Lab ID: R4060105-1)
- Antimony

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 2265034

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): L1724657-04

R1: RPD value was outside control limits.

- MSD (Lab ID: R4060688-6)

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Method:** EPA 6020B

**Description:** Metals (ICPMS) 6020B

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

QC Batch: 2265034

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): L1724657-04

R1: RPD value was outside control limits.

- Aluminum
- Barium
- Iron
- Magnesium
- Manganese
- Potassium

QC Batch: 2266071

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450516008

R1: RPD value was outside control limits.

- MSD (Lab ID: R4058979-6)
- Manganese

QC Batch: 2267954

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): L1725631-16

R1: RPD value was outside control limits.

- MSD (Lab ID: R4059987-7)
- Sodium

### Additional Comments:

Analyte Comments:

QC Batch: 2265034

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: R4060688-5)
  - Beryllium
- MSD (Lab ID: R4060688-6)
  - Beryllium

QC Batch: 2266071

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: R4058979-5)
  - Beryllium
- MSD (Lab ID: R4058979-6)
  - Beryllium

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Method:** EPA 7471B

**Description:** Mercury 7471B

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

**General Information:**

13 samples were analyzed for EPA 7471B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Method:** EPA 8270

**Description:** 8270 MSSV Semivolatiles

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

### General Information:

13 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

QC Batch: 889927

P3: Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.

- SS01/SS-1 (Lab ID: 60450516005)

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 889927

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450516008

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 3522270)
  - 2-Methylphenol(o-Cresol)
  - 3&4-Methylphenol(m&p Cresol)
  - 3,3'-Dichlorobenzidine

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Method:** EPA 8270

**Description:** 8270 MSSV Semivolatiles

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

QC Batch: 889927

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450516008

R1: RPD value was outside control limits.

- MSD (Lab ID: 3522270)
  - 2,4-Dimethylphenol
  - 2-Methylphenol(o-Cresol)
  - 3&4-Methylphenol(m&p Cresol)

### Additional Comments:

Analyte Comments:

QC Batch: 889927

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- SS01/SS-1 (Lab ID: 60450516005)
  - Nitrobenzene-d5 (S)
- SS08/SS-2 (Lab ID: 60450516011)
  - Nitrobenzene-d5 (S)

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Method:** EPA 8270

**Description:** 8270 MSSV DRO/ORO

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

**General Information:**

13 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

Analyte Comments:

QC Batch: 890176

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- SS01/SS-1 (Lab ID: 60450516005)
- TPH-ORO

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Method:** EPA 8260C

**Description:** 8260C MSV 5035A Low Level

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

**General Information:**

13 samples were analyzed for EPA 8260C by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 5035A/5030B with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

---

**Method:** EPA 8260

**Description:** 8260 MSV GRO and Oxygenates

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

**General Information:**

13 samples were analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 5035 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

QC Batch: 890601

IO: The internal standard response was outside the laboratory acceptance limits confirmed by reanalysis. The results reported are from the most QC compliant analysis.

- DUP-01 (Lab ID: 60450516004)
- 4-Bromofluorobenzene (S)

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890682

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450516008

R1: RPD value was outside control limits.

- MSD (Lab ID: 3525108)
- TPH-GRO

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

---

**Method:** EPA 8260

**Description:** 8260 MSV GRO and Oxygenates

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Method:** SM 2540G

**Description:** Total Solids 2540 G-2011

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

**General Information:**

13 samples were analyzed for SM 2540G by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

---

**Method:** EPA 350.1

**Description:** 350.1 Ammonia

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

### General Information:

13 samples were analyzed for EPA 350.1 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 890503

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 3524508)
- Nitrogen, Ammonia

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890503

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450516008

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 3524509)
  - Nitrogen, Ammonia
- MSD (Lab ID: 3524511)
  - Nitrogen, Ammonia

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Method:** SM 4500-CN-E

**Description:** 4500CNE Cyanide, Total

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

**General Information:**

13 samples were analyzed for SM 4500-CN-E by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with SM 4500-CN-E with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Method:** EPA 9056

**Description:** 9056 IC Anions

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

### General Information:

13 samples were analyzed for EPA 9056 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H2: Extraction or preparation conducted outside EPA method holding time.

- SS02/SS-1 (Lab ID: 60450516003)
- SS03/SS-2 (Lab ID: 60450516002)

### Sample Preparation:

The samples were prepared in accordance with EPA 9056 with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 889833

B: Analyte was detected in the associated method blank.

- BLANK for HBN 889833 [WETA/103 (Lab ID: 3521996)]
  - Nitrate as N
  - Nitrite as N

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 889833

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450516008

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3521998)
  - Nitrate as N
  - Nitrite as N
- MSD (Lab ID: 3521999)
  - Nitrate as N
  - Nitrite as N

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

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## PROJECT NARRATIVE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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**Method:** EPA 9056

**Description:** 9056 IC Anions

**Client:** BURNS & MCDONNELL

**Date:** May 20, 2024

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS03/SS-1 Lab ID: 60450516001 Collected: 04/08/24 09:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00444	mg/kg	0.0236	0.00444	1	04/16/24 18:02	04/17/24 02:35	309-00-2	
alpha-BHC	<0.00435	mg/kg	0.0236	0.00435	1	04/16/24 18:02	04/17/24 02:35	319-84-6	
beta-BHC	<0.00448	mg/kg	0.0236	0.00448	1	04/16/24 18:02	04/17/24 02:35	319-85-7	
delta-BHC	<0.00409	mg/kg	0.0236	0.00409	1	04/16/24 18:02	04/17/24 02:35	319-86-8	
gamma-BHC (Lindane)	<0.00407	mg/kg	0.0236	0.00407	1	04/16/24 18:02	04/17/24 02:35	58-89-9	
Chlordane (Technical)	<0.122	mg/kg	0.355	0.122	1	04/16/24 18:02	04/17/24 02:35	57-74-9	
4,4'-DDD	<0.00437	mg/kg	0.0236	0.00437	1	04/16/24 18:02	04/17/24 02:35	72-54-8	
4,4'-DDE	<0.00433	mg/kg	0.0236	0.00433	1	04/16/24 18:02	04/17/24 02:35	72-55-9	
4,4'-DDT	<0.00741	mg/kg	0.0236	0.00741	1	04/16/24 18:02	04/17/24 02:35	50-29-3	
Dieldrin	<0.00407	mg/kg	0.0236	0.00407	1	04/16/24 18:02	04/17/24 02:35	60-57-1	
Endosulfan I	<0.00429	mg/kg	0.0236	0.00429	1	04/16/24 18:02	04/17/24 02:35	959-98-8	
Endosulfan II	<0.00396	mg/kg	0.0236	0.00396	1	04/16/24 18:02	04/17/24 02:35	33213-65-9	
Endosulfan sulfate	<0.00430	mg/kg	0.0236	0.00430	1	04/16/24 18:02	04/17/24 02:35	1031-07-8	
Endrin	<0.00414	mg/kg	0.0236	0.00414	1	04/16/24 18:02	04/17/24 02:35	72-20-8	LO
Endrin aldehyde	<0.00401	mg/kg	0.0236	0.00401	1	04/16/24 18:02	04/17/24 02:35	7421-93-4	
Endrin ketone	<0.00840	mg/kg	0.0236	0.00840	1	04/16/24 18:02	04/17/24 02:35	53494-70-5	
Hexachlorobenzene	<0.00409	mg/kg	0.0236	0.00409	1	04/16/24 18:02	04/17/24 02:35	118-74-1	
Heptachlor	<0.00506	mg/kg	0.0236	0.00506	1	04/16/24 18:02	04/17/24 02:35	76-44-8	
Heptachlor epoxide	<0.00401	mg/kg	0.0236	0.00401	1	04/16/24 18:02	04/17/24 02:35	1024-57-3	
Methoxychlor	<0.00572	mg/kg	0.0236	0.00572	1	04/16/24 18:02	04/17/24 02:35	72-43-5	
Toxaphene	<0.147	mg/kg	0.473	0.147	1	04/16/24 18:02	04/17/24 02:35	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	46.7	%	10.0-135		1	04/16/24 18:02	04/17/24 02:35	2051-24-3	
Tetrachloro-m-xylene (S)	60.7	%	10.0-139		1	04/16/24 18:02	04/17/24 02:35	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00830	mg/kg	0.0827	0.00830	1	04/16/24 07:29	04/18/24 22:52	94-75-7	
Dalapon	<0.0134	mg/kg	0.0827	0.0134	1	04/16/24 07:29	04/18/24 22:52	127-20-8	
2,4-DB	<0.0351	mg/kg	0.0827	0.0351	1	04/16/24 07:29	04/18/24 22:52	94-82-6	
Dicamba	<0.0186	mg/kg	0.0827	0.0186	1	04/16/24 07:29	04/18/24 22:52	1918-00-9	
Dichlorprop	<0.0290	mg/kg	0.0827	0.0290	1	04/16/24 07:29	04/18/24 22:52	120-36-5	
Dinoseb	<0.00824	mg/kg	0.0827	0.00824	1	04/16/24 07:29	04/18/24 22:52	88-85-7	
MCPA	<0.524	mg/kg	7.68	0.524	1	04/16/24 07:29	04/18/24 22:52	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.434	mg/kg	7.68	0.434	1	04/16/24 07:29	04/18/24 22:52	93-65-2	
2,4,5-T	<0.0101	mg/kg	0.0827	0.0101	1	04/16/24 07:29	04/18/24 22:52	93-76-5	
2,4,5-TP (Silvex)	<0.0126	mg/kg	0.0827	0.0126	1	04/16/24 07:29	04/18/24 22:52	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	68.9	%	22.0-132		1	04/16/24 07:29	04/18/24 22:52	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.4	ug/kg	38.6	10.4	1	04/11/24 15:53	04/15/24 11:56	12674-11-2	
PCB-1221 (Aroclor 1221)	<13.0	ug/kg	38.6	13.0	1	04/11/24 15:53	04/15/24 11:56	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS03/SS-1 Lab ID: 60450516001 Collected: 04/08/24 09:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<13.0	ug/kg	38.6	13.0	1	04/11/24 15:53	04/15/24 11:56	11141-16-5	
PCB-1242 (Aroclor 1242)	<13.0	ug/kg	38.6	13.0	1	04/11/24 15:53	04/15/24 11:56	53469-21-9	
PCB-1248 (Aroclor 1248)	<13.0	ug/kg	38.6	13.0	1	04/11/24 15:53	04/15/24 11:56	12672-29-6	
PCB-1254 (Aroclor 1254)	<13.0	ug/kg	38.6	13.0	1	04/11/24 15:53	04/15/24 11:56	11097-69-1	
PCB-1260 (Aroclor 1260)	<13.0	ug/kg	38.6	13.0	1	04/11/24 15:53	04/15/24 11:56	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	91	%	20-120		1	04/11/24 15:53	04/15/24 11:56	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	21000	mg/kg	59.1	8.15	5	04/14/24 22:12	04/22/24 17:31	7429-90-5	
Antimony	<0.196	mg/kg	3.55	0.196	5	04/14/24 22:12	04/22/24 17:31	7440-36-0	
Arsenic	14.1	mg/kg	1.18	0.118	5	04/14/24 22:12	04/22/24 17:31	7440-38-2	
Barium	195	mg/kg	2.95	0.180	5	04/14/24 22:12	04/22/24 17:31	7440-39-3	
Beryllium	1.10J	mg/kg	2.95	0.163	5	04/14/24 22:12	04/22/24 17:31	7440-41-7	J
Cadmium	0.288J	mg/kg	1.18	0.101	5	04/14/24 22:12	04/22/24 17:31	7440-43-9	J
Calcium	10800	mg/kg	591	89.2	5	04/14/24 22:12	04/22/24 17:31	7440-70-2	
Chromium	31.8	mg/kg	5.91	0.350	5	04/14/24 22:12	04/22/24 17:31	7440-47-3	
Cobalt	17.5	mg/kg	1.18	0.0546	5	04/14/24 22:12	04/22/24 17:31	7440-48-4	
Copper	27.0	mg/kg	5.91	0.156	5	04/14/24 22:12	04/22/24 17:31	7440-50-8	
Iron	30200	mg/kg	59.1	10.6	5	04/14/24 22:12	04/22/24 17:31	7439-89-6	
Lead	16.5	mg/kg	2.36	0.117	5	04/14/24 22:12	04/22/24 17:31	7439-92-1	
Magnesium	6270	mg/kg	591	54.2	5	04/14/24 22:12	04/22/24 17:31	7439-95-4	
Manganese	536	mg/kg	2.95	0.317	5	04/14/24 22:12	04/22/24 17:31	7439-96-5	
Molybdenum	0.494J	mg/kg	2.95	0.119	5	04/14/24 22:12	04/22/24 17:31	7439-98-7	J
Nickel	40.3	mg/kg	2.95	0.233	5	04/14/24 22:12	04/22/24 17:31	7440-02-0	
Potassium	2810	mg/kg	591	80.4	5	04/14/24 22:12	04/22/24 17:31	7440-09-7	
Selenium	0.463J	mg/kg	2.95	0.213	5	04/14/24 22:12	04/22/24 17:31	7782-49-2	J
Silver	<0.102	mg/kg	0.591	0.102	5	04/14/24 22:12	04/22/24 17:31	7440-22-4	
Sodium	136J	mg/kg	591	90.4	5	04/14/24 22:12	04/22/24 17:31	7440-23-5	J
Thallium	0.243J	mg/kg	2.36	0.0768	5	04/14/24 22:12	04/22/24 17:31	7440-28-0	J
Vanadium	36.5	mg/kg	2.95	0.221	5	04/14/24 22:12	04/22/24 17:31	7440-62-2	
Zinc	96.9	mg/kg	29.5	0.875	5	04/14/24 22:12	04/22/24 17:31	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0213	mg/kg	0.0473	0.0213	1	04/11/24 16:52	04/12/24 09:15	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<83.2	ug/kg	387	83.2	1	04/10/24 14:25	04/12/24 11:47	83-32-9	
Acenaphthylene	<63.4	ug/kg	387	63.4	1	04/10/24 14:25	04/12/24 11:47	208-96-8	
Anthracene	<81.0	ug/kg	387	81.0	1	04/10/24 14:25	04/12/24 11:47	120-12-7	
Benzo(a)anthracene	<81.9	ug/kg	387	81.9	1	04/10/24 14:25	04/12/24 11:47	56-55-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS03/SS-1 Lab ID: 60450516001 Collected: 04/08/24 09:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<83.3	ug/kg	387	83.3	1	04/10/24 14:25	04/12/24 11:47	50-32-8	
Benzo(b)fluoranthene	<94.5	ug/kg	387	94.5	1	04/10/24 14:25	04/12/24 11:47	205-99-2	
Benzo(g,h,i)perylene	<67.3	ug/kg	387	67.3	1	04/10/24 14:25	04/12/24 11:47	191-24-2	
Benzo(k)fluoranthene	<83.3	ug/kg	387	83.3	1	04/10/24 14:25	04/12/24 11:47	207-08-9	
Benzoic Acid	<211	ug/kg	1960	211	1	04/10/24 14:25	04/12/24 11:47	65-85-0	
Benzyl alcohol	<71.1	ug/kg	775	71.1	1	04/10/24 14:25	04/12/24 11:47	100-51-6	
4-Bromophenylphenyl ether	<83.6	ug/kg	387	83.6	1	04/10/24 14:25	04/12/24 11:47	101-55-3	
Butylbenzylphthalate	<78.9	ug/kg	387	78.9	1	04/10/24 14:25	04/12/24 11:47	85-68-7	
Carbazole	<79.7	ug/kg	387	79.7	1	04/10/24 14:25	04/12/24 11:47	86-74-8	
4-Chloro-3-methylphenol	<81.2	ug/kg	775	81.2	1	04/10/24 14:25	04/12/24 11:47	59-50-7	
4-Chloroaniline	<60.7	ug/kg	775	60.7	1	04/10/24 14:25	04/12/24 11:47	106-47-8	
bis(2-Chloroethoxy)methane	<77.0	ug/kg	387	77.0	1	04/10/24 14:25	04/12/24 11:47	111-91-1	
bis(2-Chloroethyl) ether	<78.2	ug/kg	387	78.2	1	04/10/24 14:25	04/12/24 11:47	111-44-4	
bis(2-Chloroisopropyl) ether	<83.9	ug/kg	387	83.9	1	04/10/24 14:25	04/12/24 11:47	108-60-1	
2-Chloronaphthalene	<81.6	ug/kg	387	81.6	1	04/10/24 14:25	04/12/24 11:47	91-58-7	
2-Chlorophenol	<79.1	ug/kg	387	79.1	1	04/10/24 14:25	04/12/24 11:47	95-57-8	
4-Chlorophenylphenyl ether	<83.1	ug/kg	387	83.1	1	04/10/24 14:25	04/12/24 11:47	7005-72-3	
Chrysene	<86.3	ug/kg	387	86.3	1	04/10/24 14:25	04/12/24 11:47	218-01-9	
Dibenz(a,h)anthracene	<69.6	ug/kg	387	69.6	1	04/10/24 14:25	04/12/24 11:47	53-70-3	
Dibenzofuran	<82.8	ug/kg	387	82.8	1	04/10/24 14:25	04/12/24 11:47	132-64-9	
1,2-Dichlorobenzene	<77.1	ug/kg	387	77.1	1	04/10/24 14:25	04/12/24 11:47	95-50-1	
1,3-Dichlorobenzene	<75.7	ug/kg	387	75.7	1	04/10/24 14:25	04/12/24 11:47	541-73-1	
1,4-Dichlorobenzene	<74.7	ug/kg	387	74.7	1	04/10/24 14:25	04/12/24 11:47	106-46-7	
3,3'-Dichlorobenzidine	<38.0	ug/kg	775	38.0	1	04/10/24 14:25	04/12/24 11:47	91-94-1	
2,4-Dichlorophenol	<77.6	ug/kg	387	77.6	1	04/10/24 14:25	04/12/24 11:47	120-83-2	
Diethylphthalate	<88.5	ug/kg	387	88.5	1	04/10/24 14:25	04/12/24 11:47	84-66-2	
2,4-Dimethylphenol	<56.3	ug/kg	387	56.3	1	04/10/24 14:25	04/12/24 11:47	105-67-9	
Dimethylphthalate	<80.4	ug/kg	387	80.4	1	04/10/24 14:25	04/12/24 11:47	131-11-3	
Di-n-butylphthalate	<91.7	ug/kg	387	91.7	1	04/10/24 14:25	04/12/24 11:47	84-74-2	
4,6-Dinitro-2-methylphenol	<67.0	ug/kg	1960	67.0	1	04/10/24 14:25	04/12/24 11:47	534-52-1	
2,4-Dinitrophenol	<117	ug/kg	1960	117	1	04/10/24 14:25	04/12/24 11:47	51-28-5	
2,4-Dinitrotoluene	<87.2	ug/kg	387	87.2	1	04/10/24 14:25	04/12/24 11:47	121-14-2	
2,6-Dinitrotoluene	<75.5	ug/kg	387	75.5	1	04/10/24 14:25	04/12/24 11:47	606-20-2	
Di-n-octylphthalate	<94.3	ug/kg	387	94.3	1	04/10/24 14:25	04/12/24 11:47	117-84-0	
bis(2-Ethylhexyl)phthalate	<87.0	ug/kg	387	87.0	1	04/10/24 14:25	04/12/24 11:47	117-81-7	
Fluoranthene	<85.3	ug/kg	387	85.3	1	04/10/24 14:25	04/12/24 11:47	206-44-0	
Fluorene	<82.4	ug/kg	387	82.4	1	04/10/24 14:25	04/12/24 11:47	86-73-7	
Hexachloro-1,3-butadiene	<83.0	ug/kg	387	83.0	1	04/10/24 14:25	04/12/24 11:47	87-68-3	
Hexachlorobenzene	<81.0	ug/kg	387	81.0	1	04/10/24 14:25	04/12/24 11:47	118-74-1	
Hexachlorocyclopentadiene	<238	ug/kg	387	238	1	04/10/24 14:25	04/12/24 11:47	77-47-4	
Hexachloroethane	<71.0	ug/kg	387	71.0	1	04/10/24 14:25	04/12/24 11:47	67-72-1	
Indeno(1,2,3-cd)pyrene	<79.2	ug/kg	387	79.2	1	04/10/24 14:25	04/12/24 11:47	193-39-5	
Isophorone	<74.9	ug/kg	387	74.9	1	04/10/24 14:25	04/12/24 11:47	78-59-1	
2-Methylnaphthalene	<78.5	ug/kg	387	78.5	1	04/10/24 14:25	04/12/24 11:47	91-57-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS03/SS-1 Lab ID: 60450516001 Collected: 04/08/24 09:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<70.6	ug/kg	387	70.6	1	04/10/24 14:25	04/12/24 11:47	95-48-7	
3&4-Methylphenol(m&p Cresol)	<72.0	ug/kg	387	72.0	1	04/10/24 14:25	04/12/24 11:47	15831-10-4	
Naphthalene	<83.3	ug/kg	387	83.3	1	04/10/24 14:25	04/12/24 11:47	91-20-3	
2-Nitroaniline	<64.2	ug/kg	775	64.2	1	04/10/24 14:25	04/12/24 11:47	88-74-4	
3-Nitroaniline	<60.3	ug/kg	775	60.3	1	04/10/24 14:25	04/12/24 11:47	99-09-2	
4-Nitroaniline	<66.3	ug/kg	775	66.3	1	04/10/24 14:25	04/12/24 11:47	100-01-6	
Nitrobenzene	<82.1	ug/kg	387	82.1	1	04/10/24 14:25	04/12/24 11:47	98-95-3	
2-Nitrophenol	<60.6	ug/kg	387	60.6	1	04/10/24 14:25	04/12/24 11:47	88-75-5	
4-Nitrophenol	<57.1	ug/kg	1960	57.1	1	04/10/24 14:25	04/12/24 11:47	100-02-7	
N-Nitroso-di-n-propylamine	<73.8	ug/kg	387	73.8	1	04/10/24 14:25	04/12/24 11:47	621-64-7	
N-Nitrosodiphenylamine	<77.0	ug/kg	387	77.0	1	04/10/24 14:25	04/12/24 11:47	86-30-6	
Pentachlorophenol	<128	ug/kg	1960	128	1	04/10/24 14:25	04/12/24 11:47	87-86-5	
Phenanthrene	<82.8	ug/kg	387	82.8	1	04/10/24 14:25	04/12/24 11:47	85-01-8	
Phenol	<72.9	ug/kg	387	72.9	1	04/10/24 14:25	04/12/24 11:47	108-95-2	
Pyrene	<82.6	ug/kg	387	82.6	1	04/10/24 14:25	04/12/24 11:47	129-00-0	
Pyridine	<57.4	ug/kg	387	57.4	1	04/10/24 14:25	04/12/24 11:47	110-86-1	
1,2,4-Trichlorobenzene	<81.1	ug/kg	387	81.1	1	04/10/24 14:25	04/12/24 11:47	120-82-1	
2,4,5-Trichlorophenol	<79.4	ug/kg	387	79.4	1	04/10/24 14:25	04/12/24 11:47	95-95-4	
2,4,6-Trichlorophenol	<71.6	ug/kg	387	71.6	1	04/10/24 14:25	04/12/24 11:47	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	68	%	30-120		1	04/10/24 14:25	04/12/24 11:47	4165-60-0	
2-Fluorobiphenyl (S)	63	%	40-120		1	04/10/24 14:25	04/12/24 11:47	321-60-8	
Terphenyl-d14 (S)	65	%	45-120		1	04/10/24 14:25	04/12/24 11:47	1718-51-0	
Phenol-d6 (S)	70	%	40-120		1	04/10/24 14:25	04/12/24 11:47	13127-88-3	
2-Fluorophenol (S)	67	%	40-120		1	04/10/24 14:25	04/12/24 11:47	367-12-4	
2,4,6-Tribromophenol (S)	71	%	35-120		1	04/10/24 14:25	04/12/24 11:47	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	19.7	mg/kg	17.6	6.0	1	04/11/24 13:51	04/12/24 11:04		
TPH-DRO	<6.0	mg/kg	17.6	6.0	1	04/11/24 13:51	04/12/24 11:04		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	76	%	35-120		1	04/11/24 13:51	04/12/24 11:04	4165-60-0	
2-Fluorobiphenyl (S)	83	%	50-120		1	04/11/24 13:51	04/12/24 11:04	321-60-8	
Terphenyl-d14 (S)	85	%	45-120		1	04/11/24 13:51	04/12/24 11:04	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<86.7	ug/kg	90.9	86.7	1	04/10/24 09:05	04/10/24 12:25	67-64-1	
Benzene	<0.66	ug/kg	7.2	0.66	1	04/10/24 09:05	04/10/24 12:25	71-43-2	
Bromobenzene	<0.90	ug/kg	7.2	0.90	1	04/10/24 09:05	04/10/24 12:25	108-86-1	
Bromochloromethane	<1.1	ug/kg	7.2	1.1	1	04/10/24 09:05	04/10/24 12:25	74-97-5	
Bromodichloromethane	<1.2	ug/kg	18.8	1.2	1	04/10/24 09:05	04/10/24 12:25	75-27-4	
Bromoform	<0.56	ug/kg	18.8	0.56	1	04/10/24 09:05	04/10/24 12:25	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS03/SS-1 Lab ID: 60450516001 Collected: 04/08/24 09:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<8.9	ug/kg	18.8	8.9	1	04/10/24 09:05	04/10/24 12:25	74-83-9	
2-Butanone (MEK)	<46.0	ug/kg	90.9	46.0	1	04/10/24 09:05	04/10/24 12:25	78-93-3	
n-Butylbenzene	<0.69	ug/kg	7.2	0.69	1	04/10/24 09:05	04/10/24 12:25	104-51-8	
sec-Butylbenzene	<0.71	ug/kg	7.2	0.71	1	04/10/24 09:05	04/10/24 12:25	135-98-8	
tert-Butylbenzene	<0.47	ug/kg	7.2	0.47	1	04/10/24 09:05	04/10/24 12:25	98-06-6	
Carbon disulfide	6.7J	ug/kg	7.2	3.3	1	04/10/24 09:05	04/10/24 12:25	75-15-0	
Carbon tetrachloride	<2.4	ug/kg	7.2	2.4	1	04/10/24 09:05	04/10/24 12:25	56-23-5	
Chlorobenzene	<0.42	ug/kg	7.2	0.42	1	04/10/24 09:05	04/10/24 12:25	108-90-7	
Chloroethane	<12.0	ug/kg	36.1	12.0	1	04/10/24 09:05	04/10/24 12:25	75-00-3	
Chloroform	<2.7	ug/kg	7.2	2.7	1	04/10/24 09:05	04/10/24 12:25	67-66-3	
Chloromethane	<1.8	ug/kg	18.8	1.8	1	04/10/24 09:05	04/10/24 12:25	74-87-3	
2-Chlorotoluene	<1.0	ug/kg	7.2	1.0	1	04/10/24 09:05	04/10/24 12:25	95-49-8	
4-Chlorotoluene	<0.57	ug/kg	7.2	0.57	1	04/10/24 09:05	04/10/24 12:25	106-43-4	
1,2-Dibromo-3-chloropropane	<4.8	ug/kg	18.8	4.8	1	04/10/24 09:05	04/10/24 12:25	96-12-8	
Dibromochloromethane	<0.44	ug/kg	7.2	0.44	1	04/10/24 09:05	04/10/24 12:25	124-48-1	
1,2-Dibromoethane (EDB)	<0.76	ug/kg	7.2	0.76	1	04/10/24 09:05	04/10/24 12:25	106-93-4	
Dibromomethane	<2.1	ug/kg	7.2	2.1	1	04/10/24 09:05	04/10/24 12:25	74-95-3	
1,2-Dichlorobenzene	<1.2	ug/kg	7.2	1.2	1	04/10/24 09:05	04/10/24 12:25	95-50-1	
1,3-Dichlorobenzene	<0.91	ug/kg	7.2	0.91	1	04/10/24 09:05	04/10/24 12:25	541-73-1	
1,4-Dichlorobenzene	<1.3	ug/kg	7.2	1.3	1	04/10/24 09:05	04/10/24 12:25	106-46-7	
Dichlorodifluoromethane	<1.4	ug/kg	18.8	1.4	1	04/10/24 09:05	04/10/24 12:25	75-71-8	
1,1-Dichloroethane	<1.7	ug/kg	7.2	1.7	1	04/10/24 09:05	04/10/24 12:25	75-34-3	
1,2-Dichloroethane	<1.4	ug/kg	7.2	1.4	1	04/10/24 09:05	04/10/24 12:25	107-06-2	
1,2-Dichloroethene (Total)	<2.7	ug/kg	14.4	2.7	1	04/10/24 09:05	04/10/24 12:25	540-59-0	
1,1-Dichloroethene	<2.9	ug/kg	7.2	2.9	1	04/10/24 09:05	04/10/24 12:25	75-35-4	
cis-1,2-Dichloroethene	<1.3	ug/kg	7.2	1.3	1	04/10/24 09:05	04/10/24 12:25	156-59-2	
trans-1,2-Dichloroethene	<1.6	ug/kg	7.2	1.6	1	04/10/24 09:05	04/10/24 12:25	156-60-5	
1,2-Dichloropropane	<1.5	ug/kg	7.2	1.5	1	04/10/24 09:05	04/10/24 12:25	78-87-5	
1,3-Dichloropropane	<0.28	ug/kg	7.2	0.28	1	04/10/24 09:05	04/10/24 12:25	142-28-9	
2,2-Dichloropropane	<2.2	ug/kg	7.2	2.2	1	04/10/24 09:05	04/10/24 12:25	594-20-7	
1,1-Dichloropropene	<1.6	ug/kg	7.2	1.6	1	04/10/24 09:05	04/10/24 12:25	563-58-6	
cis-1,3-Dichloropropene	<1.1	ug/kg	7.2	1.1	1	04/10/24 09:05	04/10/24 12:25	10061-01-5	
trans-1,3-Dichloropropene	<0.87	ug/kg	7.2	0.87	1	04/10/24 09:05	04/10/24 12:25	10061-02-6	
Ethylbenzene	<1.2	ug/kg	7.2	1.2	1	04/10/24 09:05	04/10/24 12:25	100-41-4	
Hexachloro-1,3-butadiene	<1.3	ug/kg	7.2	1.3	1	04/10/24 09:05	04/10/24 12:25	87-68-3	
2-Hexanone	<15.0	ug/kg	90.9	15.0	1	04/10/24 09:05	04/10/24 12:25	591-78-6	
Isopropylbenzene (Cumene)	<0.45	ug/kg	7.2	0.45	1	04/10/24 09:05	04/10/24 12:25	98-82-8	
p-Isopropyltoluene	<0.63	ug/kg	7.2	0.63	1	04/10/24 09:05	04/10/24 12:25	99-87-6	
Methylene Chloride	<28.0	ug/kg	36.1	28.0	1	04/10/24 09:05	04/10/24 12:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	<10.1	ug/kg	90.9	10.1	1	04/10/24 09:05	04/10/24 12:25	108-10-1	
Methyl-tert-butyl ether	<1.4	ug/kg	7.2	1.4	1	04/10/24 09:05	04/10/24 12:25	1634-04-4	
Naphthalene	<1.1	ug/kg	14.4	1.1	1	04/10/24 09:05	04/10/24 12:25	91-20-3	
n-Propylbenzene	<0.88	ug/kg	7.2	0.88	1	04/10/24 09:05	04/10/24 12:25	103-65-1	
Styrene	<0.58	ug/kg	7.2	0.58	1	04/10/24 09:05	04/10/24 12:25	100-42-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS03/SS-1** Lab ID: **60450516001** Collected: 04/08/24 09:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<1.0	ug/kg	7.2	1.0	1	04/10/24 09:05	04/10/24 12:25	630-20-6	
1,1,2,2-Tetrachloroethane	<1.0	ug/kg	7.2	1.0	1	04/10/24 09:05	04/10/24 12:25	79-34-5	
Tetrachloroethene	<0.77	ug/kg	7.2	0.77	1	04/10/24 09:05	04/10/24 12:25	127-18-4	
Toluene	<6.4	ug/kg	28.9	6.4	1	04/10/24 09:05	04/10/24 12:25	108-88-3	
1,2,3-Trichlorobenzene	<0.84	ug/kg	7.2	0.84	1	04/10/24 09:05	04/10/24 12:25	87-61-6	
1,2,4-Trichlorobenzene	<0.71	ug/kg	7.2	0.71	1	04/10/24 09:05	04/10/24 12:25	120-82-1	
1,1,1-Trichloroethane	<1.5	ug/kg	7.2	1.5	1	04/10/24 09:05	04/10/24 12:25	71-55-6	
1,1,2-Trichloroethane	<1.0	ug/kg	7.2	1.0	1	04/10/24 09:05	04/10/24 12:25	79-00-5	
Trichloroethene	<2.7	ug/kg	7.2	2.7	1	04/10/24 09:05	04/10/24 12:25	79-01-6	
Trichlorofluoromethane	<13.9	ug/kg	18.8	13.9	1	04/10/24 09:05	04/10/24 12:25	75-69-4	
1,2,3-Trichloropropane	<2.2	ug/kg	7.2	2.2	1	04/10/24 09:05	04/10/24 12:25	96-18-4	
1,2,4-Trimethylbenzene	<0.99	ug/kg	7.2	0.99	1	04/10/24 09:05	04/10/24 12:25	95-63-6	
1,3,5-Trimethylbenzene	<0.63	ug/kg	7.2	0.63	1	04/10/24 09:05	04/10/24 12:25	108-67-8	
Vinyl chloride	<1.3	ug/kg	18.8	1.3	1	04/10/24 09:05	04/10/24 12:25	75-01-4	
Xylene (Total)	<5.3	ug/kg	21.6	5.3	1	04/10/24 09:05	04/10/24 12:25	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	103	%	80-120		1	04/10/24 09:05	04/10/24 12:25	2037-26-5	
4-Bromofluorobenzene (S)	100	%	83-119		1	04/10/24 09:05	04/10/24 12:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/10/24 09:05	04/10/24 12:25	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.077	mg/kg	0.57	0.077	1	04/11/24 07:56	04/11/24 10:38		
<b>Surrogates</b>									
Toluene-d8 (S)	101	%	78-122		1	04/11/24 07:56	04/11/24 10:38	2037-26-5	
4-Bromofluorobenzene (S)	106	%	69-133		1	04/11/24 07:56	04/11/24 10:38	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1	04/11/24 07:56	04/11/24 10:38	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	15.2	%	0.50	0.50	1		04/10/24 15:42		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	84.6	%			1	04/12/24 11:09	04/12/24 11:20		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	1.1J	mg/kg	1.2	0.97	1	04/15/24 09:34	04/16/24 15:08	7664-41-7	L2
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.14	mg/kg	0.17	0.14	1	04/18/24 08:30	04/18/24 11:30	57-12-5	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS03/SS-1** Lab ID: **60450516001** Collected: 04/08/24 09:40 Received: 04/08/24 17:34 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>		Analytical Method: EPA 9056 Preparation Method: EPA 9056 Pace Analytical Services - Kansas City							
Nitrate as N	<b>9.7J</b>	mg/kg	12.0	6.8	10	04/10/24 08:00	04/11/24 16:45	14797-55-8	B
Nitrite as N	<b>9.0J</b>	mg/kg	12.0	6.3	10	04/10/24 08:00	04/11/24 16:45	14797-65-0	B

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS03/SS-2 Lab ID: 60450516002 Collected: 04/08/24 09:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00442	mg/kg	0.0235	0.00442	1	04/16/24 18:02	04/17/24 02:44	309-00-2	
alpha-BHC	<0.00433	mg/kg	0.0235	0.00433	1	04/16/24 18:02	04/17/24 02:44	319-84-6	
beta-BHC	<0.00446	mg/kg	0.0235	0.00446	1	04/16/24 18:02	04/17/24 02:44	319-85-7	
delta-BHC	<0.00407	mg/kg	0.0235	0.00407	1	04/16/24 18:02	04/17/24 02:44	319-86-8	
gamma-BHC (Lindane)	<0.00405	mg/kg	0.0235	0.00405	1	04/16/24 18:02	04/17/24 02:44	58-89-9	
Chlordane (Technical)	<0.121	mg/kg	0.353	0.121	1	04/16/24 18:02	04/17/24 02:44	57-74-9	
4,4'-DDD	<0.00435	mg/kg	0.0235	0.00435	1	04/16/24 18:02	04/17/24 02:44	72-54-8	
4,4'-DDE	<0.00430	mg/kg	0.0235	0.00430	1	04/16/24 18:02	04/17/24 02:44	72-55-9	
4,4'-DDT	<0.00737	mg/kg	0.0235	0.00737	1	04/16/24 18:02	04/17/24 02:44	50-29-3	
Dieldrin	<0.00405	mg/kg	0.0235	0.00405	1	04/16/24 18:02	04/17/24 02:44	60-57-1	
Endosulfan I	<0.00427	mg/kg	0.0235	0.00427	1	04/16/24 18:02	04/17/24 02:44	959-98-8	
Endosulfan II	<0.00394	mg/kg	0.0235	0.00394	1	04/16/24 18:02	04/17/24 02:44	33213-65-9	
Endosulfan sulfate	<0.00428	mg/kg	0.0235	0.00428	1	04/16/24 18:02	04/17/24 02:44	1031-07-8	
Endrin	<0.00412	mg/kg	0.0235	0.00412	1	04/16/24 18:02	04/17/24 02:44	72-20-8	LO
Endrin aldehyde	<0.00399	mg/kg	0.0235	0.00399	1	04/16/24 18:02	04/17/24 02:44	7421-93-4	
Endrin ketone	<0.00836	mg/kg	0.0235	0.00836	1	04/16/24 18:02	04/17/24 02:44	53494-70-5	
Hexachlorobenzene	<0.00407	mg/kg	0.0235	0.00407	1	04/16/24 18:02	04/17/24 02:44	118-74-1	
Heptachlor	<0.00503	mg/kg	0.0235	0.00503	1	04/16/24 18:02	04/17/24 02:44	76-44-8	
Heptachlor epoxide	<0.00399	mg/kg	0.0235	0.00399	1	04/16/24 18:02	04/17/24 02:44	1024-57-3	
Methoxychlor	<0.00569	mg/kg	0.0235	0.00569	1	04/16/24 18:02	04/17/24 02:44	72-43-5	
Toxaphene	<0.146	mg/kg	0.470	0.146	1	04/16/24 18:02	04/17/24 02:44	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	48.1	%	10.0-135		1	04/16/24 18:02	04/17/24 02:44	2051-24-3	
Tetrachloro-m-xylene (S)	65.7	%	10.0-139		1	04/16/24 18:02	04/17/24 02:44	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00825	mg/kg	0.0823	0.00825	1	04/15/24 13:10	04/16/24 17:01	94-75-7	
Dalapon	<0.0133	mg/kg	0.0823	0.0133	1	04/15/24 13:10	04/16/24 17:01	127-20-8	
2,4-DB	<0.0349	mg/kg	0.0823	0.0349	1	04/15/24 13:10	04/16/24 17:01	94-82-6	
Dicamba	<0.0185	mg/kg	0.0823	0.0185	1	04/15/24 13:10	04/16/24 17:01	1918-00-9	
Dichlorprop	<0.0288	mg/kg	0.0823	0.0288	1	04/15/24 13:10	04/16/24 17:01	120-36-5	
Dinoseb	<0.00820	mg/kg	0.0823	0.00820	1	04/15/24 13:10	04/16/24 17:01	88-85-7	
MCPA	<0.521	mg/kg	7.64	0.521	1	04/15/24 13:10	04/16/24 17:01	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.432	mg/kg	7.64	0.432	1	04/15/24 13:10	04/16/24 17:01	93-65-2	
2,4,5-T	<0.0100	mg/kg	0.0823	0.0100	1	04/15/24 13:10	04/16/24 17:01	93-76-5	
2,4,5-TP (Silvex)	<0.0126	mg/kg	0.0823	0.0126	1	04/15/24 13:10	04/16/24 17:01	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	133	%	22.0-132		1	04/15/24 13:10	04/16/24 17:01	19719-28-9	ST
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.3	ug/kg	38.0	10.3	1	04/11/24 15:53	04/15/24 12:11	12674-11-2	
PCB-1221 (Aroclor 1221)	<12.8	ug/kg	38.0	12.8	1	04/11/24 15:53	04/15/24 12:11	11104-28-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS03/SS-2 Lab ID: 60450516002 Collected: 04/08/24 09:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<12.8	ug/kg	38.0	12.8	1	04/11/24 15:53	04/15/24 12:11	11141-16-5	
PCB-1242 (Aroclor 1242)	<12.8	ug/kg	38.0	12.8	1	04/11/24 15:53	04/15/24 12:11	53469-21-9	
PCB-1248 (Aroclor 1248)	<12.8	ug/kg	38.0	12.8	1	04/11/24 15:53	04/15/24 12:11	12672-29-6	
PCB-1254 (Aroclor 1254)	<12.8	ug/kg	38.0	12.8	1	04/11/24 15:53	04/15/24 12:11	11097-69-1	
PCB-1260 (Aroclor 1260)	<12.8	ug/kg	38.0	12.8	1	04/11/24 15:53	04/15/24 12:11	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	86	%	20-120		1	04/11/24 15:53	04/15/24 12:11	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	21600	mg/kg	58.8	8.11	5	04/14/24 22:12	04/22/24 17:35	7429-90-5	
Antimony	<0.195	mg/kg	3.53	0.195	5	04/14/24 22:12	04/22/24 17:35	7440-36-0	
Arsenic	11.6	mg/kg	1.18	0.118	5	04/14/24 22:12	04/22/24 17:35	7440-38-2	
Barium	159	mg/kg	2.94	0.179	5	04/14/24 22:12	04/22/24 17:35	7440-39-3	
Beryllium	1.27J	mg/kg	2.94	0.162	5	04/14/24 22:12	04/22/24 17:35	7440-41-7	J
Cadmium	0.156J	mg/kg	1.18	0.101	5	04/14/24 22:12	04/22/24 17:35	7440-43-9	J
Calcium	4900	mg/kg	588	88.8	5	04/14/24 22:12	04/22/24 17:35	7440-70-2	
Chromium	35.1	mg/kg	5.88	0.348	5	04/14/24 22:12	04/22/24 17:35	7440-47-3	
Cobalt	21.1	mg/kg	1.18	0.0543	5	04/14/24 22:12	04/22/24 17:35	7440-48-4	
Copper	26.3	mg/kg	5.88	0.155	5	04/14/24 22:12	04/22/24 17:35	7440-50-8	
Iron	34400	mg/kg	58.8	10.5	5	04/14/24 22:12	04/22/24 17:35	7439-89-6	
Lead	16.3	mg/kg	2.35	0.116	5	04/14/24 22:12	04/22/24 17:35	7439-92-1	
Magnesium	6230	mg/kg	588	54.0	5	04/14/24 22:12	04/22/24 17:35	7439-95-4	
Manganese	832	mg/kg	2.94	0.315	5	04/14/24 22:12	04/22/24 17:35	7439-96-5	
Molybdenum	0.355J	mg/kg	2.94	0.119	5	04/14/24 22:12	04/22/24 17:35	7439-98-7	J
Nickel	41.8	mg/kg	2.94	0.232	5	04/14/24 22:12	04/22/24 17:35	7440-02-0	
Potassium	2710	mg/kg	588	80.0	5	04/14/24 22:12	04/22/24 17:35	7440-09-7	
Selenium	0.527J	mg/kg	2.94	0.212	5	04/14/24 22:12	04/22/24 17:35	7782-49-2	J
Silver	<0.102	mg/kg	0.588	0.102	5	04/14/24 22:12	04/22/24 17:35	7440-22-4	
Sodium	163J	mg/kg	588	90.0	5	04/14/24 22:12	04/22/24 17:35	7440-23-5	J
Thallium	0.205J	mg/kg	2.35	0.0764	5	04/14/24 22:12	04/22/24 17:35	7440-28-0	J
Vanadium	38.0	mg/kg	2.94	0.220	5	04/14/24 22:12	04/22/24 17:35	7440-62-2	
Zinc	91.1	mg/kg	29.4	0.870	5	04/14/24 22:12	04/22/24 17:35	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0212	mg/kg	0.0470	0.0212	1	04/11/24 16:52	04/12/24 09:17	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<82.3	ug/kg	383	82.3	1	04/10/24 14:25	04/12/24 12:08	83-32-9	
Acenaphthylene	<62.7	ug/kg	383	62.7	1	04/10/24 14:25	04/12/24 12:08	208-96-8	
Anthracene	<80.1	ug/kg	383	80.1	1	04/10/24 14:25	04/12/24 12:08	120-12-7	
Benzo(a)anthracene	<81.0	ug/kg	383	81.0	1	04/10/24 14:25	04/12/24 12:08	56-55-3	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS03/SS-2 Lab ID: 60450516002 Collected: 04/08/24 09:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<82.4	ug/kg	383	82.4	1	04/10/24 14:25	04/12/24 12:08	50-32-8	
Benzo(b)fluoranthene	<93.5	ug/kg	383	93.5	1	04/10/24 14:25	04/12/24 12:08	205-99-2	
Benzo(g,h,i)perylene	<66.5	ug/kg	383	66.5	1	04/10/24 14:25	04/12/24 12:08	191-24-2	
Benzo(k)fluoranthene	<82.4	ug/kg	383	82.4	1	04/10/24 14:25	04/12/24 12:08	207-08-9	
Benzoic Acid	<209	ug/kg	1940	209	1	04/10/24 14:25	04/12/24 12:08	65-85-0	
Benzyl alcohol	<70.4	ug/kg	766	70.4	1	04/10/24 14:25	04/12/24 12:08	100-51-6	
4-Bromophenylphenyl ether	<82.7	ug/kg	383	82.7	1	04/10/24 14:25	04/12/24 12:08	101-55-3	
Butylbenzylphthalate	<78.0	ug/kg	383	78.0	1	04/10/24 14:25	04/12/24 12:08	85-68-7	
Carbazole	<78.8	ug/kg	383	78.8	1	04/10/24 14:25	04/12/24 12:08	86-74-8	
4-Chloro-3-methylphenol	<80.3	ug/kg	766	80.3	1	04/10/24 14:25	04/12/24 12:08	59-50-7	
4-Chloroaniline	<60.0	ug/kg	766	60.0	1	04/10/24 14:25	04/12/24 12:08	106-47-8	
bis(2-Chloroethoxy)methane	<76.2	ug/kg	383	76.2	1	04/10/24 14:25	04/12/24 12:08	111-91-1	
bis(2-Chloroethyl) ether	<77.3	ug/kg	383	77.3	1	04/10/24 14:25	04/12/24 12:08	111-44-4	
bis(2-Chloroisopropyl) ether	<83.0	ug/kg	383	83.0	1	04/10/24 14:25	04/12/24 12:08	108-60-1	
2-Chloronaphthalene	<80.7	ug/kg	383	80.7	1	04/10/24 14:25	04/12/24 12:08	91-58-7	
2-Chlorophenol	<78.3	ug/kg	383	78.3	1	04/10/24 14:25	04/12/24 12:08	95-57-8	
4-Chlorophenylphenyl ether	<82.2	ug/kg	383	82.2	1	04/10/24 14:25	04/12/24 12:08	7005-72-3	
Chrysene	<85.3	ug/kg	383	85.3	1	04/10/24 14:25	04/12/24 12:08	218-01-9	
Dibenz(a,h)anthracene	<68.8	ug/kg	383	68.8	1	04/10/24 14:25	04/12/24 12:08	53-70-3	
Dibenzofuran	<81.9	ug/kg	383	81.9	1	04/10/24 14:25	04/12/24 12:08	132-64-9	
1,2-Dichlorobenzene	<76.3	ug/kg	383	76.3	1	04/10/24 14:25	04/12/24 12:08	95-50-1	
1,3-Dichlorobenzene	<74.9	ug/kg	383	74.9	1	04/10/24 14:25	04/12/24 12:08	541-73-1	
1,4-Dichlorobenzene	<73.8	ug/kg	383	73.8	1	04/10/24 14:25	04/12/24 12:08	106-46-7	
3,3'-Dichlorobenzidine	<37.6	ug/kg	766	37.6	1	04/10/24 14:25	04/12/24 12:08	91-94-1	
2,4-Dichlorophenol	<76.7	ug/kg	383	76.7	1	04/10/24 14:25	04/12/24 12:08	120-83-2	
Diethylphthalate	<87.5	ug/kg	383	87.5	1	04/10/24 14:25	04/12/24 12:08	84-66-2	
2,4-Dimethylphenol	<55.7	ug/kg	383	55.7	1	04/10/24 14:25	04/12/24 12:08	105-67-9	
Dimethylphthalate	<79.5	ug/kg	383	79.5	1	04/10/24 14:25	04/12/24 12:08	131-11-3	
Di-n-butylphthalate	<90.7	ug/kg	383	90.7	1	04/10/24 14:25	04/12/24 12:08	84-74-2	
4,6-Dinitro-2-methylphenol	<66.3	ug/kg	1940	66.3	1	04/10/24 14:25	04/12/24 12:08	534-52-1	
2,4-Dinitrophenol	<116	ug/kg	1940	116	1	04/10/24 14:25	04/12/24 12:08	51-28-5	
2,4-Dinitrotoluene	<86.3	ug/kg	383	86.3	1	04/10/24 14:25	04/12/24 12:08	121-14-2	
2,6-Dinitrotoluene	<74.7	ug/kg	383	74.7	1	04/10/24 14:25	04/12/24 12:08	606-20-2	
Di-n-octylphthalate	<93.2	ug/kg	383	93.2	1	04/10/24 14:25	04/12/24 12:08	117-84-0	
bis(2-Ethylhexyl)phthalate	<86.0	ug/kg	383	86.0	1	04/10/24 14:25	04/12/24 12:08	117-81-7	
Fluoranthene	<84.4	ug/kg	383	84.4	1	04/10/24 14:25	04/12/24 12:08	206-44-0	
Fluorene	<81.5	ug/kg	383	81.5	1	04/10/24 14:25	04/12/24 12:08	86-73-7	
Hexachloro-1,3-butadiene	<82.1	ug/kg	383	82.1	1	04/10/24 14:25	04/12/24 12:08	87-68-3	
Hexachlorobenzene	<80.1	ug/kg	383	80.1	1	04/10/24 14:25	04/12/24 12:08	118-74-1	
Hexachlorocyclopentadiene	<236	ug/kg	383	236	1	04/10/24 14:25	04/12/24 12:08	77-47-4	
Hexachloroethane	<70.2	ug/kg	383	70.2	1	04/10/24 14:25	04/12/24 12:08	67-72-1	
Indeno(1,2,3-cd)pyrene	<78.4	ug/kg	383	78.4	1	04/10/24 14:25	04/12/24 12:08	193-39-5	
Isophorone	<74.1	ug/kg	383	74.1	1	04/10/24 14:25	04/12/24 12:08	78-59-1	
2-Methylnaphthalene	<77.7	ug/kg	383	77.7	1	04/10/24 14:25	04/12/24 12:08	91-57-6	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS03/SS-2 Lab ID: 60450516002 Collected: 04/08/24 09:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<69.8	ug/kg	383	69.8	1	04/10/24 14:25	04/12/24 12:08	95-48-7	
3&4-Methylphenol(m&p Cresol)	<71.2	ug/kg	383	71.2	1	04/10/24 14:25	04/12/24 12:08	15831-10-4	
Naphthalene	<82.4	ug/kg	383	82.4	1	04/10/24 14:25	04/12/24 12:08	91-20-3	
2-Nitroaniline	<63.5	ug/kg	766	63.5	1	04/10/24 14:25	04/12/24 12:08	88-74-4	
3-Nitroaniline	<59.7	ug/kg	766	59.7	1	04/10/24 14:25	04/12/24 12:08	99-09-2	
4-Nitroaniline	<65.6	ug/kg	766	65.6	1	04/10/24 14:25	04/12/24 12:08	100-01-6	
Nitrobenzene	<81.2	ug/kg	383	81.2	1	04/10/24 14:25	04/12/24 12:08	98-95-3	
2-Nitrophenol	<59.9	ug/kg	383	59.9	1	04/10/24 14:25	04/12/24 12:08	88-75-5	
4-Nitrophenol	<56.4	ug/kg	1940	56.4	1	04/10/24 14:25	04/12/24 12:08	100-02-7	
N-Nitroso-di-n-propylamine	<73.0	ug/kg	383	73.0	1	04/10/24 14:25	04/12/24 12:08	621-64-7	
N-Nitrosodiphenylamine	<76.2	ug/kg	383	76.2	1	04/10/24 14:25	04/12/24 12:08	86-30-6	
Pentachlorophenol	<127	ug/kg	1940	127	1	04/10/24 14:25	04/12/24 12:08	87-86-5	
Phenanthrene	<81.9	ug/kg	383	81.9	1	04/10/24 14:25	04/12/24 12:08	85-01-8	
Phenol	<72.1	ug/kg	383	72.1	1	04/10/24 14:25	04/12/24 12:08	108-95-2	
Pyrene	<81.7	ug/kg	383	81.7	1	04/10/24 14:25	04/12/24 12:08	129-00-0	
Pyridine	<56.8	ug/kg	383	56.8	1	04/10/24 14:25	04/12/24 12:08	110-86-1	
1,2,4-Trichlorobenzene	<80.2	ug/kg	383	80.2	1	04/10/24 14:25	04/12/24 12:08	120-82-1	
2,4,5-Trichlorophenol	<78.5	ug/kg	383	78.5	1	04/10/24 14:25	04/12/24 12:08	95-95-4	
2,4,6-Trichlorophenol	<70.8	ug/kg	383	70.8	1	04/10/24 14:25	04/12/24 12:08	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	61	%	30-120		1	04/10/24 14:25	04/12/24 12:08	4165-60-0	
2-Fluorobiphenyl (S)	54	%	40-120		1	04/10/24 14:25	04/12/24 12:08	321-60-8	
Terphenyl-d14 (S)	59	%	45-120		1	04/10/24 14:25	04/12/24 12:08	1718-51-0	
Phenol-d6 (S)	60	%	40-120		1	04/10/24 14:25	04/12/24 12:08	13127-88-3	
2-Fluorophenol (S)	59	%	40-120		1	04/10/24 14:25	04/12/24 12:08	367-12-4	
2,4,6-Tribromophenol (S)	61	%	35-120		1	04/10/24 14:25	04/12/24 12:08	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	22.2	mg/kg	17.5	5.9	1	04/11/24 13:51	04/12/24 11:23		
TPH-DRO	<5.9	mg/kg	17.5	5.9	1	04/11/24 13:51	04/12/24 11:23		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	73	%	35-120		1	04/11/24 13:51	04/12/24 11:23	4165-60-0	
2-Fluorobiphenyl (S)	81	%	50-120		1	04/11/24 13:51	04/12/24 11:23	321-60-8	
Terphenyl-d14 (S)	82	%	45-120		1	04/11/24 13:51	04/12/24 11:23	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<79.3	ug/kg	83.2	79.3	1	04/10/24 09:05	04/10/24 12:44	67-64-1	
Benzene	<0.60	ug/kg	6.6	0.60	1	04/10/24 09:05	04/10/24 12:44	71-43-2	
Bromobenzene	<0.82	ug/kg	6.6	0.82	1	04/10/24 09:05	04/10/24 12:44	108-86-1	
Bromochloromethane	<0.98	ug/kg	6.6	0.98	1	04/10/24 09:05	04/10/24 12:44	74-97-5	
Bromodichloromethane	<1.1	ug/kg	17.2	1.1	1	04/10/24 09:05	04/10/24 12:44	75-27-4	
Bromoform	<0.51	ug/kg	17.2	0.51	1	04/10/24 09:05	04/10/24 12:44	75-25-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS03/SS-2 Lab ID: 60450516002 Collected: 04/08/24 09:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<8.1	ug/kg	17.2	8.1	1	04/10/24 09:05	04/10/24 12:44	74-83-9	
2-Butanone (MEK)	<42.1	ug/kg	83.2	42.1	1	04/10/24 09:05	04/10/24 12:44	78-93-3	
n-Butylbenzene	<0.64	ug/kg	6.6	0.64	1	04/10/24 09:05	04/10/24 12:44	104-51-8	
sec-Butylbenzene	<0.65	ug/kg	6.6	0.65	1	04/10/24 09:05	04/10/24 12:44	135-98-8	
tert-Butylbenzene	<0.43	ug/kg	6.6	0.43	1	04/10/24 09:05	04/10/24 12:44	98-06-6	
Carbon disulfide	<3.0	ug/kg	6.6	3.0	1	04/10/24 09:05	04/10/24 12:44	75-15-0	
Carbon tetrachloride	<2.2	ug/kg	6.6	2.2	1	04/10/24 09:05	04/10/24 12:44	56-23-5	
Chlorobenzene	<0.39	ug/kg	6.6	0.39	1	04/10/24 09:05	04/10/24 12:44	108-90-7	
Chloroethane	<10.9	ug/kg	33.0	10.9	1	04/10/24 09:05	04/10/24 12:44	75-00-3	
Chloroform	<2.4	ug/kg	6.6	2.4	1	04/10/24 09:05	04/10/24 12:44	67-66-3	
Chloromethane	<1.6	ug/kg	17.2	1.6	1	04/10/24 09:05	04/10/24 12:44	74-87-3	
2-Chlorotoluene	<0.92	ug/kg	6.6	0.92	1	04/10/24 09:05	04/10/24 12:44	95-49-8	
4-Chlorotoluene	<0.52	ug/kg	6.6	0.52	1	04/10/24 09:05	04/10/24 12:44	106-43-4	
1,2-Dibromo-3-chloropropane	<4.4	ug/kg	17.2	4.4	1	04/10/24 09:05	04/10/24 12:44	96-12-8	
Dibromochloromethane	<0.40	ug/kg	6.6	0.40	1	04/10/24 09:05	04/10/24 12:44	124-48-1	
1,2-Dibromoethane (EDB)	<0.69	ug/kg	6.6	0.69	1	04/10/24 09:05	04/10/24 12:44	106-93-4	
Dibromomethane	<1.9	ug/kg	6.6	1.9	1	04/10/24 09:05	04/10/24 12:44	74-95-3	
1,2-Dichlorobenzene	<1.1	ug/kg	6.6	1.1	1	04/10/24 09:05	04/10/24 12:44	95-50-1	
1,3-Dichlorobenzene	<0.84	ug/kg	6.6	0.84	1	04/10/24 09:05	04/10/24 12:44	541-73-1	
1,4-Dichlorobenzene	<1.2	ug/kg	6.6	1.2	1	04/10/24 09:05	04/10/24 12:44	106-46-7	
Dichlorodifluoromethane	<1.2	ug/kg	17.2	1.2	1	04/10/24 09:05	04/10/24 12:44	75-71-8	
1,1-Dichloroethane	<1.5	ug/kg	6.6	1.5	1	04/10/24 09:05	04/10/24 12:44	75-34-3	
1,2-Dichloroethane	<1.3	ug/kg	6.6	1.3	1	04/10/24 09:05	04/10/24 12:44	107-06-2	
1,2-Dichloroethene (Total)	<2.5	ug/kg	13.2	2.5	1	04/10/24 09:05	04/10/24 12:44	540-59-0	
1,1-Dichloroethene	<2.7	ug/kg	6.6	2.7	1	04/10/24 09:05	04/10/24 12:44	75-35-4	
cis-1,2-Dichloroethene	<1.2	ug/kg	6.6	1.2	1	04/10/24 09:05	04/10/24 12:44	156-59-2	
trans-1,2-Dichloroethene	<1.5	ug/kg	6.6	1.5	1	04/10/24 09:05	04/10/24 12:44	156-60-5	
1,2-Dichloropropane	<1.4	ug/kg	6.6	1.4	1	04/10/24 09:05	04/10/24 12:44	78-87-5	
1,3-Dichloropropane	<0.26	ug/kg	6.6	0.26	1	04/10/24 09:05	04/10/24 12:44	142-28-9	
2,2-Dichloropropane	<2.0	ug/kg	6.6	2.0	1	04/10/24 09:05	04/10/24 12:44	594-20-7	
1,1-Dichloropropene	<1.4	ug/kg	6.6	1.4	1	04/10/24 09:05	04/10/24 12:44	563-58-6	
cis-1,3-Dichloropropene	<0.99	ug/kg	6.6	0.99	1	04/10/24 09:05	04/10/24 12:44	10061-01-5	
trans-1,3-Dichloropropene	<0.79	ug/kg	6.6	0.79	1	04/10/24 09:05	04/10/24 12:44	10061-02-6	
Ethylbenzene	<1.1	ug/kg	6.6	1.1	1	04/10/24 09:05	04/10/24 12:44	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/kg	6.6	1.2	1	04/10/24 09:05	04/10/24 12:44	87-68-3	
2-Hexanone	<13.7	ug/kg	83.2	13.7	1	04/10/24 09:05	04/10/24 12:44	591-78-6	
Isopropylbenzene (Cumene)	<0.42	ug/kg	6.6	0.42	1	04/10/24 09:05	04/10/24 12:44	98-82-8	
p-Isopropyltoluene	<0.57	ug/kg	6.6	0.57	1	04/10/24 09:05	04/10/24 12:44	99-87-6	
Methylene Chloride	<25.6	ug/kg	33.0	25.6	1	04/10/24 09:05	04/10/24 12:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	<9.2	ug/kg	83.2	9.2	1	04/10/24 09:05	04/10/24 12:44	108-10-1	
Methyl-tert-butyl ether	<1.3	ug/kg	6.6	1.3	1	04/10/24 09:05	04/10/24 12:44	1634-04-4	
Naphthalene	<0.96	ug/kg	13.2	0.96	1	04/10/24 09:05	04/10/24 12:44	91-20-3	
n-Propylbenzene	<0.80	ug/kg	6.6	0.80	1	04/10/24 09:05	04/10/24 12:44	103-65-1	
Styrene	<0.53	ug/kg	6.6	0.53	1	04/10/24 09:05	04/10/24 12:44	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS03/SS-2 Lab ID: 60450516002 Collected: 04/08/24 09:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<0.94	ug/kg	6.6	0.94	1	04/10/24 09:05	04/10/24 12:44	630-20-6	
1,1,2,2-Tetrachloroethane	<0.93	ug/kg	6.6	0.93	1	04/10/24 09:05	04/10/24 12:44	79-34-5	
Tetrachloroethene	<0.70	ug/kg	6.6	0.70	1	04/10/24 09:05	04/10/24 12:44	127-18-4	
Toluene	<5.9	ug/kg	26.4	5.9	1	04/10/24 09:05	04/10/24 12:44	108-88-3	
1,2,3-Trichlorobenzene	<0.77	ug/kg	6.6	0.77	1	04/10/24 09:05	04/10/24 12:44	87-61-6	
1,2,4-Trichlorobenzene	<0.65	ug/kg	6.6	0.65	1	04/10/24 09:05	04/10/24 12:44	120-82-1	
1,1,1-Trichloroethane	<1.3	ug/kg	6.6	1.3	1	04/10/24 09:05	04/10/24 12:44	71-55-6	
1,1,2-Trichloroethane	<0.94	ug/kg	6.6	0.94	1	04/10/24 09:05	04/10/24 12:44	79-00-5	
Trichloroethene	<2.5	ug/kg	6.6	2.5	1	04/10/24 09:05	04/10/24 12:44	79-01-6	
Trichlorofluoromethane	<12.7	ug/kg	17.2	12.7	1	04/10/24 09:05	04/10/24 12:44	75-69-4	
1,2,3-Trichloropropane	<2.0	ug/kg	6.6	2.0	1	04/10/24 09:05	04/10/24 12:44	96-18-4	
1,2,4-Trimethylbenzene	<0.91	ug/kg	6.6	0.91	1	04/10/24 09:05	04/10/24 12:44	95-63-6	
1,3,5-Trimethylbenzene	<0.57	ug/kg	6.6	0.57	1	04/10/24 09:05	04/10/24 12:44	108-67-8	
Vinyl chloride	<1.2	ug/kg	17.2	1.2	1	04/10/24 09:05	04/10/24 12:44	75-01-4	
Xylene (Total)	<4.9	ug/kg	19.8	4.9	1	04/10/24 09:05	04/10/24 12:44	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	107	%	80-120		1	04/10/24 09:05	04/10/24 12:44	2037-26-5	
4-Bromofluorobenzene (S)	101	%	83-119		1	04/10/24 09:05	04/10/24 12:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/10/24 09:05	04/10/24 12:44	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.083	mg/kg	0.61	0.083	1	04/11/24 07:56	04/11/24 10:54		
<b>Surrogates</b>									
Toluene-d8 (S)	101	%	78-122		1	04/11/24 07:56	04/11/24 10:54	2037-26-5	
4-Bromofluorobenzene (S)	111	%	69-133		1	04/11/24 07:56	04/11/24 10:54	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/11/24 07:56	04/11/24 10:54	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	14.4	%	0.50	0.50	1		04/10/24 15:42		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	85.0	%			1	04/12/24 11:09	04/12/24 11:20		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<0.95	mg/kg	1.2	0.95	1	04/15/24 09:34	04/16/24 15:09	7664-41-7	L2
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.14	mg/kg	0.17	0.14	1	04/18/24 08:30	04/18/24 11:32	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS03/SS-2** Lab ID: **60450516002** Collected: 04/08/24 09:50 Received: 04/08/24 17:34 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>		Analytical Method: EPA 9056 Preparation Method: EPA 9056 Pace Analytical Services - Kansas City							
Nitrate as N	<6.6	mg/kg	11.7	6.6	10	05/14/24 09:31	05/14/24 09:31	14797-55-8	H2
Nitrite as N	<6.1	mg/kg	11.7	6.1	10	05/14/24 09:31	05/14/24 09:31	14797-65-0	H2

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS02/SS-1 Lab ID: 60450516003 Collected: 04/08/24 11:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00435	mg/kg	0.0232	0.00435	1	04/16/24 18:02	04/17/24 02:52	309-00-2	
alpha-BHC	<0.00426	mg/kg	0.0232	0.00426	1	04/16/24 18:02	04/17/24 02:52	319-84-6	
beta-BHC	<0.00439	mg/kg	0.0232	0.00439	1	04/16/24 18:02	04/17/24 02:52	319-85-7	
delta-BHC	<0.00401	mg/kg	0.0232	0.00401	1	04/16/24 18:02	04/17/24 02:52	319-86-8	
gamma-BHC (Lindane)	<0.00398	mg/kg	0.0232	0.00398	1	04/16/24 18:02	04/17/24 02:52	58-89-9	
Chlordane (Technical)	<0.119	mg/kg	0.347	0.119	1	04/16/24 18:02	04/17/24 02:52	57-74-9	
4,4'-DDD	<0.00428	mg/kg	0.0232	0.00428	1	04/16/24 18:02	04/17/24 02:52	72-54-8	
4,4'-DDE	<0.00424	mg/kg	0.0232	0.00424	1	04/16/24 18:02	04/17/24 02:52	72-55-9	
4,4'-DDT	<0.00726	mg/kg	0.0232	0.00726	1	04/16/24 18:02	04/17/24 02:52	50-29-3	
Dieldrin	<0.00398	mg/kg	0.0232	0.00398	1	04/16/24 18:02	04/17/24 02:52	60-57-1	
Endosulfan I	<0.00420	mg/kg	0.0232	0.00420	1	04/16/24 18:02	04/17/24 02:52	959-98-8	
Endosulfan II	<0.00388	mg/kg	0.0232	0.00388	1	04/16/24 18:02	04/17/24 02:52	33213-65-9	
Endosulfan sulfate	<0.00421	mg/kg	0.0232	0.00421	1	04/16/24 18:02	04/17/24 02:52	1031-07-8	
Endrin	<0.00405	mg/kg	0.0232	0.00405	1	04/16/24 18:02	04/17/24 02:52	72-20-8	LO
Endrin aldehyde	<0.00393	mg/kg	0.0232	0.00393	1	04/16/24 18:02	04/17/24 02:52	7421-93-4	
Endrin ketone	<0.00823	mg/kg	0.0232	0.00823	1	04/16/24 18:02	04/17/24 02:52	53494-70-5	
Hexachlorobenzene	<0.00401	mg/kg	0.0232	0.00401	1	04/16/24 18:02	04/17/24 02:52	118-74-1	
Heptachlor	<0.00496	mg/kg	0.0232	0.00496	1	04/16/24 18:02	04/17/24 02:52	76-44-8	
Heptachlor epoxide	<0.00393	mg/kg	0.0232	0.00393	1	04/16/24 18:02	04/17/24 02:52	1024-57-3	
Methoxychlor	<0.00560	mg/kg	0.0232	0.00560	1	04/16/24 18:02	04/17/24 02:52	72-43-5	
Toxaphene	<0.144	mg/kg	0.463	0.144	1	04/16/24 18:02	04/17/24 02:52	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	57.7	%	10.0-135		1	04/16/24 18:02	04/17/24 02:52	2051-24-3	
Tetrachloro-m-xylene (S)	71.7	%	10.0-139		1	04/16/24 18:02	04/17/24 02:52	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00813	mg/kg	0.0811	0.00813	1	04/15/24 13:10	04/16/24 17:11	94-75-7	
Dalapon	<0.0131	mg/kg	0.0811	0.0131	1	04/15/24 13:10	04/16/24 17:11	127-20-8	
2,4-DB	<0.0344	mg/kg	0.0811	0.0344	1	04/15/24 13:10	04/16/24 17:11	94-82-6	
Dicamba	<0.0182	mg/kg	0.0811	0.0182	1	04/15/24 13:10	04/16/24 17:11	1918-00-9	
Dichlorprop	<0.0284	mg/kg	0.0811	0.0284	1	04/15/24 13:10	04/16/24 17:11	120-36-5	
Dinoseb	<0.00807	mg/kg	0.0811	0.00807	1	04/15/24 13:10	04/16/24 17:11	88-85-7	
MCPA	<0.513	mg/kg	7.53	0.513	1	04/15/24 13:10	04/16/24 17:11	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.425	mg/kg	7.53	0.425	1	04/15/24 13:10	04/16/24 17:11	93-65-2	
2,4,5-T	<0.00987	mg/kg	0.0811	0.00987	1	04/15/24 13:10	04/16/24 17:11	93-76-5	
2,4,5-TP (Silvex)	<0.0124	mg/kg	0.0811	0.0124	1	04/15/24 13:10	04/16/24 17:11	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	70.1	%	22.0-132		1	04/15/24 13:10	04/16/24 17:11	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<9.9	ug/kg	36.6	9.9	1	04/11/24 15:53	04/15/24 12:26	12674-11-2	
PCB-1221 (Aroclor 1221)	<12.3	ug/kg	36.6	12.3	1	04/11/24 15:53	04/15/24 12:26	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS02/SS-1 Lab ID: 60450516003 Collected: 04/08/24 11:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<12.3	ug/kg	36.6	12.3	1	04/11/24 15:53	04/15/24 12:26	11141-16-5	
PCB-1242 (Aroclor 1242)	<12.3	ug/kg	36.6	12.3	1	04/11/24 15:53	04/15/24 12:26	53469-21-9	
PCB-1248 (Aroclor 1248)	<12.3	ug/kg	36.6	12.3	1	04/11/24 15:53	04/15/24 12:26	12672-29-6	
PCB-1254 (Aroclor 1254)	<12.3	ug/kg	36.6	12.3	1	04/11/24 15:53	04/15/24 12:26	11097-69-1	
PCB-1260 (Aroclor 1260)	<12.3	ug/kg	36.6	12.3	1	04/11/24 15:53	04/15/24 12:26	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	82	%	20-120		1	04/11/24 15:53	04/15/24 12:26	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	4250	mg/kg	57.9	7.99	5	04/14/24 22:12	04/22/24 17:49	7429-90-5	
Antimony	0.618J	mg/kg	3.47	0.192	5	04/14/24 22:12	04/22/24 17:49	7440-36-0	B,J
Arsenic	5.93	mg/kg	1.16	0.116	5	04/14/24 22:12	04/22/24 17:49	7440-38-2	
Barium	62.0	mg/kg	2.89	0.176	5	04/14/24 22:12	04/22/24 17:49	7440-39-3	
Beryllium	0.275J	mg/kg	2.89	0.160	5	04/14/24 22:12	04/22/24 17:49	7440-41-7	J
Cadmium	0.296J	mg/kg	1.16	0.0990	5	04/14/24 22:12	04/22/24 17:49	7440-43-9	J
Calcium	317000	mg/kg	579	87.4	5	04/14/24 22:12	04/22/24 17:49	7440-70-2	
Chromium	9.40	mg/kg	5.79	0.343	5	04/14/24 22:12	04/22/24 17:49	7440-47-3	
Cobalt	3.36	mg/kg	1.16	0.0535	5	04/14/24 22:12	04/22/24 17:49	7440-48-4	
Copper	6.23	mg/kg	5.79	0.153	5	04/14/24 22:12	04/22/24 17:49	7440-50-8	
Iron	11300	mg/kg	57.9	10.4	5	04/14/24 22:12	04/22/24 17:49	7439-89-6	
Lead	7.71	mg/kg	2.32	0.115	5	04/14/24 22:12	04/22/24 17:49	7439-92-1	
Magnesium	9320	mg/kg	579	53.1	5	04/14/24 22:12	04/22/24 17:49	7439-95-4	
Manganese	716	mg/kg	2.89	0.310	5	04/14/24 22:12	04/22/24 17:49	7439-96-5	
Molybdenum	2.32J	mg/kg	2.89	0.117	5	04/14/24 22:12	04/22/24 17:49	7439-98-7	J
Nickel	13.9	mg/kg	2.89	0.228	5	04/14/24 22:12	04/22/24 17:49	7440-02-0	
Potassium	1240	mg/kg	579	78.7	5	04/14/24 22:12	04/22/24 17:49	7440-09-7	
Selenium	0.742J	mg/kg	2.89	0.208	5	04/14/24 22:12	04/22/24 17:49	7782-49-2	J
Silver	<0.100	mg/kg	0.579	0.100	5	04/14/24 22:12	04/22/24 17:49	7440-22-4	
Sodium	181J	mg/kg	579	88.6	5	04/14/24 22:12	04/22/24 17:49	7440-23-5	J
Thallium	0.110J	mg/kg	2.32	0.0753	5	04/14/24 22:12	04/22/24 17:49	7440-28-0	J
Vanadium	12.7	mg/kg	2.89	0.217	5	04/14/24 22:12	04/22/24 17:49	7440-62-2	
Zinc	24.6J	mg/kg	28.9	0.857	5	04/14/24 22:12	04/22/24 17:49	7440-66-6	J
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0208	mg/kg	0.0463	0.0208	1	04/11/24 16:52	04/12/24 09:24	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<79.1	ug/kg	368	79.1	1	04/10/24 14:25	04/12/24 12:30	83-32-9	
Acenaphthylene	<60.2	ug/kg	368	60.2	1	04/10/24 14:25	04/12/24 12:30	208-96-8	
Anthracene	<77.0	ug/kg	368	77.0	1	04/10/24 14:25	04/12/24 12:30	120-12-7	
Benzo(a)anthracene	<77.9	ug/kg	368	77.9	1	04/10/24 14:25	04/12/24 12:30	56-55-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS02/SS-1 Lab ID: 60450516003 Collected: 04/08/24 11:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>		Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Benzo(a)pyrene	<79.2	ug/kg	368	79.2	1	04/10/24 14:25	04/12/24 12:30	50-32-8	
Benzo(b)fluoranthene	<89.8	ug/kg	368	89.8	1	04/10/24 14:25	04/12/24 12:30	205-99-2	
Benzo(g,h,i)perylene	<63.9	ug/kg	368	63.9	1	04/10/24 14:25	04/12/24 12:30	191-24-2	
Benzo(k)fluoranthene	<79.2	ug/kg	368	79.2	1	04/10/24 14:25	04/12/24 12:30	207-08-9	
Benzoic Acid	<201	ug/kg	1860	201	1	04/10/24 14:25	04/12/24 12:30	65-85-0	
Benzyl alcohol	<67.6	ug/kg	736	67.6	1	04/10/24 14:25	04/12/24 12:30	100-51-6	
4-Bromophenylphenyl ether	<79.4	ug/kg	368	79.4	1	04/10/24 14:25	04/12/24 12:30	101-55-3	
Butylbenzylphthalate	<75.0	ug/kg	368	75.0	1	04/10/24 14:25	04/12/24 12:30	85-68-7	
Carbazole	<75.7	ug/kg	368	75.7	1	04/10/24 14:25	04/12/24 12:30	86-74-8	
4-Chloro-3-methylphenol	<77.2	ug/kg	736	77.2	1	04/10/24 14:25	04/12/24 12:30	59-50-7	
4-Chloroaniline	<57.7	ug/kg	736	57.7	1	04/10/24 14:25	04/12/24 12:30	106-47-8	
bis(2-Chloroethoxy)methane	<73.2	ug/kg	368	73.2	1	04/10/24 14:25	04/12/24 12:30	111-91-1	
bis(2-Chloroethyl) ether	<74.3	ug/kg	368	74.3	1	04/10/24 14:25	04/12/24 12:30	111-44-4	
bis(2-Chloroisopropyl) ether	<79.8	ug/kg	368	79.8	1	04/10/24 14:25	04/12/24 12:30	108-60-1	
2-Chloronaphthalene	<77.5	ug/kg	368	77.5	1	04/10/24 14:25	04/12/24 12:30	91-58-7	
2-Chlorophenol	<75.2	ug/kg	368	75.2	1	04/10/24 14:25	04/12/24 12:30	95-57-8	
4-Chlorophenylphenyl ether	<79.0	ug/kg	368	79.0	1	04/10/24 14:25	04/12/24 12:30	7005-72-3	
Chrysene	<82.0	ug/kg	368	82.0	1	04/10/24 14:25	04/12/24 12:30	218-01-9	
Dibenz(a,h)anthracene	<66.1	ug/kg	368	66.1	1	04/10/24 14:25	04/12/24 12:30	53-70-3	
Dibenzofuran	<78.6	ug/kg	368	78.6	1	04/10/24 14:25	04/12/24 12:30	132-64-9	
1,2-Dichlorobenzene	<73.3	ug/kg	368	73.3	1	04/10/24 14:25	04/12/24 12:30	95-50-1	
1,3-Dichlorobenzene	<71.9	ug/kg	368	71.9	1	04/10/24 14:25	04/12/24 12:30	541-73-1	
1,4-Dichlorobenzene	<70.9	ug/kg	368	70.9	1	04/10/24 14:25	04/12/24 12:30	106-46-7	
3,3'-Dichlorobenzidine	<36.1	ug/kg	736	36.1	1	04/10/24 14:25	04/12/24 12:30	91-94-1	
2,4-Dichlorophenol	<73.7	ug/kg	368	73.7	1	04/10/24 14:25	04/12/24 12:30	120-83-2	
Diethylphthalate	<84.1	ug/kg	368	84.1	1	04/10/24 14:25	04/12/24 12:30	84-66-2	
2,4-Dimethylphenol	<53.5	ug/kg	368	53.5	1	04/10/24 14:25	04/12/24 12:30	105-67-9	
Dimethylphthalate	<76.4	ug/kg	368	76.4	1	04/10/24 14:25	04/12/24 12:30	131-11-3	
Di-n-butylphthalate	<87.1	ug/kg	368	87.1	1	04/10/24 14:25	04/12/24 12:30	84-74-2	
4,6-Dinitro-2-methylphenol	<63.7	ug/kg	1860	63.7	1	04/10/24 14:25	04/12/24 12:30	534-52-1	
2,4-Dinitrophenol	<111	ug/kg	1860	111	1	04/10/24 14:25	04/12/24 12:30	51-28-5	
2,4-Dinitrotoluene	<82.9	ug/kg	368	82.9	1	04/10/24 14:25	04/12/24 12:30	121-14-2	
2,6-Dinitrotoluene	<71.7	ug/kg	368	71.7	1	04/10/24 14:25	04/12/24 12:30	606-20-2	
Di-n-octylphthalate	<89.6	ug/kg	368	89.6	1	04/10/24 14:25	04/12/24 12:30	117-84-0	
bis(2-Ethylhexyl)phthalate	<82.7	ug/kg	368	82.7	1	04/10/24 14:25	04/12/24 12:30	117-81-7	
Fluoranthene	<81.1	ug/kg	368	81.1	1	04/10/24 14:25	04/12/24 12:30	206-44-0	
Fluorene	<78.3	ug/kg	368	78.3	1	04/10/24 14:25	04/12/24 12:30	86-73-7	
Hexachloro-1,3-butadiene	<78.9	ug/kg	368	78.9	1	04/10/24 14:25	04/12/24 12:30	87-68-3	
Hexachlorobenzene	<77.0	ug/kg	368	77.0	1	04/10/24 14:25	04/12/24 12:30	118-74-1	
Hexachlorocyclopentadiene	<226	ug/kg	368	226	1	04/10/24 14:25	04/12/24 12:30	77-47-4	
Hexachloroethane	<67.5	ug/kg	368	67.5	1	04/10/24 14:25	04/12/24 12:30	67-72-1	
Indeno(1,2,3-cd)pyrene	<75.3	ug/kg	368	75.3	1	04/10/24 14:25	04/12/24 12:30	193-39-5	
Isophorone	<71.2	ug/kg	368	71.2	1	04/10/24 14:25	04/12/24 12:30	78-59-1	
2-Methylnaphthalene	<74.6	ug/kg	368	74.6	1	04/10/24 14:25	04/12/24 12:30	91-57-6	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS02/SS-1 Lab ID: 60450516003 Collected: 04/08/24 11:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<67.0	ug/kg	368	67.0	1	04/10/24 14:25	04/12/24 12:30	95-48-7	
3&4-Methylphenol(m&p Cresol)	<68.4	ug/kg	368	68.4	1	04/10/24 14:25	04/12/24 12:30	15831-10-4	
Naphthalene	<79.2	ug/kg	368	79.2	1	04/10/24 14:25	04/12/24 12:30	91-20-3	
2-Nitroaniline	<61.0	ug/kg	736	61.0	1	04/10/24 14:25	04/12/24 12:30	88-74-4	
3-Nitroaniline	<57.3	ug/kg	736	57.3	1	04/10/24 14:25	04/12/24 12:30	99-09-2	
4-Nitroaniline	<63.0	ug/kg	736	63.0	1	04/10/24 14:25	04/12/24 12:30	100-01-6	
Nitrobenzene	<78.0	ug/kg	368	78.0	1	04/10/24 14:25	04/12/24 12:30	98-95-3	
2-Nitrophenol	<57.6	ug/kg	368	57.6	1	04/10/24 14:25	04/12/24 12:30	88-75-5	
4-Nitrophenol	<54.2	ug/kg	1860	54.2	1	04/10/24 14:25	04/12/24 12:30	100-02-7	
N-Nitroso-di-n-propylamine	<70.2	ug/kg	368	70.2	1	04/10/24 14:25	04/12/24 12:30	621-64-7	
N-Nitrosodiphenylamine	<73.2	ug/kg	368	73.2	1	04/10/24 14:25	04/12/24 12:30	86-30-6	
Pentachlorophenol	<122	ug/kg	1860	122	1	04/10/24 14:25	04/12/24 12:30	87-86-5	
Phenanthrene	<78.6	ug/kg	368	78.6	1	04/10/24 14:25	04/12/24 12:30	85-01-8	
Phenol	<69.3	ug/kg	368	69.3	1	04/10/24 14:25	04/12/24 12:30	108-95-2	
Pyrene	<78.5	ug/kg	368	78.5	1	04/10/24 14:25	04/12/24 12:30	129-00-0	
Pyridine	<54.5	ug/kg	368	54.5	1	04/10/24 14:25	04/12/24 12:30	110-86-1	
1,2,4-Trichlorobenzene	<77.1	ug/kg	368	77.1	1	04/10/24 14:25	04/12/24 12:30	120-82-1	
2,4,5-Trichlorophenol	<75.4	ug/kg	368	75.4	1	04/10/24 14:25	04/12/24 12:30	95-95-4	
2,4,6-Trichlorophenol	<68.0	ug/kg	368	68.0	1	04/10/24 14:25	04/12/24 12:30	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	61	%	30-120		1	04/10/24 14:25	04/12/24 12:30	4165-60-0	
2-Fluorobiphenyl (S)	55	%	40-120		1	04/10/24 14:25	04/12/24 12:30	321-60-8	
Terphenyl-d14 (S)	59	%	45-120		1	04/10/24 14:25	04/12/24 12:30	1718-51-0	
Phenol-d6 (S)	63	%	40-120		1	04/10/24 14:25	04/12/24 12:30	13127-88-3	
2-Fluorophenol (S)	60	%	40-120		1	04/10/24 14:25	04/12/24 12:30	367-12-4	
2,4,6-Tribromophenol (S)	62	%	35-120		1	04/10/24 14:25	04/12/24 12:30	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	31.3	mg/kg	16.8	5.7	1	04/11/24 13:51	04/12/24 11:43		
TPH-DRO	7.9J	mg/kg	16.8	5.7	1	04/11/24 13:51	04/12/24 11:43		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	79	%	35-120		1	04/11/24 13:51	04/12/24 11:43	4165-60-0	
2-Fluorobiphenyl (S)	88	%	50-120		1	04/11/24 13:51	04/12/24 11:43	321-60-8	
Terphenyl-d14 (S)	89	%	45-120		1	04/11/24 13:51	04/12/24 11:43	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<69.2	ug/kg	72.5	69.2	1	04/10/24 09:05	04/10/24 13:05	67-64-1	
Benzene	<0.53	ug/kg	5.8	0.53	1	04/10/24 09:05	04/10/24 13:05	71-43-2	
Bromobenzene	<0.72	ug/kg	5.8	0.72	1	04/10/24 09:05	04/10/24 13:05	108-86-1	
Bromochloromethane	<0.86	ug/kg	5.8	0.86	1	04/10/24 09:05	04/10/24 13:05	74-97-5	
Bromodichloromethane	<0.97	ug/kg	15.0	0.97	1	04/10/24 09:05	04/10/24 13:05	75-27-4	
Bromoform	<0.45	ug/kg	15.0	0.45	1	04/10/24 09:05	04/10/24 13:05	75-25-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS02/SS-1 Lab ID: 60450516003 Collected: 04/08/24 11:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<7.1	ug/kg	15.0	7.1	1	04/10/24 09:05	04/10/24 13:05	74-83-9	
2-Butanone (MEK)	<36.7	ug/kg	72.5	36.7	1	04/10/24 09:05	04/10/24 13:05	78-93-3	
n-Butylbenzene	<0.55	ug/kg	5.8	0.55	1	04/10/24 09:05	04/10/24 13:05	104-51-8	
sec-Butylbenzene	<0.57	ug/kg	5.8	0.57	1	04/10/24 09:05	04/10/24 13:05	135-98-8	
tert-Butylbenzene	<0.37	ug/kg	5.8	0.37	1	04/10/24 09:05	04/10/24 13:05	98-06-6	
Carbon disulfide	<2.7	ug/kg	5.8	2.7	1	04/10/24 09:05	04/10/24 13:05	75-15-0	
Carbon tetrachloride	<1.9	ug/kg	5.8	1.9	1	04/10/24 09:05	04/10/24 13:05	56-23-5	
Chlorobenzene	<0.34	ug/kg	5.8	0.34	1	04/10/24 09:05	04/10/24 13:05	108-90-7	
Chloroethane	<9.5	ug/kg	28.8	9.5	1	04/10/24 09:05	04/10/24 13:05	75-00-3	
Chloroform	<2.1	ug/kg	5.8	2.1	1	04/10/24 09:05	04/10/24 13:05	67-66-3	
Chloromethane	<1.4	ug/kg	15.0	1.4	1	04/10/24 09:05	04/10/24 13:05	74-87-3	
2-Chlorotoluene	<0.80	ug/kg	5.8	0.80	1	04/10/24 09:05	04/10/24 13:05	95-49-8	
4-Chlorotoluene	<0.45	ug/kg	5.8	0.45	1	04/10/24 09:05	04/10/24 13:05	106-43-4	
1,2-Dibromo-3-chloropropane	<3.8	ug/kg	15.0	3.8	1	04/10/24 09:05	04/10/24 13:05	96-12-8	
Dibromochloromethane	<0.35	ug/kg	5.8	0.35	1	04/10/24 09:05	04/10/24 13:05	124-48-1	
1,2-Dibromoethane (EDB)	<0.61	ug/kg	5.8	0.61	1	04/10/24 09:05	04/10/24 13:05	106-93-4	
Dibromomethane	<1.7	ug/kg	5.8	1.7	1	04/10/24 09:05	04/10/24 13:05	74-95-3	
1,2-Dichlorobenzene	<0.96	ug/kg	5.8	0.96	1	04/10/24 09:05	04/10/24 13:05	95-50-1	
1,3-Dichlorobenzene	<0.73	ug/kg	5.8	0.73	1	04/10/24 09:05	04/10/24 13:05	541-73-1	
1,4-Dichlorobenzene	<1.0	ug/kg	5.8	1.0	1	04/10/24 09:05	04/10/24 13:05	106-46-7	
Dichlorodifluoromethane	<1.1	ug/kg	15.0	1.1	1	04/10/24 09:05	04/10/24 13:05	75-71-8	
1,1-Dichloroethane	<1.3	ug/kg	5.8	1.3	1	04/10/24 09:05	04/10/24 13:05	75-34-3	
1,2-Dichloroethane	<1.1	ug/kg	5.8	1.1	1	04/10/24 09:05	04/10/24 13:05	107-06-2	
1,2-Dichloroethene (Total)	<2.2	ug/kg	11.5	2.2	1	04/10/24 09:05	04/10/24 13:05	540-59-0	
1,1-Dichloroethene	<2.3	ug/kg	5.8	2.3	1	04/10/24 09:05	04/10/24 13:05	75-35-4	
cis-1,2-Dichloroethene	<1.1	ug/kg	5.8	1.1	1	04/10/24 09:05	04/10/24 13:05	156-59-2	
trans-1,2-Dichloroethene	<1.3	ug/kg	5.8	1.3	1	04/10/24 09:05	04/10/24 13:05	156-60-5	
1,2-Dichloropropane	<1.2	ug/kg	5.8	1.2	1	04/10/24 09:05	04/10/24 13:05	78-87-5	
1,3-Dichloropropane	<0.22	ug/kg	5.8	0.22	1	04/10/24 09:05	04/10/24 13:05	142-28-9	
2,2-Dichloropropane	<1.7	ug/kg	5.8	1.7	1	04/10/24 09:05	04/10/24 13:05	594-20-7	
1,1-Dichloropropene	<1.2	ug/kg	5.8	1.2	1	04/10/24 09:05	04/10/24 13:05	563-58-6	
cis-1,3-Dichloropropene	<0.86	ug/kg	5.8	0.86	1	04/10/24 09:05	04/10/24 13:05	10061-01-5	
trans-1,3-Dichloropropene	<0.69	ug/kg	5.8	0.69	1	04/10/24 09:05	04/10/24 13:05	10061-02-6	
Ethylbenzene	<1.0	ug/kg	5.8	1.0	1	04/10/24 09:05	04/10/24 13:05	100-41-4	
Hexachloro-1,3-butadiene	<1.0	ug/kg	5.8	1.0	1	04/10/24 09:05	04/10/24 13:05	87-68-3	
2-Hexanone	<12.0	ug/kg	72.5	12.0	1	04/10/24 09:05	04/10/24 13:05	591-78-6	
Isopropylbenzene (Cumene)	<0.36	ug/kg	5.8	0.36	1	04/10/24 09:05	04/10/24 13:05	98-82-8	
p-Isopropyltoluene	<0.50	ug/kg	5.8	0.50	1	04/10/24 09:05	04/10/24 13:05	99-87-6	
Methylene Chloride	<22.3	ug/kg	28.8	22.3	1	04/10/24 09:05	04/10/24 13:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	<8.1	ug/kg	72.5	8.1	1	04/10/24 09:05	04/10/24 13:05	108-10-1	
Methyl-tert-butyl ether	<1.1	ug/kg	5.8	1.1	1	04/10/24 09:05	04/10/24 13:05	1634-04-4	
Naphthalene	<0.84	ug/kg	11.5	0.84	1	04/10/24 09:05	04/10/24 13:05	91-20-3	
n-Propylbenzene	<0.70	ug/kg	5.8	0.70	1	04/10/24 09:05	04/10/24 13:05	103-65-1	
Styrene	<0.47	ug/kg	5.8	0.47	1	04/10/24 09:05	04/10/24 13:05	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS02/SS-1 Lab ID: 60450516003 Collected: 04/08/24 11:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<0.82	ug/kg	5.8	0.82	1	04/10/24 09:05	04/10/24 13:05	630-20-6	
1,1,2,2-Tetrachloroethane	<0.81	ug/kg	5.8	0.81	1	04/10/24 09:05	04/10/24 13:05	79-34-5	
Tetrachloroethene	<0.61	ug/kg	5.8	0.61	1	04/10/24 09:05	04/10/24 13:05	127-18-4	
Toluene	<5.1	ug/kg	23.0	5.1	1	04/10/24 09:05	04/10/24 13:05	108-88-3	
1,2,3-Trichlorobenzene	<0.67	ug/kg	5.8	0.67	1	04/10/24 09:05	04/10/24 13:05	87-61-6	
1,2,4-Trichlorobenzene	<0.56	ug/kg	5.8	0.56	1	04/10/24 09:05	04/10/24 13:05	120-82-1	
1,1,1-Trichloroethane	<1.2	ug/kg	5.8	1.2	1	04/10/24 09:05	04/10/24 13:05	71-55-6	
1,1,2-Trichloroethane	<0.82	ug/kg	5.8	0.82	1	04/10/24 09:05	04/10/24 13:05	79-00-5	
Trichloroethene	<2.2	ug/kg	5.8	2.2	1	04/10/24 09:05	04/10/24 13:05	79-01-6	
Trichlorofluoromethane	<11.1	ug/kg	15.0	11.1	1	04/10/24 09:05	04/10/24 13:05	75-69-4	
1,2,3-Trichloropropane	<1.8	ug/kg	5.8	1.8	1	04/10/24 09:05	04/10/24 13:05	96-18-4	
1,2,4-Trimethylbenzene	1.0J	ug/kg	5.8	0.79	1	04/10/24 09:05	04/10/24 13:05	95-63-6	
1,3,5-Trimethylbenzene	0.60J	ug/kg	5.8	0.50	1	04/10/24 09:05	04/10/24 13:05	108-67-8	
Vinyl chloride	<1.1	ug/kg	15.0	1.1	1	04/10/24 09:05	04/10/24 13:05	75-01-4	
Xylene (Total)	<4.2	ug/kg	17.3	4.2	1	04/10/24 09:05	04/10/24 13:05	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	109	%	80-120		1	04/10/24 09:05	04/10/24 13:05	2037-26-5	
4-Bromofluorobenzene (S)	101	%	83-119		1	04/10/24 09:05	04/10/24 13:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/10/24 09:05	04/10/24 13:05	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.068	mg/kg	0.50	0.068	1	04/11/24 07:56	04/11/24 11:15		
<b>Surrogates</b>									
Toluene-d8 (S)	105	%	78-122		1	04/11/24 07:56	04/11/24 11:15	2037-26-5	
4-Bromofluorobenzene (S)	117	%	69-133		1	04/11/24 07:56	04/11/24 11:15	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/11/24 07:56	04/11/24 11:15	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	11.3	%	0.50	0.50	1		04/10/24 15:42		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	86.4	%			1	04/12/24 11:09	04/12/24 11:20		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<0.93	mg/kg	1.2	0.93	1	04/15/24 09:34	04/16/24 15:11	7664-41-7	L2
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.12	mg/kg	0.16	0.12	1	04/18/24 08:30	04/18/24 11:33	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS02/SS-1** Lab ID: **60450516003** Collected: 04/08/24 11:00 Received: 04/08/24 17:34 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<6.2	mg/kg	11.0	6.2	10	05/08/24 13:35	05/09/24 09:13	14797-55-8	H2
Nitrite as N	<5.7	mg/kg	11.0	5.7	10	05/08/24 13:35	05/09/24 09:13	14797-65-0	H2

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: DUP-01 Lab ID: 60450516004 Collected: 04/08/24 00:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00413	mg/kg	0.0220	0.00413	1	04/16/24 18:02	04/17/24 03:01	309-00-2	
alpha-BHC	<0.00404	mg/kg	0.0220	0.00404	1	04/16/24 18:02	04/17/24 03:01	319-84-6	
beta-BHC	<0.00416	mg/kg	0.0220	0.00416	1	04/16/24 18:02	04/17/24 03:01	319-85-7	
delta-BHC	<0.00380	mg/kg	0.0220	0.00380	1	04/16/24 18:02	04/17/24 03:01	319-86-8	
gamma-BHC (Lindane)	<0.00378	mg/kg	0.0220	0.00378	1	04/16/24 18:02	04/17/24 03:01	58-89-9	
Chlordane (Technical)	<0.113	mg/kg	0.330	0.113	1	04/16/24 18:02	04/17/24 03:01	57-74-9	
4,4'-DDD	<0.00406	mg/kg	0.0220	0.00406	1	04/16/24 18:02	04/17/24 03:01	72-54-8	
4,4'-DDE	<0.00402	mg/kg	0.0220	0.00402	1	04/16/24 18:02	04/17/24 03:01	72-55-9	
4,4'-DDT	<0.00689	mg/kg	0.0220	0.00689	1	04/16/24 18:02	04/17/24 03:01	50-29-3	
Dieldrin	<0.00378	mg/kg	0.0220	0.00378	1	04/16/24 18:02	04/17/24 03:01	60-57-1	
Endosulfan I	<0.00399	mg/kg	0.0220	0.00399	1	04/16/24 18:02	04/17/24 03:01	959-98-8	
Endosulfan II	<0.00368	mg/kg	0.0220	0.00368	1	04/16/24 18:02	04/17/24 03:01	33213-65-9	
Endosulfan sulfate	<0.00400	mg/kg	0.0220	0.00400	1	04/16/24 18:02	04/17/24 03:01	1031-07-8	
Endrin	<0.00384	mg/kg	0.0220	0.00384	1	04/16/24 18:02	04/17/24 03:01	72-20-8	LO
Endrin aldehyde	<0.00372	mg/kg	0.0220	0.00372	1	04/16/24 18:02	04/17/24 03:01	7421-93-4	
Endrin ketone	<0.00781	mg/kg	0.0220	0.00781	1	04/16/24 18:02	04/17/24 03:01	53494-70-5	
Hexachlorobenzene	<0.00380	mg/kg	0.0220	0.00380	1	04/16/24 18:02	04/17/24 03:01	118-74-1	
Heptachlor	<0.00470	mg/kg	0.0220	0.00470	1	04/16/24 18:02	04/17/24 03:01	76-44-8	
Heptachlor epoxide	<0.00372	mg/kg	0.0220	0.00372	1	04/16/24 18:02	04/17/24 03:01	1024-57-3	
Methoxychlor	<0.00532	mg/kg	0.0220	0.00532	1	04/16/24 18:02	04/17/24 03:01	72-43-5	
Toxaphene	<0.136	mg/kg	0.439	0.136	1	04/16/24 18:02	04/17/24 03:01	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	48.8	%	10.0-135		1	04/16/24 18:02	04/17/24 03:01	2051-24-3	
Tetrachloro-m-xylene (S)	67.2	%	10.0-139		1	04/16/24 18:02	04/17/24 03:01	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00771	mg/kg	0.0769	0.00771	1	04/15/24 13:10	04/16/24 17:21	94-75-7	
Dalapon	<0.0124	mg/kg	0.0769	0.0124	1	04/15/24 13:10	04/16/24 17:21	127-20-8	
2,4-DB	<0.0326	mg/kg	0.0769	0.0326	1	04/15/24 13:10	04/16/24 17:21	94-82-6	
Dicamba	<0.0172	mg/kg	0.0769	0.0172	1	04/15/24 13:10	04/16/24 17:21	1918-00-9	
Dichlorprop	<0.0269	mg/kg	0.0769	0.0269	1	04/15/24 13:10	04/16/24 17:21	120-36-5	
Dinoseb	<0.00766	mg/kg	0.0769	0.00766	1	04/15/24 13:10	04/16/24 17:21	88-85-7	
MCPA	<0.487	mg/kg	7.14	0.487	1	04/15/24 13:10	04/16/24 17:21	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.403	mg/kg	7.14	0.403	1	04/15/24 13:10	04/16/24 17:21	93-65-2	
2,4,5-T	<0.00936	mg/kg	0.0769	0.00936	1	04/15/24 13:10	04/16/24 17:21	93-76-5	
2,4,5-TP (Silvex)	<0.0118	mg/kg	0.0769	0.0118	1	04/15/24 13:10	04/16/24 17:21	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	68.5	%	22.0-132		1	04/15/24 13:10	04/16/24 17:21	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.1	ug/kg	37.6	10.1	1	04/11/24 15:53	04/15/24 12:55	12674-11-2	
PCB-1221 (Aroclor 1221)	<12.7	ug/kg	37.6	12.7	1	04/11/24 15:53	04/15/24 12:55	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: DUP-01 Lab ID: 60450516004 Collected: 04/08/24 00:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<12.7	ug/kg	37.6	12.7	1	04/11/24 15:53	04/15/24 12:55	11141-16-5	
PCB-1242 (Aroclor 1242)	<12.7	ug/kg	37.6	12.7	1	04/11/24 15:53	04/15/24 12:55	53469-21-9	
PCB-1248 (Aroclor 1248)	<12.7	ug/kg	37.6	12.7	1	04/11/24 15:53	04/15/24 12:55	12672-29-6	
PCB-1254 (Aroclor 1254)	<12.7	ug/kg	37.6	12.7	1	04/11/24 15:53	04/15/24 12:55	11097-69-1	
PCB-1260 (Aroclor 1260)	<12.7	ug/kg	37.6	12.7	1	04/11/24 15:53	04/15/24 12:55	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	82	%	20-120		1	04/11/24 15:53	04/15/24 12:55	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	6720	mg/kg	54.9	7.58	5	04/15/24 09:27	04/17/24 22:10	7429-90-5	
Antimony	0.672J	mg/kg	3.30	0.182	5	04/15/24 09:27	04/17/24 22:10	7440-36-0	B,J
Arsenic	6.52	mg/kg	1.10	0.110	5	04/15/24 09:27	04/17/24 22:10	7440-38-2	
Barium	66.3	mg/kg	2.75	0.167	5	04/15/24 09:27	04/17/24 22:10	7440-39-3	
Beryllium	0.423J	mg/kg	2.75	0.152	5	04/15/24 09:27	04/17/24 22:10	7440-41-7	J
Cadmium	0.164J	mg/kg	1.10	0.0939	5	04/15/24 09:27	04/17/24 22:10	7440-43-9	J
Calcium	297000	mg/kg	549	82.9	5	04/15/24 09:27	04/17/24 22:10	7440-70-2	
Chromium	12.9	mg/kg	5.49	0.325	5	04/15/24 09:27	04/17/24 22:10	7440-47-3	
Cobalt	4.03	mg/kg	1.10	0.0508	5	04/15/24 09:27	04/17/24 22:10	7440-48-4	
Copper	7.38	mg/kg	5.49	0.145	5	04/15/24 09:27	04/17/24 22:10	7440-50-8	
Iron	13400	mg/kg	54.9	9.83	5	04/15/24 09:27	04/17/24 22:10	7439-89-6	
Lead	21.5	mg/kg	2.20	0.109	5	04/15/24 09:27	04/17/24 22:10	7439-92-1	
Magnesium	8730	mg/kg	549	50.4	5	04/15/24 09:27	04/17/24 22:10	7439-95-4	
Manganese	802	mg/kg	2.75	0.294	5	04/15/24 09:27	04/17/24 22:10	7439-96-5	
Molybdenum	2.95	mg/kg	2.75	0.111	5	04/15/24 09:27	04/17/24 22:10	7439-98-7	
Nickel	15.7	mg/kg	2.75	0.216	5	04/15/24 09:27	04/17/24 22:10	7440-02-0	
Potassium	1880	mg/kg	549	74.7	5	04/15/24 09:27	04/17/24 22:10	7440-09-7	
Selenium	0.674J	mg/kg	2.75	0.198	5	04/15/24 09:27	04/17/24 22:10	7782-49-2	J
Silver	<0.0950	mg/kg	0.549	0.0950	5	04/15/24 09:27	04/17/24 22:10	7440-22-4	
Sodium	178J	mg/kg	549	84.0	5	04/15/24 09:27	04/17/24 22:10	7440-23-5	J
Thallium	0.143J	mg/kg	2.20	0.0714	5	04/15/24 09:27	04/17/24 22:10	7440-28-0	J
Vanadium	17.5	mg/kg	2.75	0.205	5	04/15/24 09:27	04/17/24 22:10	7440-62-2	
Zinc	21.2J	mg/kg	27.5	0.813	5	04/15/24 09:27	04/17/24 22:10	7440-66-6	J
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0198	mg/kg	0.0439	0.0198	1	04/11/24 16:52	04/12/24 09:26	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<81.3	ug/kg	378	81.3	1	04/10/24 14:25	04/12/24 12:52	83-32-9	
Acenaphthylene	<61.9	ug/kg	378	61.9	1	04/10/24 14:25	04/12/24 12:52	208-96-8	
Anthracene	<79.1	ug/kg	378	79.1	1	04/10/24 14:25	04/12/24 12:52	120-12-7	
Benzo(a)anthracene	<80.1	ug/kg	378	80.1	1	04/10/24 14:25	04/12/24 12:52	56-55-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: DUP-01 Lab ID: 60450516004 Collected: 04/08/24 00:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<81.4	ug/kg	378	81.4	1	04/10/24 14:25	04/12/24 12:52	50-32-8	
Benzo(b)fluoranthene	<92.3	ug/kg	378	92.3	1	04/10/24 14:25	04/12/24 12:52	205-99-2	
Benzo(g,h,i)perylene	<65.7	ug/kg	378	65.7	1	04/10/24 14:25	04/12/24 12:52	191-24-2	
Benzo(k)fluoranthene	<81.4	ug/kg	378	81.4	1	04/10/24 14:25	04/12/24 12:52	207-08-9	
Benzoic Acid	<206	ug/kg	1920	206	1	04/10/24 14:25	04/12/24 12:52	65-85-0	
Benzyl alcohol	<69.5	ug/kg	757	69.5	1	04/10/24 14:25	04/12/24 12:52	100-51-6	
4-Bromophenylphenyl ether	<81.7	ug/kg	378	81.7	1	04/10/24 14:25	04/12/24 12:52	101-55-3	
Butylbenzylphthalate	<77.1	ug/kg	378	77.1	1	04/10/24 14:25	04/12/24 12:52	85-68-7	
Carbazole	<77.9	ug/kg	378	77.9	1	04/10/24 14:25	04/12/24 12:52	86-74-8	
4-Chloro-3-methylphenol	<79.4	ug/kg	757	79.4	1	04/10/24 14:25	04/12/24 12:52	59-50-7	
4-Chloroaniline	<59.3	ug/kg	757	59.3	1	04/10/24 14:25	04/12/24 12:52	106-47-8	
bis(2-Chloroethoxy)methane	<75.2	ug/kg	378	75.2	1	04/10/24 14:25	04/12/24 12:52	111-91-1	
bis(2-Chloroethyl) ether	<76.4	ug/kg	378	76.4	1	04/10/24 14:25	04/12/24 12:52	111-44-4	
bis(2-Chloroisopropyl) ether	<82.0	ug/kg	378	82.0	1	04/10/24 14:25	04/12/24 12:52	108-60-1	
2-Chloronaphthalene	<79.7	ug/kg	378	79.7	1	04/10/24 14:25	04/12/24 12:52	91-58-7	
2-Chlorophenol	<77.3	ug/kg	378	77.3	1	04/10/24 14:25	04/12/24 12:52	95-57-8	
4-Chlorophenylphenyl ether	<81.2	ug/kg	378	81.2	1	04/10/24 14:25	04/12/24 12:52	7005-72-3	
Chrysene	<84.3	ug/kg	378	84.3	1	04/10/24 14:25	04/12/24 12:52	218-01-9	
Dibenz(a,h)anthracene	<68.0	ug/kg	378	68.0	1	04/10/24 14:25	04/12/24 12:52	53-70-3	
Dibenzofuran	<80.9	ug/kg	378	80.9	1	04/10/24 14:25	04/12/24 12:52	132-64-9	
1,2-Dichlorobenzene	<75.3	ug/kg	378	75.3	1	04/10/24 14:25	04/12/24 12:52	95-50-1	
1,3-Dichlorobenzene	<74.0	ug/kg	378	74.0	1	04/10/24 14:25	04/12/24 12:52	541-73-1	
1,4-Dichlorobenzene	<72.9	ug/kg	378	72.9	1	04/10/24 14:25	04/12/24 12:52	106-46-7	
3,3'-Dichlorobenzidine	<37.2	ug/kg	757	37.2	1	04/10/24 14:25	04/12/24 12:52	91-94-1	
2,4-Dichlorophenol	<75.8	ug/kg	378	75.8	1	04/10/24 14:25	04/12/24 12:52	120-83-2	
Diethylphthalate	<86.5	ug/kg	378	86.5	1	04/10/24 14:25	04/12/24 12:52	84-66-2	
2,4-Dimethylphenol	<55.0	ug/kg	378	55.0	1	04/10/24 14:25	04/12/24 12:52	105-67-9	
Dimethylphthalate	<78.6	ug/kg	378	78.6	1	04/10/24 14:25	04/12/24 12:52	131-11-3	
Di-n-butylphthalate	<89.6	ug/kg	378	89.6	1	04/10/24 14:25	04/12/24 12:52	84-74-2	
4,6-Dinitro-2-methylphenol	<65.5	ug/kg	1920	65.5	1	04/10/24 14:25	04/12/24 12:52	534-52-1	
2,4-Dinitrophenol	<114	ug/kg	1920	114	1	04/10/24 14:25	04/12/24 12:52	51-28-5	
2,4-Dinitrotoluene	<85.2	ug/kg	378	85.2	1	04/10/24 14:25	04/12/24 12:52	121-14-2	
2,6-Dinitrotoluene	<73.7	ug/kg	378	73.7	1	04/10/24 14:25	04/12/24 12:52	606-20-2	
Di-n-octylphthalate	<92.1	ug/kg	378	92.1	1	04/10/24 14:25	04/12/24 12:52	117-84-0	
bis(2-Ethylhexyl)phthalate	<85.0	ug/kg	378	85.0	1	04/10/24 14:25	04/12/24 12:52	117-81-7	
Fluoranthene	<83.4	ug/kg	378	83.4	1	04/10/24 14:25	04/12/24 12:52	206-44-0	
Fluorene	<80.5	ug/kg	378	80.5	1	04/10/24 14:25	04/12/24 12:52	86-73-7	
Hexachloro-1,3-butadiene	<81.1	ug/kg	378	81.1	1	04/10/24 14:25	04/12/24 12:52	87-68-3	
Hexachlorobenzene	<79.1	ug/kg	378	79.1	1	04/10/24 14:25	04/12/24 12:52	118-74-1	
Hexachlorocyclopentadiene	<233	ug/kg	378	233	1	04/10/24 14:25	04/12/24 12:52	77-47-4	
Hexachloroethane	<69.4	ug/kg	378	69.4	1	04/10/24 14:25	04/12/24 12:52	67-72-1	
Indeno(1,2,3-cd)pyrene	<77.4	ug/kg	378	77.4	1	04/10/24 14:25	04/12/24 12:52	193-39-5	
Isophorone	<73.2	ug/kg	378	73.2	1	04/10/24 14:25	04/12/24 12:52	78-59-1	
2-Methylnaphthalene	<76.7	ug/kg	378	76.7	1	04/10/24 14:25	04/12/24 12:52	91-57-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: DUP-01 Lab ID: 60450516004 Collected: 04/08/24 00:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<68.9	ug/kg	378	68.9	1	04/10/24 14:25	04/12/24 12:52	95-48-7	
3&4-Methylphenol(m&p Cresol)	<70.3	ug/kg	378	70.3	1	04/10/24 14:25	04/12/24 12:52	15831-10-4	
Naphthalene	<81.4	ug/kg	378	81.4	1	04/10/24 14:25	04/12/24 12:52	91-20-3	
2-Nitroaniline	<62.7	ug/kg	757	62.7	1	04/10/24 14:25	04/12/24 12:52	88-74-4	
3-Nitroaniline	<58.9	ug/kg	757	58.9	1	04/10/24 14:25	04/12/24 12:52	99-09-2	
4-Nitroaniline	<64.8	ug/kg	757	64.8	1	04/10/24 14:25	04/12/24 12:52	100-01-6	
Nitrobenzene	<80.2	ug/kg	378	80.2	1	04/10/24 14:25	04/12/24 12:52	98-95-3	
2-Nitrophenol	<59.2	ug/kg	378	59.2	1	04/10/24 14:25	04/12/24 12:52	88-75-5	
4-Nitrophenol	<55.7	ug/kg	1920	55.7	1	04/10/24 14:25	04/12/24 12:52	100-02-7	
N-Nitroso-di-n-propylamine	<72.1	ug/kg	378	72.1	1	04/10/24 14:25	04/12/24 12:52	621-64-7	
N-Nitrosodiphenylamine	<75.2	ug/kg	378	75.2	1	04/10/24 14:25	04/12/24 12:52	86-30-6	
Pentachlorophenol	<125	ug/kg	1920	125	1	04/10/24 14:25	04/12/24 12:52	87-86-5	
Phenanthrene	<80.9	ug/kg	378	80.9	1	04/10/24 14:25	04/12/24 12:52	85-01-8	
Phenol	<71.2	ug/kg	378	71.2	1	04/10/24 14:25	04/12/24 12:52	108-95-2	
Pyrene	<80.7	ug/kg	378	80.7	1	04/10/24 14:25	04/12/24 12:52	129-00-0	
Pyridine	<56.1	ug/kg	378	56.1	1	04/10/24 14:25	04/12/24 12:52	110-86-1	
1,2,4-Trichlorobenzene	<79.2	ug/kg	378	79.2	1	04/10/24 14:25	04/12/24 12:52	120-82-1	
2,4,5-Trichlorophenol	<77.5	ug/kg	378	77.5	1	04/10/24 14:25	04/12/24 12:52	95-95-4	
2,4,6-Trichlorophenol	<70.0	ug/kg	378	70.0	1	04/10/24 14:25	04/12/24 12:52	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	68	%	30-120		1	04/10/24 14:25	04/12/24 12:52	4165-60-0	
2-Fluorobiphenyl (S)	62	%	40-120		1	04/10/24 14:25	04/12/24 12:52	321-60-8	
Terphenyl-d14 (S)	66	%	45-120		1	04/10/24 14:25	04/12/24 12:52	1718-51-0	
Phenol-d6 (S)	70	%	40-120		1	04/10/24 14:25	04/12/24 12:52	13127-88-3	
2-Fluorophenol (S)	67	%	40-120		1	04/10/24 14:25	04/12/24 12:52	367-12-4	
2,4,6-Tribromophenol (S)	72	%	35-120		1	04/10/24 14:25	04/12/24 12:52	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	25.1	mg/kg	17.0	5.8	1	04/11/24 13:51	04/12/24 12:02		
TPH-DRO	9.8J	mg/kg	17.0	5.8	1	04/11/24 13:51	04/12/24 12:02		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	89	%	35-120		1	04/11/24 13:51	04/12/24 12:02	4165-60-0	
2-Fluorobiphenyl (S)	96	%	50-120		1	04/11/24 13:51	04/12/24 12:02	321-60-8	
Terphenyl-d14 (S)	96	%	45-120		1	04/11/24 13:51	04/12/24 12:02	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<69.1	ug/kg	72.5	69.1	1	04/10/24 09:05	04/10/24 13:25	67-64-1	
Benzene	<0.53	ug/kg	5.8	0.53	1	04/10/24 09:05	04/10/24 13:25	71-43-2	
Bromobenzene	<0.72	ug/kg	5.8	0.72	1	04/10/24 09:05	04/10/24 13:25	108-86-1	
Bromochloromethane	<0.86	ug/kg	5.8	0.86	1	04/10/24 09:05	04/10/24 13:25	74-97-5	
Bromodichloromethane	<0.97	ug/kg	15.0	0.97	1	04/10/24 09:05	04/10/24 13:25	75-27-4	
Bromoform	<0.45	ug/kg	15.0	0.45	1	04/10/24 09:05	04/10/24 13:25	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: DUP-01 Lab ID: 60450516004 Collected: 04/08/24 00:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<7.1	ug/kg	15.0	7.1	1	04/10/24 09:05	04/10/24 13:25	74-83-9	
2-Butanone (MEK)	<36.7	ug/kg	72.5	36.7	1	04/10/24 09:05	04/10/24 13:25	78-93-3	
n-Butylbenzene	<0.55	ug/kg	5.8	0.55	1	04/10/24 09:05	04/10/24 13:25	104-51-8	
sec-Butylbenzene	<0.57	ug/kg	5.8	0.57	1	04/10/24 09:05	04/10/24 13:25	135-98-8	
tert-Butylbenzene	<0.37	ug/kg	5.8	0.37	1	04/10/24 09:05	04/10/24 13:25	98-06-6	
Carbon disulfide	<2.7	ug/kg	5.8	2.7	1	04/10/24 09:05	04/10/24 13:25	75-15-0	
Carbon tetrachloride	<1.9	ug/kg	5.8	1.9	1	04/10/24 09:05	04/10/24 13:25	56-23-5	
Chlorobenzene	<0.34	ug/kg	5.8	0.34	1	04/10/24 09:05	04/10/24 13:25	108-90-7	
Chloroethane	<9.5	ug/kg	28.8	9.5	1	04/10/24 09:05	04/10/24 13:25	75-00-3	
Chloroform	<2.1	ug/kg	5.8	2.1	1	04/10/24 09:05	04/10/24 13:25	67-66-3	
Chloromethane	<1.4	ug/kg	15.0	1.4	1	04/10/24 09:05	04/10/24 13:25	74-87-3	
2-Chlorotoluene	<0.80	ug/kg	5.8	0.80	1	04/10/24 09:05	04/10/24 13:25	95-49-8	
4-Chlorotoluene	<0.45	ug/kg	5.8	0.45	1	04/10/24 09:05	04/10/24 13:25	106-43-4	
1,2-Dibromo-3-chloropropane	<3.8	ug/kg	15.0	3.8	1	04/10/24 09:05	04/10/24 13:25	96-12-8	
Dibromochloromethane	<0.35	ug/kg	5.8	0.35	1	04/10/24 09:05	04/10/24 13:25	124-48-1	
1,2-Dibromoethane (EDB)	<0.61	ug/kg	5.8	0.61	1	04/10/24 09:05	04/10/24 13:25	106-93-4	
Dibromomethane	<1.7	ug/kg	5.8	1.7	1	04/10/24 09:05	04/10/24 13:25	74-95-3	
1,2-Dichlorobenzene	<0.96	ug/kg	5.8	0.96	1	04/10/24 09:05	04/10/24 13:25	95-50-1	
1,3-Dichlorobenzene	<0.73	ug/kg	5.8	0.73	1	04/10/24 09:05	04/10/24 13:25	541-73-1	
1,4-Dichlorobenzene	<1.0	ug/kg	5.8	1.0	1	04/10/24 09:05	04/10/24 13:25	106-46-7	
Dichlorodifluoromethane	<1.1	ug/kg	15.0	1.1	1	04/10/24 09:05	04/10/24 13:25	75-71-8	
1,1-Dichloroethane	<1.3	ug/kg	5.8	1.3	1	04/10/24 09:05	04/10/24 13:25	75-34-3	
1,2-Dichloroethane	<1.1	ug/kg	5.8	1.1	1	04/10/24 09:05	04/10/24 13:25	107-06-2	
1,2-Dichloroethene (Total)	<2.2	ug/kg	11.5	2.2	1	04/10/24 09:05	04/10/24 13:25	540-59-0	
1,1-Dichloroethene	<2.3	ug/kg	5.8	2.3	1	04/10/24 09:05	04/10/24 13:25	75-35-4	
cis-1,2-Dichloroethene	<1.1	ug/kg	5.8	1.1	1	04/10/24 09:05	04/10/24 13:25	156-59-2	
trans-1,2-Dichloroethene	<1.3	ug/kg	5.8	1.3	1	04/10/24 09:05	04/10/24 13:25	156-60-5	
1,2-Dichloropropane	<1.2	ug/kg	5.8	1.2	1	04/10/24 09:05	04/10/24 13:25	78-87-5	
1,3-Dichloropropane	<0.22	ug/kg	5.8	0.22	1	04/10/24 09:05	04/10/24 13:25	142-28-9	
2,2-Dichloropropane	<1.7	ug/kg	5.8	1.7	1	04/10/24 09:05	04/10/24 13:25	594-20-7	
1,1-Dichloropropene	<1.2	ug/kg	5.8	1.2	1	04/10/24 09:05	04/10/24 13:25	563-58-6	
cis-1,3-Dichloropropene	<0.86	ug/kg	5.8	0.86	1	04/10/24 09:05	04/10/24 13:25	10061-01-5	
trans-1,3-Dichloropropene	<0.69	ug/kg	5.8	0.69	1	04/10/24 09:05	04/10/24 13:25	10061-02-6	
Ethylbenzene	<1.0	ug/kg	5.8	1.0	1	04/10/24 09:05	04/10/24 13:25	100-41-4	
Hexachloro-1,3-butadiene	<1.0	ug/kg	5.8	1.0	1	04/10/24 09:05	04/10/24 13:25	87-68-3	
2-Hexanone	<12.0	ug/kg	72.5	12.0	1	04/10/24 09:05	04/10/24 13:25	591-78-6	
Isopropylbenzene (Cumene)	<0.36	ug/kg	5.8	0.36	1	04/10/24 09:05	04/10/24 13:25	98-82-8	
p-Isopropyltoluene	<0.50	ug/kg	5.8	0.50	1	04/10/24 09:05	04/10/24 13:25	99-87-6	
Methylene Chloride	<22.3	ug/kg	28.8	22.3	1	04/10/24 09:05	04/10/24 13:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	<8.1	ug/kg	72.5	8.1	1	04/10/24 09:05	04/10/24 13:25	108-10-1	
Methyl-tert-butyl ether	<1.1	ug/kg	5.8	1.1	1	04/10/24 09:05	04/10/24 13:25	1634-04-4	
Naphthalene	<0.84	ug/kg	11.5	0.84	1	04/10/24 09:05	04/10/24 13:25	91-20-3	
n-Propylbenzene	<0.70	ug/kg	5.8	0.70	1	04/10/24 09:05	04/10/24 13:25	103-65-1	
Styrene	<0.46	ug/kg	5.8	0.46	1	04/10/24 09:05	04/10/24 13:25	100-42-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: DUP-01 Lab ID: 60450516004 Collected: 04/08/24 00:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<0.82	ug/kg	5.8	0.82	1	04/10/24 09:05	04/10/24 13:25	630-20-6	
1,1,2,2-Tetrachloroethane	<0.81	ug/kg	5.8	0.81	1	04/10/24 09:05	04/10/24 13:25	79-34-5	
Tetrachloroethene	<0.61	ug/kg	5.8	0.61	1	04/10/24 09:05	04/10/24 13:25	127-18-4	
Toluene	<5.1	ug/kg	23.0	5.1	1	04/10/24 09:05	04/10/24 13:25	108-88-3	
1,2,3-Trichlorobenzene	<0.67	ug/kg	5.8	0.67	1	04/10/24 09:05	04/10/24 13:25	87-61-6	
1,2,4-Trichlorobenzene	<0.56	ug/kg	5.8	0.56	1	04/10/24 09:05	04/10/24 13:25	120-82-1	
1,1,1-Trichloroethane	<1.2	ug/kg	5.8	1.2	1	04/10/24 09:05	04/10/24 13:25	71-55-6	
1,1,2-Trichloroethane	<0.82	ug/kg	5.8	0.82	1	04/10/24 09:05	04/10/24 13:25	79-00-5	
Trichloroethene	<2.2	ug/kg	5.8	2.2	1	04/10/24 09:05	04/10/24 13:25	79-01-6	
Trichlorofluoromethane	<11.0	ug/kg	15.0	11.0	1	04/10/24 09:05	04/10/24 13:25	75-69-4	
1,2,3-Trichloropropane	<1.8	ug/kg	5.8	1.8	1	04/10/24 09:05	04/10/24 13:25	96-18-4	
1,2,4-Trimethylbenzene	0.81J	ug/kg	5.8	0.79	1	04/10/24 09:05	04/10/24 13:25	95-63-6	
1,3,5-Trimethylbenzene	<0.50	ug/kg	5.8	0.50	1	04/10/24 09:05	04/10/24 13:25	108-67-8	
Vinyl chloride	<1.1	ug/kg	15.0	1.1	1	04/10/24 09:05	04/10/24 13:25	75-01-4	
Xylene (Total)	<4.2	ug/kg	17.3	4.2	1	04/10/24 09:05	04/10/24 13:25	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	108	%	80-120		1	04/10/24 09:05	04/10/24 13:25	2037-26-5	
4-Bromofluorobenzene (S)	100	%	83-119		1	04/10/24 09:05	04/10/24 13:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/10/24 09:05	04/10/24 13:25	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.073	mg/kg	0.54	0.073	1	04/11/24 07:56	04/11/24 11:30		
<b>Surrogates</b>									
Toluene-d8 (S)	108	%	78-122		1	04/11/24 07:56	04/11/24 11:30	2037-26-5	
4-Bromofluorobenzene (S)	131	%	69-133		1	04/11/24 07:56	04/11/24 11:30	460-00-4	IO
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1	04/11/24 07:56	04/11/24 11:30	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	13.3	%	0.50	0.50	1		04/10/24 15:42		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	91.0	%			1	04/12/24 11:09	04/12/24 11:20		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<0.92	mg/kg	1.2	0.92	1	04/15/24 09:34	04/16/24 15:15	7664-41-7	L2
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.14	mg/kg	0.17	0.14	1	04/18/24 08:30	04/18/24 11:37	57-12-5	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: DUP-01 Lab ID: 60450516004 Collected: 04/08/24 00:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	10.4J	mg/kg	11.3	6.4	10	04/10/24 08:00	04/11/24 17:47	14797-55-8	B
Nitrite as N	<5.9	mg/kg	11.3	5.9	10	04/10/24 08:00	04/11/24 17:47	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS01/SS-1 Lab ID: 60450516005 Collected: 04/08/24 11:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00495	mg/kg	0.0263	0.00495	1	04/16/24 18:02	04/17/24 03:10	309-00-2	
alpha-BHC	<0.00485	mg/kg	0.0263	0.00485	1	04/16/24 18:02	04/17/24 03:10	319-84-6	
beta-BHC	<0.00499	mg/kg	0.0263	0.00499	1	04/16/24 18:02	04/17/24 03:10	319-85-7	
delta-BHC	<0.00456	mg/kg	0.0263	0.00456	1	04/16/24 18:02	04/17/24 03:10	319-86-8	
gamma-BHC (Lindane)	<0.00453	mg/kg	0.0263	0.00453	1	04/16/24 18:02	04/17/24 03:10	58-89-9	
Chlordane (Technical)	<0.136	mg/kg	0.395	0.136	1	04/16/24 18:02	04/17/24 03:10	57-74-9	
4,4'-DDD	<0.00487	mg/kg	0.0263	0.00487	1	04/16/24 18:02	04/17/24 03:10	72-54-8	
4,4'-DDE	<0.00482	mg/kg	0.0263	0.00482	1	04/16/24 18:02	04/17/24 03:10	72-55-9	
4,4'-DDT	<0.00826	mg/kg	0.0263	0.00826	1	04/16/24 18:02	04/17/24 03:10	50-29-3	
Dieldrin	<0.00453	mg/kg	0.0263	0.00453	1	04/16/24 18:02	04/17/24 03:10	60-57-1	
Endosulfan I	<0.00478	mg/kg	0.0263	0.00478	1	04/16/24 18:02	04/17/24 03:10	959-98-8	
Endosulfan II	<0.00441	mg/kg	0.0263	0.00441	1	04/16/24 18:02	04/17/24 03:10	33213-65-9	
Endosulfan sulfate	<0.00479	mg/kg	0.0263	0.00479	1	04/16/24 18:02	04/17/24 03:10	1031-07-8	
Endrin	<0.00461	mg/kg	0.0263	0.00461	1	04/16/24 18:02	04/17/24 03:10	72-20-8	LO
Endrin aldehyde	<0.00447	mg/kg	0.0263	0.00447	1	04/16/24 18:02	04/17/24 03:10	7421-93-4	
Endrin ketone	<0.00937	mg/kg	0.0263	0.00937	1	04/16/24 18:02	04/17/24 03:10	53494-70-5	
Hexachlorobenzene	<0.00456	mg/kg	0.0263	0.00456	1	04/16/24 18:02	04/17/24 03:10	118-74-1	
Heptachlor	<0.00564	mg/kg	0.0263	0.00564	1	04/16/24 18:02	04/17/24 03:10	76-44-8	
Heptachlor epoxide	<0.00447	mg/kg	0.0263	0.00447	1	04/16/24 18:02	04/17/24 03:10	1024-57-3	
Methoxychlor	<0.00638	mg/kg	0.0263	0.00638	1	04/16/24 18:02	04/17/24 03:10	72-43-5	
Toxaphene	<0.163	mg/kg	0.527	0.163	1	04/16/24 18:02	04/17/24 03:10	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	51.3	%	10.0-135		1	04/16/24 18:02	04/17/24 03:10	2051-24-3	
Tetrachloro-m-xylene (S)	57.9	%	10.0-139		1	04/16/24 18:02	04/17/24 03:10	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00925	mg/kg	0.0922	0.00925	1	04/15/24 13:10	04/16/24 17:31	94-75-7	
Dalapon	<0.0149	mg/kg	0.0922	0.0149	1	04/15/24 13:10	04/16/24 17:31	127-20-8	
2,4-DB	<0.0391	mg/kg	0.0922	0.0391	1	04/15/24 13:10	04/16/24 17:31	94-82-6	
Dicamba	<0.0207	mg/kg	0.0922	0.0207	1	04/15/24 13:10	04/16/24 17:31	1918-00-9	
Dichlorprop	<0.0323	mg/kg	0.0922	0.0323	1	04/15/24 13:10	04/16/24 17:31	120-36-5	
Dinoseb	<0.00918	mg/kg	0.0922	0.00918	1	04/15/24 13:10	04/16/24 17:31	88-85-7	
MCPA	<0.584	mg/kg	8.56	0.584	1	04/15/24 13:10	04/16/24 17:31	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.483	mg/kg	8.56	0.483	1	04/15/24 13:10	04/16/24 17:31	93-65-2	
2,4,5-T	<0.0112	mg/kg	0.0922	0.0112	1	04/15/24 13:10	04/16/24 17:31	93-76-5	
2,4,5-TP (Silvex)	<0.0141	mg/kg	0.0922	0.0141	1	04/15/24 13:10	04/16/24 17:31	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	63.6	%	22.0-132		1	04/15/24 13:10	04/16/24 17:31	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.7	ug/kg	39.8	10.7	1	04/11/24 15:53	04/15/24 13:10	12674-11-2	
PCB-1221 (Aroclor 1221)	<13.4	ug/kg	39.8	13.4	1	04/11/24 15:53	04/15/24 13:10	11104-28-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS01/SS-1 Lab ID: 60450516005 Collected: 04/08/24 11:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<13.4	ug/kg	39.8	13.4	1	04/11/24 15:53	04/15/24 13:10	11141-16-5	
PCB-1242 (Aroclor 1242)	<13.4	ug/kg	39.8	13.4	1	04/11/24 15:53	04/15/24 13:10	53469-21-9	
PCB-1248 (Aroclor 1248)	<13.4	ug/kg	39.8	13.4	1	04/11/24 15:53	04/15/24 13:10	12672-29-6	
PCB-1254 (Aroclor 1254)	<13.4	ug/kg	39.8	13.4	1	04/11/24 15:53	04/15/24 13:10	11097-69-1	
PCB-1260 (Aroclor 1260)	<13.4	ug/kg	39.8	13.4	1	04/11/24 15:53	04/15/24 13:10	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	87	%	20-120		1	04/11/24 15:53	04/15/24 13:10	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	17600	mg/kg	65.9	9.09	5	04/15/24 09:27	04/17/24 22:13	7429-90-5	
Antimony	0.755J	mg/kg	3.95	0.219	5	04/15/24 09:27	04/17/24 22:13	7440-36-0	B,J
Arsenic	9.30	mg/kg	1.32	0.132	5	04/15/24 09:27	04/17/24 22:13	7440-38-2	
Barium	161	mg/kg	3.29	0.200	5	04/15/24 09:27	04/17/24 22:13	7440-39-3	
Beryllium	0.785J	mg/kg	3.29	0.182	5	04/15/24 09:27	04/17/24 22:13	7440-41-7	J
Cadmium	0.425J	mg/kg	1.32	0.113	5	04/15/24 09:27	04/17/24 22:13	7440-43-9	J
Calcium	152000	mg/kg	659	99.4	5	04/15/24 09:27	04/17/24 22:13	7440-70-2	
Chromium	32.0	mg/kg	6.59	0.390	5	04/15/24 09:27	04/17/24 22:13	7440-47-3	
Cobalt	7.81	mg/kg	1.32	0.0609	5	04/15/24 09:27	04/17/24 22:13	7440-48-4	
Copper	17.1	mg/kg	6.59	0.174	5	04/15/24 09:27	04/17/24 22:13	7440-50-8	
Iron	20900	mg/kg	65.9	11.8	5	04/15/24 09:27	04/17/24 22:13	7439-89-6	
Lead	18.8	mg/kg	2.63	0.130	5	04/15/24 09:27	04/17/24 22:13	7439-92-1	
Magnesium	7040	mg/kg	659	60.5	5	04/15/24 09:27	04/17/24 22:13	7439-95-4	
Manganese	880	mg/kg	3.29	0.353	5	04/15/24 09:27	04/17/24 22:13	7439-96-5	
Molybdenum	2.65J	mg/kg	3.29	0.133	5	04/15/24 09:27	04/17/24 22:13	7439-98-7	J
Nickel	26.2	mg/kg	3.29	0.259	5	04/15/24 09:27	04/17/24 22:13	7440-02-0	
Potassium	3080	mg/kg	659	89.6	5	04/15/24 09:27	04/17/24 22:13	7440-09-7	
Selenium	1.65J	mg/kg	3.29	0.237	5	04/15/24 09:27	04/17/24 22:13	7782-49-2	J
Silver	0.149J	mg/kg	0.659	0.114	5	04/15/24 09:27	04/17/24 22:13	7440-22-4	J
Sodium	220J	mg/kg	659	101	5	04/15/24 09:27	04/17/24 22:13	7440-23-5	J
Thallium	0.234J	mg/kg	2.63	0.0856	5	04/15/24 09:27	04/17/24 22:13	7440-28-0	J
Vanadium	42.1	mg/kg	3.29	0.246	5	04/15/24 09:27	04/17/24 22:13	7440-62-2	
Zinc	72.3	mg/kg	32.9	0.975	5	04/15/24 09:27	04/17/24 22:13	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0237	mg/kg	0.0527	0.0237	1	04/11/24 16:52	04/12/24 09:29	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<2150	ug/kg	10000	2150	5	04/10/24 14:25	04/12/24 13:13	83-32-9	
Acenaphthylene	<1640	ug/kg	10000	1640	5	04/10/24 14:25	04/12/24 13:13	208-96-8	
Anthracene	<2100	ug/kg	10000	2100	5	04/10/24 14:25	04/12/24 13:13	120-12-7	
Benzo(a)anthracene	<2120	ug/kg	10000	2120	5	04/10/24 14:25	04/12/24 13:13	56-55-3	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS01/SS-1 Lab ID: 60450516005 Collected: 04/08/24 11:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>		Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Benzo(a)pyrene	<2160	ug/kg	10000	2160	5	04/10/24 14:25	04/12/24 13:13	50-32-8	
Benzo(b)fluoranthene	<2450	ug/kg	10000	2450	5	04/10/24 14:25	04/12/24 13:13	205-99-2	
Benzo(g,h,i)perylene	<1740	ug/kg	10000	1740	5	04/10/24 14:25	04/12/24 13:13	191-24-2	
Benzo(k)fluoranthene	<2160	ug/kg	10000	2160	5	04/10/24 14:25	04/12/24 13:13	207-08-9	
Benzoic Acid	<5470	ug/kg	50700	5470	5	04/10/24 14:25	04/12/24 13:13	65-85-0	
Benzyl alcohol	<1840	ug/kg	20000	1840	5	04/10/24 14:25	04/12/24 13:13	100-51-6	
4-Bromophenylphenyl ether	<2160	ug/kg	10000	2160	5	04/10/24 14:25	04/12/24 13:13	101-55-3	
Butylbenzylphthalate	<2040	ug/kg	10000	2040	5	04/10/24 14:25	04/12/24 13:13	85-68-7	
Carbazole	<2060	ug/kg	10000	2060	5	04/10/24 14:25	04/12/24 13:13	86-74-8	
4-Chloro-3-methylphenol	<2100	ug/kg	20000	2100	5	04/10/24 14:25	04/12/24 13:13	59-50-7	
4-Chloroaniline	<1570	ug/kg	20000	1570	5	04/10/24 14:25	04/12/24 13:13	106-47-8	
bis(2-Chloroethoxy)methane	<1990	ug/kg	10000	1990	5	04/10/24 14:25	04/12/24 13:13	111-91-1	
bis(2-Chloroethyl) ether	<2020	ug/kg	10000	2020	5	04/10/24 14:25	04/12/24 13:13	111-44-4	
bis(2-Chloroisopropyl) ether	<2170	ug/kg	10000	2170	5	04/10/24 14:25	04/12/24 13:13	108-60-1	
2-Chloronaphthalene	<2110	ug/kg	10000	2110	5	04/10/24 14:25	04/12/24 13:13	91-58-7	
2-Chlorophenol	<2050	ug/kg	10000	2050	5	04/10/24 14:25	04/12/24 13:13	95-57-8	
4-Chlorophenylphenyl ether	<2150	ug/kg	10000	2150	5	04/10/24 14:25	04/12/24 13:13	7005-72-3	
Chrysene	<2230	ug/kg	10000	2230	5	04/10/24 14:25	04/12/24 13:13	218-01-9	
Dibenz(a,h)anthracene	<1800	ug/kg	10000	1800	5	04/10/24 14:25	04/12/24 13:13	53-70-3	
Dibenzofuran	<2140	ug/kg	10000	2140	5	04/10/24 14:25	04/12/24 13:13	132-64-9	
1,2-Dichlorobenzene	<2000	ug/kg	10000	2000	5	04/10/24 14:25	04/12/24 13:13	95-50-1	
1,3-Dichlorobenzene	<1960	ug/kg	10000	1960	5	04/10/24 14:25	04/12/24 13:13	541-73-1	
1,4-Dichlorobenzene	<1930	ug/kg	10000	1930	5	04/10/24 14:25	04/12/24 13:13	106-46-7	
3,3'-Dichlorobenzidine	<984	ug/kg	20000	984	5	04/10/24 14:25	04/12/24 13:13	91-94-1	
2,4-Dichlorophenol	<2010	ug/kg	10000	2010	5	04/10/24 14:25	04/12/24 13:13	120-83-2	
Diethylphthalate	<2290	ug/kg	10000	2290	5	04/10/24 14:25	04/12/24 13:13	84-66-2	
2,4-Dimethylphenol	<1460	ug/kg	10000	1460	5	04/10/24 14:25	04/12/24 13:13	105-67-9	
Dimethylphthalate	<2080	ug/kg	10000	2080	5	04/10/24 14:25	04/12/24 13:13	131-11-3	
Di-n-butylphthalate	<2370	ug/kg	10000	2370	5	04/10/24 14:25	04/12/24 13:13	84-74-2	
4,6-Dinitro-2-methylphenol	<1730	ug/kg	50700	1730	5	04/10/24 14:25	04/12/24 13:13	534-52-1	
2,4-Dinitrophenol	<3030	ug/kg	50700	3030	5	04/10/24 14:25	04/12/24 13:13	51-28-5	
2,4-Dinitrotoluene	<2260	ug/kg	10000	2260	5	04/10/24 14:25	04/12/24 13:13	121-14-2	
2,6-Dinitrotoluene	<1950	ug/kg	10000	1950	5	04/10/24 14:25	04/12/24 13:13	606-20-2	
Di-n-octylphthalate	<2440	ug/kg	10000	2440	5	04/10/24 14:25	04/12/24 13:13	117-84-0	
bis(2-Ethylhexyl)phthalate	<2250	ug/kg	10000	2250	5	04/10/24 14:25	04/12/24 13:13	117-81-7	
Fluoranthene	<2210	ug/kg	10000	2210	5	04/10/24 14:25	04/12/24 13:13	206-44-0	
Fluorene	<2130	ug/kg	10000	2130	5	04/10/24 14:25	04/12/24 13:13	86-73-7	
Hexachloro-1,3-butadiene	<2150	ug/kg	10000	2150	5	04/10/24 14:25	04/12/24 13:13	87-68-3	
Hexachlorobenzene	<2100	ug/kg	10000	2100	5	04/10/24 14:25	04/12/24 13:13	118-74-1	
Hexachlorocyclopentadiene	<6170	ug/kg	10000	6170	5	04/10/24 14:25	04/12/24 13:13	77-47-4	
Hexachloroethane	<1840	ug/kg	10000	1840	5	04/10/24 14:25	04/12/24 13:13	67-72-1	
Indeno(1,2,3-cd)pyrene	<2050	ug/kg	10000	2050	5	04/10/24 14:25	04/12/24 13:13	193-39-5	
Isophorone	<1940	ug/kg	10000	1940	5	04/10/24 14:25	04/12/24 13:13	78-59-1	
2-Methylnaphthalene	<2030	ug/kg	10000	2030	5	04/10/24 14:25	04/12/24 13:13	91-57-6	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS01/SS-1 Lab ID: 60450516005 Collected: 04/08/24 11:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<1830	ug/kg	10000	1830	5	04/10/24 14:25	04/12/24 13:13	95-48-7	
3&4-Methylphenol(m&p Cresol)	<1860	ug/kg	10000	1860	5	04/10/24 14:25	04/12/24 13:13	15831-10-4	
Naphthalene	<2160	ug/kg	10000	2160	5	04/10/24 14:25	04/12/24 13:13	91-20-3	
2-Nitroaniline	<1660	ug/kg	20000	1660	5	04/10/24 14:25	04/12/24 13:13	88-74-4	
3-Nitroaniline	<1560	ug/kg	20000	1560	5	04/10/24 14:25	04/12/24 13:13	99-09-2	
4-Nitroaniline	<1720	ug/kg	20000	1720	5	04/10/24 14:25	04/12/24 13:13	100-01-6	
Nitrobenzene	<2120	ug/kg	10000	2120	5	04/10/24 14:25	04/12/24 13:13	98-95-3	
2-Nitrophenol	<1570	ug/kg	10000	1570	5	04/10/24 14:25	04/12/24 13:13	88-75-5	
4-Nitrophenol	<1480	ug/kg	50700	1480	5	04/10/24 14:25	04/12/24 13:13	100-02-7	
N-Nitroso-di-n-propylamine	<1910	ug/kg	10000	1910	5	04/10/24 14:25	04/12/24 13:13	621-64-7	
N-Nitrosodiphenylamine	<1990	ug/kg	10000	1990	5	04/10/24 14:25	04/12/24 13:13	86-30-6	
Pentachlorophenol	<3310	ug/kg	50700	3310	5	04/10/24 14:25	04/12/24 13:13	87-86-5	
Phenanthrene	<2140	ug/kg	10000	2140	5	04/10/24 14:25	04/12/24 13:13	85-01-8	
Phenol	<1890	ug/kg	10000	1890	5	04/10/24 14:25	04/12/24 13:13	108-95-2	
Pyrene	<2140	ug/kg	10000	2140	5	04/10/24 14:25	04/12/24 13:13	129-00-0	
Pyridine	<1490	ug/kg	10000	1490	5	04/10/24 14:25	04/12/24 13:13	110-86-1	
1,2,4-Trichlorobenzene	<2100	ug/kg	10000	2100	5	04/10/24 14:25	04/12/24 13:13	120-82-1	
2,4,5-Trichlorophenol	<2050	ug/kg	10000	2050	5	04/10/24 14:25	04/12/24 13:13	95-95-4	
2,4,6-Trichlorophenol	<1850	ug/kg	10000	1850	5	04/10/24 14:25	04/12/24 13:13	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	81	%	30-120		5	04/10/24 14:25	04/12/24 13:13	4165-60-0	D3,P3
2-Fluorobiphenyl (S)	69	%	40-120		5	04/10/24 14:25	04/12/24 13:13	321-60-8	
Terphenyl-d14 (S)	76	%	45-120		5	04/10/24 14:25	04/12/24 13:13	1718-51-0	
Phenol-d6 (S)	82	%	40-120		5	04/10/24 14:25	04/12/24 13:13	13127-88-3	
2-Fluorophenol (S)	83	%	40-120		5	04/10/24 14:25	04/12/24 13:13	367-12-4	
2,4,6-Tribromophenol (S)	67	%	35-120		5	04/10/24 14:25	04/12/24 13:13	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	306	mg/kg	182	61.7	10	04/11/24 13:51	04/12/24 12:21		D3
TPH-DRO	<61.7	mg/kg	182	61.7	10	04/11/24 13:51	04/12/24 12:21		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	80	%	35-120		10	04/11/24 13:51	04/12/24 12:21	4165-60-0	
2-Fluorobiphenyl (S)	90	%	50-120		10	04/11/24 13:51	04/12/24 12:21	321-60-8	
Terphenyl-d14 (S)	90	%	45-120		10	04/11/24 13:51	04/12/24 12:21	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<81.4	ug/kg	85.3	81.4	1	04/10/24 09:05	04/10/24 13:45	67-64-1	
Benzene	<0.62	ug/kg	6.8	0.62	1	04/10/24 09:05	04/10/24 13:45	71-43-2	
Bromobenzene	<0.84	ug/kg	6.8	0.84	1	04/10/24 09:05	04/10/24 13:45	108-86-1	
Bromochloromethane	<1.0	ug/kg	6.8	1.0	1	04/10/24 09:05	04/10/24 13:45	74-97-5	
Bromodichloromethane	<1.1	ug/kg	17.6	1.1	1	04/10/24 09:05	04/10/24 13:45	75-27-4	
Bromoform	<0.53	ug/kg	17.6	0.53	1	04/10/24 09:05	04/10/24 13:45	75-25-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS01/SS-1 Lab ID: 60450516005 Collected: 04/08/24 11:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<8.4	ug/kg	17.6	8.4	1	04/10/24 09:05	04/10/24 13:45	74-83-9	
2-Butanone (MEK)	<43.2	ug/kg	85.3	43.2	1	04/10/24 09:05	04/10/24 13:45	78-93-3	
n-Butylbenzene	<0.65	ug/kg	6.8	0.65	1	04/10/24 09:05	04/10/24 13:45	104-51-8	
sec-Butylbenzene	<0.67	ug/kg	6.8	0.67	1	04/10/24 09:05	04/10/24 13:45	135-98-8	
tert-Butylbenzene	<0.44	ug/kg	6.8	0.44	1	04/10/24 09:05	04/10/24 13:45	98-06-6	
Carbon disulfide	5.6J	ug/kg	6.8	3.1	1	04/10/24 09:05	04/10/24 13:45	75-15-0	
Carbon tetrachloride	<2.3	ug/kg	6.8	2.3	1	04/10/24 09:05	04/10/24 13:45	56-23-5	
Chlorobenzene	<0.40	ug/kg	6.8	0.40	1	04/10/24 09:05	04/10/24 13:45	108-90-7	
Chloroethane	<11.2	ug/kg	33.8	11.2	1	04/10/24 09:05	04/10/24 13:45	75-00-3	
Chloroform	<2.5	ug/kg	6.8	2.5	1	04/10/24 09:05	04/10/24 13:45	67-66-3	
Chloromethane	<1.7	ug/kg	17.6	1.7	1	04/10/24 09:05	04/10/24 13:45	74-87-3	
2-Chlorotoluene	<0.95	ug/kg	6.8	0.95	1	04/10/24 09:05	04/10/24 13:45	95-49-8	
4-Chlorotoluene	<0.53	ug/kg	6.8	0.53	1	04/10/24 09:05	04/10/24 13:45	106-43-4	
1,2-Dibromo-3-chloropropane	<4.5	ug/kg	17.6	4.5	1	04/10/24 09:05	04/10/24 13:45	96-12-8	
Dibromochloromethane	<0.41	ug/kg	6.8	0.41	1	04/10/24 09:05	04/10/24 13:45	124-48-1	
1,2-Dibromoethane (EDB)	<0.71	ug/kg	6.8	0.71	1	04/10/24 09:05	04/10/24 13:45	106-93-4	
Dibromomethane	<2.0	ug/kg	6.8	2.0	1	04/10/24 09:05	04/10/24 13:45	74-95-3	
1,2-Dichlorobenzene	<1.1	ug/kg	6.8	1.1	1	04/10/24 09:05	04/10/24 13:45	95-50-1	
1,3-Dichlorobenzene	<0.86	ug/kg	6.8	0.86	1	04/10/24 09:05	04/10/24 13:45	541-73-1	
1,4-Dichlorobenzene	<1.2	ug/kg	6.8	1.2	1	04/10/24 09:05	04/10/24 13:45	106-46-7	
Dichlorodifluoromethane	<1.3	ug/kg	17.6	1.3	1	04/10/24 09:05	04/10/24 13:45	75-71-8	
1,1-Dichloroethane	<1.6	ug/kg	6.8	1.6	1	04/10/24 09:05	04/10/24 13:45	75-34-3	
1,2-Dichloroethane	<1.3	ug/kg	6.8	1.3	1	04/10/24 09:05	04/10/24 13:45	107-06-2	
1,2-Dichloroethene (Total)	<2.6	ug/kg	13.5	2.6	1	04/10/24 09:05	04/10/24 13:45	540-59-0	
1,1-Dichloroethene	<2.7	ug/kg	6.8	2.7	1	04/10/24 09:05	04/10/24 13:45	75-35-4	
cis-1,2-Dichloroethene	<1.3	ug/kg	6.8	1.3	1	04/10/24 09:05	04/10/24 13:45	156-59-2	
trans-1,2-Dichloroethene	<1.5	ug/kg	6.8	1.5	1	04/10/24 09:05	04/10/24 13:45	156-60-5	
1,2-Dichloropropane	<1.4	ug/kg	6.8	1.4	1	04/10/24 09:05	04/10/24 13:45	78-87-5	
1,3-Dichloropropane	<0.26	ug/kg	6.8	0.26	1	04/10/24 09:05	04/10/24 13:45	142-28-9	
2,2-Dichloropropane	<2.0	ug/kg	6.8	2.0	1	04/10/24 09:05	04/10/24 13:45	594-20-7	
1,1-Dichloropropene	<1.5	ug/kg	6.8	1.5	1	04/10/24 09:05	04/10/24 13:45	563-58-6	
cis-1,3-Dichloropropene	<1.0	ug/kg	6.8	1.0	1	04/10/24 09:05	04/10/24 13:45	10061-01-5	
trans-1,3-Dichloropropene	<0.81	ug/kg	6.8	0.81	1	04/10/24 09:05	04/10/24 13:45	10061-02-6	
Ethylbenzene	<1.2	ug/kg	6.8	1.2	1	04/10/24 09:05	04/10/24 13:45	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/kg	6.8	1.2	1	04/10/24 09:05	04/10/24 13:45	87-68-3	
2-Hexanone	<14.1	ug/kg	85.3	14.1	1	04/10/24 09:05	04/10/24 13:45	591-78-6	
Isopropylbenzene (Cumene)	<0.43	ug/kg	6.8	0.43	1	04/10/24 09:05	04/10/24 13:45	98-82-8	
p-Isopropyltoluene	<0.59	ug/kg	6.8	0.59	1	04/10/24 09:05	04/10/24 13:45	99-87-6	
Methylene Chloride	<26.3	ug/kg	33.8	26.3	1	04/10/24 09:05	04/10/24 13:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	<9.5	ug/kg	85.3	9.5	1	04/10/24 09:05	04/10/24 13:45	108-10-1	
Methyl-tert-butyl ether	<1.3	ug/kg	6.8	1.3	1	04/10/24 09:05	04/10/24 13:45	1634-04-4	
Naphthalene	<0.99	ug/kg	13.5	0.99	1	04/10/24 09:05	04/10/24 13:45	91-20-3	
n-Propylbenzene	<0.82	ug/kg	6.8	0.82	1	04/10/24 09:05	04/10/24 13:45	103-65-1	
Styrene	<0.55	ug/kg	6.8	0.55	1	04/10/24 09:05	04/10/24 13:45	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS01/SS-1 Lab ID: 60450516005 Collected: 04/08/24 11:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<0.96	ug/kg	6.8	0.96	1	04/10/24 09:05	04/10/24 13:45	630-20-6	
1,1,2,2-Tetrachloroethane	<0.95	ug/kg	6.8	0.95	1	04/10/24 09:05	04/10/24 13:45	79-34-5	
Tetrachloroethene	<0.72	ug/kg	6.8	0.72	1	04/10/24 09:05	04/10/24 13:45	127-18-4	
Toluene	<6.0	ug/kg	27.1	6.0	1	04/10/24 09:05	04/10/24 13:45	108-88-3	
1,2,3-Trichlorobenzene	<0.79	ug/kg	6.8	0.79	1	04/10/24 09:05	04/10/24 13:45	87-61-6	
1,2,4-Trichlorobenzene	<0.66	ug/kg	6.8	0.66	1	04/10/24 09:05	04/10/24 13:45	120-82-1	
1,1,1-Trichloroethane	<1.4	ug/kg	6.8	1.4	1	04/10/24 09:05	04/10/24 13:45	71-55-6	
1,1,2-Trichloroethane	<0.97	ug/kg	6.8	0.97	1	04/10/24 09:05	04/10/24 13:45	79-00-5	
Trichloroethene	<2.6	ug/kg	6.8	2.6	1	04/10/24 09:05	04/10/24 13:45	79-01-6	
Trichlorofluoromethane	<13.0	ug/kg	17.6	13.0	1	04/10/24 09:05	04/10/24 13:45	75-69-4	
1,2,3-Trichloropropane	<2.1	ug/kg	6.8	2.1	1	04/10/24 09:05	04/10/24 13:45	96-18-4	
1,2,4-Trimethylbenzene	<0.93	ug/kg	6.8	0.93	1	04/10/24 09:05	04/10/24 13:45	95-63-6	
1,3,5-Trimethylbenzene	<0.59	ug/kg	6.8	0.59	1	04/10/24 09:05	04/10/24 13:45	108-67-8	
Vinyl chloride	<1.3	ug/kg	17.6	1.3	1	04/10/24 09:05	04/10/24 13:45	75-01-4	
Xylene (Total)	<5.0	ug/kg	20.3	5.0	1	04/10/24 09:05	04/10/24 13:45	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	109	%	80-120		1	04/10/24 09:05	04/10/24 13:45	2037-26-5	
4-Bromofluorobenzene (S)	102	%	83-119		1	04/10/24 09:05	04/10/24 13:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/10/24 09:05	04/10/24 13:45	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.076	mg/kg	0.56	0.076	1	04/11/24 07:56	04/11/24 11:46		
<b>Surrogates</b>									
Toluene-d8 (S)	107	%	78-122		1	04/11/24 07:56	04/11/24 11:46	2037-26-5	
4-Bromofluorobenzene (S)	128	%	69-133		1	04/11/24 07:56	04/11/24 11:46	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1	04/11/24 07:56	04/11/24 11:46	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	18.2	%	0.50	0.50	1		04/10/24 15:42		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	75.9	%			1	04/12/24 11:09	04/12/24 11:20		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<0.95	mg/kg	1.2	0.95	1	04/15/24 09:34	04/16/24 15:17	7664-41-7	L2
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.15	mg/kg	0.19	0.15	1	04/18/24 08:30	04/18/24 11:39	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS01/SS-1** Lab ID: **60450516005** Collected: 04/08/24 11:50 Received: 04/08/24 17:34 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<b>11.1J</b>	mg/kg	12.8	7.2	10	04/10/24 08:00	04/11/24 18:00	14797-55-8	B
Nitrite as N	<b>&lt;6.7</b>	mg/kg	12.8	6.7	10	04/10/24 08:00	04/11/24 18:00	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS05/SS-1 Lab ID: 60450516006 Collected: 04/08/24 12:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00468	mg/kg	0.0249	0.00468	1	04/16/24 18:02	04/17/24 03:19	309-00-2	
alpha-BHC	<0.00458	mg/kg	0.0249	0.00458	1	04/16/24 18:02	04/17/24 03:19	319-84-6	
beta-BHC	<0.00472	mg/kg	0.0249	0.00472	1	04/16/24 18:02	04/17/24 03:19	319-85-7	
delta-BHC	<0.00431	mg/kg	0.0249	0.00431	1	04/16/24 18:02	04/17/24 03:19	319-86-8	
gamma-BHC (Lindane)	<0.00428	mg/kg	0.0249	0.00428	1	04/16/24 18:02	04/17/24 03:19	58-89-9	
Chlordane (Technical)	<0.128	mg/kg	0.373	0.128	1	04/16/24 18:02	04/17/24 03:19	57-74-9	
4,4'-DDD	<0.00461	mg/kg	0.0249	0.00461	1	04/16/24 18:02	04/17/24 03:19	72-54-8	
4,4'-DDE	<0.00456	mg/kg	0.0249	0.00456	1	04/16/24 18:02	04/17/24 03:19	72-55-9	
4,4'-DDT	<0.00781	mg/kg	0.0249	0.00781	1	04/16/24 18:02	04/17/24 03:19	50-29-3	
Dieldrin	<0.00428	mg/kg	0.0249	0.00428	1	04/16/24 18:02	04/17/24 03:19	60-57-1	
Endosulfan I	<0.00452	mg/kg	0.0249	0.00452	1	04/16/24 18:02	04/17/24 03:19	959-98-8	
Endosulfan II	<0.00417	mg/kg	0.0249	0.00417	1	04/16/24 18:02	04/17/24 03:19	33213-65-9	
Endosulfan sulfate	<0.00453	mg/kg	0.0249	0.00453	1	04/16/24 18:02	04/17/24 03:19	1031-07-8	
Endrin	<0.00436	mg/kg	0.0249	0.00436	1	04/16/24 18:02	04/17/24 03:19	72-20-8	LO
Endrin aldehyde	<0.00422	mg/kg	0.0249	0.00422	1	04/16/24 18:02	04/17/24 03:19	7421-93-4	
Endrin ketone	<0.00885	mg/kg	0.0249	0.00885	1	04/16/24 18:02	04/17/24 03:19	53494-70-5	
Hexachlorobenzene	<0.00431	mg/kg	0.0249	0.00431	1	04/16/24 18:02	04/17/24 03:19	118-74-1	
Heptachlor	<0.00533	mg/kg	0.0249	0.00533	1	04/16/24 18:02	04/17/24 03:19	76-44-8	
Heptachlor epoxide	<0.00422	mg/kg	0.0249	0.00422	1	04/16/24 18:02	04/17/24 03:19	1024-57-3	
Methoxychlor	<0.00603	mg/kg	0.0249	0.00603	1	04/16/24 18:02	04/17/24 03:19	72-43-5	
Toxaphene	<0.154	mg/kg	0.498	0.154	1	04/16/24 18:02	04/17/24 03:19	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	39.4	%	10.0-135		1	04/16/24 18:02	04/17/24 03:19	2051-24-3	
Tetrachloro-m-xylene (S)	63.3	%	10.0-139		1	04/16/24 18:02	04/17/24 03:19	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00874	mg/kg	0.0871	0.00874	1	04/15/24 13:10	04/16/24 17:41	94-75-7	
Dalapon	<0.0141	mg/kg	0.0871	0.0141	1	04/15/24 13:10	04/16/24 17:41	127-20-8	
2,4-DB	<0.0370	mg/kg	0.0871	0.0370	1	04/15/24 13:10	04/16/24 17:41	94-82-6	
Dicamba	<0.0195	mg/kg	0.0871	0.0195	1	04/15/24 13:10	04/16/24 17:41	1918-00-9	
Dichlorprop	<0.0305	mg/kg	0.0871	0.0305	1	04/15/24 13:10	04/16/24 17:41	120-36-5	
Dinoseb	<0.00868	mg/kg	0.0871	0.00868	1	04/15/24 13:10	04/16/24 17:41	88-85-7	
MCPA	<0.551	mg/kg	8.09	0.551	1	04/15/24 13:10	04/16/24 17:41	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.457	mg/kg	8.09	0.457	1	04/15/24 13:10	04/16/24 17:41	93-65-2	
2,4,5-T	<0.0106	mg/kg	0.0871	0.0106	1	04/15/24 13:10	04/16/24 17:41	93-76-5	
2,4,5-TP (Silvex)	<0.0133	mg/kg	0.0871	0.0133	1	04/15/24 13:10	04/16/24 17:41	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	64.8	%	22.0-132		1	04/15/24 13:10	04/16/24 17:41	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<11.0	ug/kg	40.6	11.0	1	04/11/24 15:53	04/15/24 13:25	12674-11-2	
PCB-1221 (Aroclor 1221)	<13.7	ug/kg	40.6	13.7	1	04/11/24 15:53	04/15/24 13:25	11104-28-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS05/SS-1 Lab ID: 60450516006 Collected: 04/08/24 12:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<13.7	ug/kg	40.6	13.7	1	04/11/24 15:53	04/15/24 13:25	11141-16-5	
PCB-1242 (Aroclor 1242)	<13.7	ug/kg	40.6	13.7	1	04/11/24 15:53	04/15/24 13:25	53469-21-9	
PCB-1248 (Aroclor 1248)	<13.7	ug/kg	40.6	13.7	1	04/11/24 15:53	04/15/24 13:25	12672-29-6	
PCB-1254 (Aroclor 1254)	<13.7	ug/kg	40.6	13.7	1	04/11/24 15:53	04/15/24 13:25	11097-69-1	
PCB-1260 (Aroclor 1260)	<13.7	ug/kg	40.6	13.7	1	04/11/24 15:53	04/15/24 13:25	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	83	%	20-120		1	04/11/24 15:53	04/15/24 13:25	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	29800	mg/kg	62.2	8.59	5	04/15/24 09:27	04/17/24 22:16	7429-90-5	
Antimony	0.647J	mg/kg	3.73	0.207	5	04/15/24 09:27	04/17/24 22:16	7440-36-0	B,J
Arsenic	11.4	mg/kg	1.24	0.124	5	04/15/24 09:27	04/17/24 22:16	7440-38-2	
Barium	238	mg/kg	3.11	0.189	5	04/15/24 09:27	04/17/24 22:16	7440-39-3	
Beryllium	0.956J	mg/kg	3.11	0.172	5	04/15/24 09:27	04/17/24 22:16	7440-41-7	J
Cadmium	0.147J	mg/kg	1.24	0.106	5	04/15/24 09:27	04/17/24 22:16	7440-43-9	J
Calcium	3390	mg/kg	622	94.0	5	04/15/24 09:27	04/17/24 22:16	7440-70-2	
Chromium	28.1	mg/kg	6.22	0.368	5	04/15/24 09:27	04/17/24 22:16	7440-47-3	
Cobalt	11.1	mg/kg	1.24	0.0575	5	04/15/24 09:27	04/17/24 22:16	7440-48-4	
Copper	18.1	mg/kg	6.22	0.164	5	04/15/24 09:27	04/17/24 22:16	7440-50-8	
Iron	27000	mg/kg	62.2	11.1	5	04/15/24 09:27	04/17/24 22:16	7439-89-6	
Lead	17.4	mg/kg	2.49	0.123	5	04/15/24 09:27	04/17/24 22:16	7439-92-1	
Magnesium	5010	mg/kg	622	57.1	5	04/15/24 09:27	04/17/24 22:16	7439-95-4	
Manganese	760	mg/kg	3.11	0.334	5	04/15/24 09:27	04/17/24 22:16	7439-96-5	
Molybdenum	0.950J	mg/kg	3.11	0.126	5	04/15/24 09:27	04/17/24 22:16	7439-98-7	J
Nickel	25.6	mg/kg	3.11	0.245	5	04/15/24 09:27	04/17/24 22:16	7440-02-0	
Potassium	3010	mg/kg	622	84.7	5	04/15/24 09:27	04/17/24 22:16	7440-09-7	
Selenium	0.646J	mg/kg	3.11	0.224	5	04/15/24 09:27	04/17/24 22:16	7782-49-2	J
Silver	<0.108	mg/kg	0.622	0.108	5	04/15/24 09:27	04/17/24 22:16	7440-22-4	
Sodium	98.0J	mg/kg	622	95.2	5	04/15/24 09:27	04/17/24 22:16	7440-23-5	J
Thallium	0.382J	mg/kg	2.49	0.0809	5	04/15/24 09:27	04/17/24 22:16	7440-28-0	J
Vanadium	59.3	mg/kg	3.11	0.233	5	04/15/24 09:27	04/17/24 22:16	7440-62-2	
Zinc	67.6	mg/kg	31.1	0.921	5	04/15/24 09:27	04/17/24 22:16	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0224	mg/kg	0.0498	0.0224	1	04/11/24 16:52	04/12/24 09:31	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<87.7	ug/kg	408	87.7	1	04/10/24 14:25	04/12/24 13:35	83-32-9	
Acenaphthylene	<66.8	ug/kg	408	66.8	1	04/10/24 14:25	04/12/24 13:35	208-96-8	
Anthracene	<85.3	ug/kg	408	85.3	1	04/10/24 14:25	04/12/24 13:35	120-12-7	
Benzo(a)anthracene	<86.3	ug/kg	408	86.3	1	04/10/24 14:25	04/12/24 13:35	56-55-3	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS05/SS-1 Lab ID: 60450516006 Collected: 04/08/24 12:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<87.8	ug/kg	408	87.8	1	04/10/24 14:25	04/12/24 13:35	50-32-8	
Benzo(b)fluoranthene	<99.6	ug/kg	408	99.6	1	04/10/24 14:25	04/12/24 13:35	205-99-2	
Benzo(g,h,i)perylene	<70.9	ug/kg	408	70.9	1	04/10/24 14:25	04/12/24 13:35	191-24-2	
Benzo(k)fluoranthene	<87.8	ug/kg	408	87.8	1	04/10/24 14:25	04/12/24 13:35	207-08-9	
Benzoic Acid	<223	ug/kg	2070	223	1	04/10/24 14:25	04/12/24 13:35	65-85-0	
Benzyl alcohol	<74.9	ug/kg	816	74.9	1	04/10/24 14:25	04/12/24 13:35	100-51-6	
4-Bromophenylphenyl ether	<88.1	ug/kg	408	88.1	1	04/10/24 14:25	04/12/24 13:35	101-55-3	
Butylbenzylphthalate	<83.1	ug/kg	408	83.1	1	04/10/24 14:25	04/12/24 13:35	85-68-7	
Carbazole	<84.0	ug/kg	408	84.0	1	04/10/24 14:25	04/12/24 13:35	86-74-8	
4-Chloro-3-methylphenol	<85.6	ug/kg	816	85.6	1	04/10/24 14:25	04/12/24 13:35	59-50-7	
4-Chloroaniline	<63.9	ug/kg	816	63.9	1	04/10/24 14:25	04/12/24 13:35	106-47-8	
bis(2-Chloroethoxy)methane	<81.1	ug/kg	408	81.1	1	04/10/24 14:25	04/12/24 13:35	111-91-1	
bis(2-Chloroethyl) ether	<82.4	ug/kg	408	82.4	1	04/10/24 14:25	04/12/24 13:35	111-44-4	
bis(2-Chloroisopropyl) ether	<88.4	ug/kg	408	88.4	1	04/10/24 14:25	04/12/24 13:35	108-60-1	
2-Chloronaphthalene	<86.0	ug/kg	408	86.0	1	04/10/24 14:25	04/12/24 13:35	91-58-7	
2-Chlorophenol	<83.4	ug/kg	408	83.4	1	04/10/24 14:25	04/12/24 13:35	95-57-8	
4-Chlorophenylphenyl ether	<87.6	ug/kg	408	87.6	1	04/10/24 14:25	04/12/24 13:35	7005-72-3	
Chrysene	<90.9	ug/kg	408	90.9	1	04/10/24 14:25	04/12/24 13:35	218-01-9	
Dibenz(a,h)anthracene	<73.3	ug/kg	408	73.3	1	04/10/24 14:25	04/12/24 13:35	53-70-3	
Dibenzofuran	<87.2	ug/kg	408	87.2	1	04/10/24 14:25	04/12/24 13:35	132-64-9	
1,2-Dichlorobenzene	<81.3	ug/kg	408	81.3	1	04/10/24 14:25	04/12/24 13:35	95-50-1	
1,3-Dichlorobenzene	<79.8	ug/kg	408	79.8	1	04/10/24 14:25	04/12/24 13:35	541-73-1	
1,4-Dichlorobenzene	<78.7	ug/kg	408	78.7	1	04/10/24 14:25	04/12/24 13:35	106-46-7	
3,3'-Dichlorobenzidine	<40.1	ug/kg	816	40.1	1	04/10/24 14:25	04/12/24 13:35	91-94-1	
2,4-Dichlorophenol	<81.8	ug/kg	408	81.8	1	04/10/24 14:25	04/12/24 13:35	120-83-2	
Diethylphthalate	<93.3	ug/kg	408	93.3	1	04/10/24 14:25	04/12/24 13:35	84-66-2	
2,4-Dimethylphenol	<59.4	ug/kg	408	59.4	1	04/10/24 14:25	04/12/24 13:35	105-67-9	
Dimethylphthalate	<84.7	ug/kg	408	84.7	1	04/10/24 14:25	04/12/24 13:35	131-11-3	
Di-n-butylphthalate	<96.6	ug/kg	408	96.6	1	04/10/24 14:25	04/12/24 13:35	84-74-2	
4,6-Dinitro-2-methylphenol	<70.6	ug/kg	2070	70.6	1	04/10/24 14:25	04/12/24 13:35	534-52-1	
2,4-Dinitrophenol	<123	ug/kg	2070	123	1	04/10/24 14:25	04/12/24 13:35	51-28-5	
2,4-Dinitrotoluene	<91.9	ug/kg	408	91.9	1	04/10/24 14:25	04/12/24 13:35	121-14-2	
2,6-Dinitrotoluene	<79.5	ug/kg	408	79.5	1	04/10/24 14:25	04/12/24 13:35	606-20-2	
Di-n-octylphthalate	<99.3	ug/kg	408	99.3	1	04/10/24 14:25	04/12/24 13:35	117-84-0	
bis(2-Ethylhexyl)phthalate	<91.6	ug/kg	408	91.6	1	04/10/24 14:25	04/12/24 13:35	117-81-7	
Fluoranthene	<89.9	ug/kg	408	89.9	1	04/10/24 14:25	04/12/24 13:35	206-44-0	
Fluorene	<86.8	ug/kg	408	86.8	1	04/10/24 14:25	04/12/24 13:35	86-73-7	
Hexachloro-1,3-butadiene	<87.4	ug/kg	408	87.4	1	04/10/24 14:25	04/12/24 13:35	87-68-3	
Hexachlorobenzene	<85.3	ug/kg	408	85.3	1	04/10/24 14:25	04/12/24 13:35	118-74-1	
Hexachlorocyclopentadiene	<251	ug/kg	408	251	1	04/10/24 14:25	04/12/24 13:35	77-47-4	
Hexachloroethane	<74.8	ug/kg	408	74.8	1	04/10/24 14:25	04/12/24 13:35	67-72-1	
Indeno(1,2,3-cd)pyrene	<83.5	ug/kg	408	83.5	1	04/10/24 14:25	04/12/24 13:35	193-39-5	
Isophorone	<78.9	ug/kg	408	78.9	1	04/10/24 14:25	04/12/24 13:35	78-59-1	
2-Methylnaphthalene	<82.7	ug/kg	408	82.7	1	04/10/24 14:25	04/12/24 13:35	91-57-6	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS05/SS-1 Lab ID: 60450516006 Collected: 04/08/24 12:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<74.3	ug/kg	408	74.3	1	04/10/24 14:25	04/12/24 13:35	95-48-7	
3&4-Methylphenol(m&p Cresol)	<75.8	ug/kg	408	75.8	1	04/10/24 14:25	04/12/24 13:35	15831-10-4	
Naphthalene	<87.8	ug/kg	408	87.8	1	04/10/24 14:25	04/12/24 13:35	91-20-3	
2-Nitroaniline	<67.7	ug/kg	816	67.7	1	04/10/24 14:25	04/12/24 13:35	88-74-4	
3-Nitroaniline	<63.6	ug/kg	816	63.6	1	04/10/24 14:25	04/12/24 13:35	99-09-2	
4-Nitroaniline	<69.9	ug/kg	816	69.9	1	04/10/24 14:25	04/12/24 13:35	100-01-6	
Nitrobenzene	<86.5	ug/kg	408	86.5	1	04/10/24 14:25	04/12/24 13:35	98-95-3	
2-Nitrophenol	<63.8	ug/kg	408	63.8	1	04/10/24 14:25	04/12/24 13:35	88-75-5	
4-Nitrophenol	<60.1	ug/kg	2070	60.1	1	04/10/24 14:25	04/12/24 13:35	100-02-7	
N-Nitroso-di-n-propylamine	<77.8	ug/kg	408	77.8	1	04/10/24 14:25	04/12/24 13:35	621-64-7	
N-Nitrosodiphenylamine	<81.1	ug/kg	408	81.1	1	04/10/24 14:25	04/12/24 13:35	86-30-6	
Pentachlorophenol	<135	ug/kg	2070	135	1	04/10/24 14:25	04/12/24 13:35	87-86-5	
Phenanthrene	<87.2	ug/kg	408	87.2	1	04/10/24 14:25	04/12/24 13:35	85-01-8	
Phenol	<76.8	ug/kg	408	76.8	1	04/10/24 14:25	04/12/24 13:35	108-95-2	
Pyrene	<87.1	ug/kg	408	87.1	1	04/10/24 14:25	04/12/24 13:35	129-00-0	
Pyridine	<60.5	ug/kg	408	60.5	1	04/10/24 14:25	04/12/24 13:35	110-86-1	
1,2,4-Trichlorobenzene	<85.5	ug/kg	408	85.5	1	04/10/24 14:25	04/12/24 13:35	120-82-1	
2,4,5-Trichlorophenol	<83.6	ug/kg	408	83.6	1	04/10/24 14:25	04/12/24 13:35	95-95-4	
2,4,6-Trichlorophenol	<75.4	ug/kg	408	75.4	1	04/10/24 14:25	04/12/24 13:35	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	68	%	30-120		1	04/10/24 14:25	04/12/24 13:35	4165-60-0	
2-Fluorobiphenyl (S)	60	%	40-120		1	04/10/24 14:25	04/12/24 13:35	321-60-8	
Terphenyl-d14 (S)	65	%	45-120		1	04/10/24 14:25	04/12/24 13:35	1718-51-0	
Phenol-d6 (S)	70	%	40-120		1	04/10/24 14:25	04/12/24 13:35	13127-88-3	
2-Fluorophenol (S)	67	%	40-120		1	04/10/24 14:25	04/12/24 13:35	367-12-4	
2,4,6-Tribromophenol (S)	71	%	35-120		1	04/10/24 14:25	04/12/24 13:35	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	34.1	mg/kg	18.7	6.4	1	04/11/24 13:51	04/12/24 12:41		
TPH-DRO	<6.4	mg/kg	18.7	6.4	1	04/11/24 13:51	04/12/24 12:41		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	78	%	35-120		1	04/11/24 13:51	04/12/24 12:41	4165-60-0	
2-Fluorobiphenyl (S)	86	%	50-120		1	04/11/24 13:51	04/12/24 12:41	321-60-8	
Terphenyl-d14 (S)	87	%	45-120		1	04/11/24 13:51	04/12/24 12:41	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<87.8	ug/kg	92.0	87.8	1	04/10/24 09:05	04/10/24 14:05	67-64-1	
Benzene	<0.67	ug/kg	7.3	0.67	1	04/10/24 09:05	04/10/24 14:05	71-43-2	
Bromobenzene	<0.91	ug/kg	7.3	0.91	1	04/10/24 09:05	04/10/24 14:05	108-86-1	
Bromochloromethane	<1.1	ug/kg	7.3	1.1	1	04/10/24 09:05	04/10/24 14:05	74-97-5	
Bromodichloromethane	<1.2	ug/kg	19.0	1.2	1	04/10/24 09:05	04/10/24 14:05	75-27-4	
Bromoform	<0.57	ug/kg	19.0	0.57	1	04/10/24 09:05	04/10/24 14:05	75-25-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS05/SS-1 Lab ID: 60450516006 Collected: 04/08/24 12:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<9.0	ug/kg	19.0	9.0	1	04/10/24 09:05	04/10/24 14:05	74-83-9	
2-Butanone (MEK)	<46.6	ug/kg	92.0	46.6	1	04/10/24 09:05	04/10/24 14:05	78-93-3	
n-Butylbenzene	<0.70	ug/kg	7.3	0.70	1	04/10/24 09:05	04/10/24 14:05	104-51-8	
sec-Butylbenzene	<0.72	ug/kg	7.3	0.72	1	04/10/24 09:05	04/10/24 14:05	135-98-8	
tert-Butylbenzene	<0.47	ug/kg	7.3	0.47	1	04/10/24 09:05	04/10/24 14:05	98-06-6	
Carbon disulfide	<3.4	ug/kg	7.3	3.4	1	04/10/24 09:05	04/10/24 14:05	75-15-0	
Carbon tetrachloride	<2.4	ug/kg	7.3	2.4	1	04/10/24 09:05	04/10/24 14:05	56-23-5	
Chlorobenzene	<0.43	ug/kg	7.3	0.43	1	04/10/24 09:05	04/10/24 14:05	108-90-7	
Chloroethane	<12.1	ug/kg	36.5	12.1	1	04/10/24 09:05	04/10/24 14:05	75-00-3	
Chloroform	<2.7	ug/kg	7.3	2.7	1	04/10/24 09:05	04/10/24 14:05	67-66-3	
Chloromethane	<1.8	ug/kg	19.0	1.8	1	04/10/24 09:05	04/10/24 14:05	74-87-3	
2-Chlorotoluene	<1.0	ug/kg	7.3	1.0	1	04/10/24 09:05	04/10/24 14:05	95-49-8	
4-Chlorotoluene	<0.58	ug/kg	7.3	0.58	1	04/10/24 09:05	04/10/24 14:05	106-43-4	
1,2-Dibromo-3-chloropropane	<4.9	ug/kg	19.0	4.9	1	04/10/24 09:05	04/10/24 14:05	96-12-8	
Dibromochloromethane	<0.44	ug/kg	7.3	0.44	1	04/10/24 09:05	04/10/24 14:05	124-48-1	
1,2-Dibromoethane (EDB)	<0.77	ug/kg	7.3	0.77	1	04/10/24 09:05	04/10/24 14:05	106-93-4	
Dibromomethane	<2.1	ug/kg	7.3	2.1	1	04/10/24 09:05	04/10/24 14:05	74-95-3	
1,2-Dichlorobenzene	<1.2	ug/kg	7.3	1.2	1	04/10/24 09:05	04/10/24 14:05	95-50-1	
1,3-Dichlorobenzene	<0.92	ug/kg	7.3	0.92	1	04/10/24 09:05	04/10/24 14:05	541-73-1	
1,4-Dichlorobenzene	<1.3	ug/kg	7.3	1.3	1	04/10/24 09:05	04/10/24 14:05	106-46-7	
Dichlorodifluoromethane	<1.4	ug/kg	19.0	1.4	1	04/10/24 09:05	04/10/24 14:05	75-71-8	
1,1-Dichloroethane	<1.7	ug/kg	7.3	1.7	1	04/10/24 09:05	04/10/24 14:05	75-34-3	
1,2-Dichloroethane	<1.4	ug/kg	7.3	1.4	1	04/10/24 09:05	04/10/24 14:05	107-06-2	
1,2-Dichloroethene (Total)	<2.8	ug/kg	14.6	2.8	1	04/10/24 09:05	04/10/24 14:05	540-59-0	
1,1-Dichloroethene	<3.0	ug/kg	7.3	3.0	1	04/10/24 09:05	04/10/24 14:05	75-35-4	
cis-1,2-Dichloroethene	<1.4	ug/kg	7.3	1.4	1	04/10/24 09:05	04/10/24 14:05	156-59-2	
trans-1,2-Dichloroethene	<1.6	ug/kg	7.3	1.6	1	04/10/24 09:05	04/10/24 14:05	156-60-5	
1,2-Dichloropropane	<1.5	ug/kg	7.3	1.5	1	04/10/24 09:05	04/10/24 14:05	78-87-5	
1,3-Dichloropropane	<0.28	ug/kg	7.3	0.28	1	04/10/24 09:05	04/10/24 14:05	142-28-9	
2,2-Dichloropropane	<2.2	ug/kg	7.3	2.2	1	04/10/24 09:05	04/10/24 14:05	594-20-7	
1,1-Dichloropropene	<1.6	ug/kg	7.3	1.6	1	04/10/24 09:05	04/10/24 14:05	563-58-6	
cis-1,3-Dichloropropene	<1.1	ug/kg	7.3	1.1	1	04/10/24 09:05	04/10/24 14:05	10061-01-5	
trans-1,3-Dichloropropene	<0.88	ug/kg	7.3	0.88	1	04/10/24 09:05	04/10/24 14:05	10061-02-6	
Ethylbenzene	<1.3	ug/kg	7.3	1.3	1	04/10/24 09:05	04/10/24 14:05	100-41-4	
Hexachloro-1,3-butadiene	<1.3	ug/kg	7.3	1.3	1	04/10/24 09:05	04/10/24 14:05	87-68-3	
2-Hexanone	<15.2	ug/kg	92.0	15.2	1	04/10/24 09:05	04/10/24 14:05	591-78-6	
Isopropylbenzene (Cumene)	<0.46	ug/kg	7.3	0.46	1	04/10/24 09:05	04/10/24 14:05	98-82-8	
p-Isopropyltoluene	<0.64	ug/kg	7.3	0.64	1	04/10/24 09:05	04/10/24 14:05	99-87-6	
Methylene Chloride	<28.3	ug/kg	36.5	28.3	1	04/10/24 09:05	04/10/24 14:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	<10.2	ug/kg	92.0	10.2	1	04/10/24 09:05	04/10/24 14:05	108-10-1	
Methyl-tert-butyl ether	<1.4	ug/kg	7.3	1.4	1	04/10/24 09:05	04/10/24 14:05	1634-04-4	
Naphthalene	<1.1	ug/kg	14.6	1.1	1	04/10/24 09:05	04/10/24 14:05	91-20-3	
n-Propylbenzene	<0.89	ug/kg	7.3	0.89	1	04/10/24 09:05	04/10/24 14:05	103-65-1	
Styrene	<0.59	ug/kg	7.3	0.59	1	04/10/24 09:05	04/10/24 14:05	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS05/SS-1 Lab ID: 60450516006 Collected: 04/08/24 12:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<1.0	ug/kg	7.3	1.0	1	04/10/24 09:05	04/10/24 14:05	630-20-6	
1,1,2,2-Tetrachloroethane	<1.0	ug/kg	7.3	1.0	1	04/10/24 09:05	04/10/24 14:05	79-34-5	
Tetrachloroethene	<0.78	ug/kg	7.3	0.78	1	04/10/24 09:05	04/10/24 14:05	127-18-4	
Toluene	<6.5	ug/kg	29.2	6.5	1	04/10/24 09:05	04/10/24 14:05	108-88-3	
1,2,3-Trichlorobenzene	<0.85	ug/kg	7.3	0.85	1	04/10/24 09:05	04/10/24 14:05	87-61-6	
1,2,4-Trichlorobenzene	<0.72	ug/kg	7.3	0.72	1	04/10/24 09:05	04/10/24 14:05	120-82-1	
1,1,1-Trichloroethane	<1.5	ug/kg	7.3	1.5	1	04/10/24 09:05	04/10/24 14:05	71-55-6	
1,1,2-Trichloroethane	<1.0	ug/kg	7.3	1.0	1	04/10/24 09:05	04/10/24 14:05	79-00-5	
Trichloroethene	<2.8	ug/kg	7.3	2.8	1	04/10/24 09:05	04/10/24 14:05	79-01-6	
Trichlorofluoromethane	<14.0	ug/kg	19.0	14.0	1	04/10/24 09:05	04/10/24 14:05	75-69-4	
1,2,3-Trichloropropane	<2.2	ug/kg	7.3	2.2	1	04/10/24 09:05	04/10/24 14:05	96-18-4	
1,2,4-Trimethylbenzene	<1.0	ug/kg	7.3	1.0	1	04/10/24 09:05	04/10/24 14:05	95-63-6	
1,3,5-Trimethylbenzene	<0.63	ug/kg	7.3	0.63	1	04/10/24 09:05	04/10/24 14:05	108-67-8	
Vinyl chloride	<1.4	ug/kg	19.0	1.4	1	04/10/24 09:05	04/10/24 14:05	75-01-4	
Xylene (Total)	<5.4	ug/kg	21.9	5.4	1	04/10/24 09:05	04/10/24 14:05	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	109	%	80-120		1	04/10/24 09:05	04/10/24 14:05	2037-26-5	
4-Bromofluorobenzene (S)	101	%	83-119		1	04/10/24 09:05	04/10/24 14:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/10/24 09:05	04/10/24 14:05	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.092	mg/kg	0.68	0.092	1	04/11/24 07:56	04/11/24 12:02		
<b>Surrogates</b>									
Toluene-d8 (S)	100	%	78-122		1	04/11/24 07:56	04/11/24 12:02	2037-26-5	
4-Bromofluorobenzene (S)	108	%	69-133		1	04/11/24 07:56	04/11/24 12:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1	04/11/24 07:56	04/11/24 12:02	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	19.9	%	0.50	0.50	1		04/10/24 15:43		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	80.3	%			1	04/12/24 08:46	04/12/24 08:57		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	2.1	mg/kg	1.2	0.96	1	04/15/24 09:34	04/16/24 15:18	7664-41-7	L2
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.15	mg/kg	0.18	0.15	1	04/18/24 08:30	04/18/24 11:40	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS05/SS-1** Lab ID: **60450516006** Collected: 04/08/24 12:40 Received: 04/08/24 17:34 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>		Analytical Method: EPA 9056 Preparation Method: EPA 9056 Pace Analytical Services - Kansas City							
Nitrate as N	<b>11.2J</b>	mg/kg	12.1	6.8	10	04/10/24 08:00	04/11/24 18:11	14797-55-8	B
Nitrite as N	<b>9.0J</b>	mg/kg	12.1	6.3	10	04/10/24 08:00	04/11/24 18:11	14797-65-0	B

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS05/SS-2 Lab ID: 60450516007 Collected: 04/08/24 12:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00472	mg/kg	0.0251	0.00472	1	04/16/24 18:02	04/17/24 03:28	309-00-2	
alpha-BHC	<0.00462	mg/kg	0.0251	0.00462	1	04/16/24 18:02	04/17/24 03:28	319-84-6	
beta-BHC	<0.00476	mg/kg	0.0251	0.00476	1	04/16/24 18:02	04/17/24 03:28	319-85-7	
delta-BHC	<0.00434	mg/kg	0.0251	0.00434	1	04/16/24 18:02	04/17/24 03:28	319-86-8	
gamma-BHC (Lindane)	<0.00432	mg/kg	0.0251	0.00432	1	04/16/24 18:02	04/17/24 03:28	58-89-9	
Chlordane (Technical)	<0.129	mg/kg	0.377	0.129	1	04/16/24 18:02	04/17/24 03:28	57-74-9	
4,4'-DDD	<0.00464	mg/kg	0.0251	0.00464	1	04/16/24 18:02	04/17/24 03:28	72-54-8	
4,4'-DDE	<0.00459	mg/kg	0.0251	0.00459	1	04/16/24 18:02	04/17/24 03:28	72-55-9	
4,4'-DDT	<0.00787	mg/kg	0.0251	0.00787	1	04/16/24 18:02	04/17/24 03:28	50-29-3	
Dieldrin	<0.00432	mg/kg	0.0251	0.00432	1	04/16/24 18:02	04/17/24 03:28	60-57-1	
Endosulfan I	<0.00456	mg/kg	0.0251	0.00456	1	04/16/24 18:02	04/17/24 03:28	959-98-8	
Endosulfan II	<0.00420	mg/kg	0.0251	0.00420	1	04/16/24 18:02	04/17/24 03:28	33213-65-9	
Endosulfan sulfate	<0.00457	mg/kg	0.0251	0.00457	1	04/16/24 18:02	04/17/24 03:28	1031-07-8	
Endrin	<0.00439	mg/kg	0.0251	0.00439	1	04/16/24 18:02	04/17/24 03:28	72-20-8	LO
Endrin aldehyde	<0.00425	mg/kg	0.0251	0.00425	1	04/16/24 18:02	04/17/24 03:28	7421-93-4	
Endrin ketone	<0.00892	mg/kg	0.0251	0.00892	1	04/16/24 18:02	04/17/24 03:28	53494-70-5	
Hexachlorobenzene	<0.00434	mg/kg	0.0251	0.00434	1	04/16/24 18:02	04/17/24 03:28	118-74-1	
Heptachlor	<0.00537	mg/kg	0.0251	0.00537	1	04/16/24 18:02	04/17/24 03:28	76-44-8	
Heptachlor epoxide	<0.00425	mg/kg	0.0251	0.00425	1	04/16/24 18:02	04/17/24 03:28	1024-57-3	
Methoxychlor	<0.00607	mg/kg	0.0251	0.00607	1	04/16/24 18:02	04/17/24 03:28	72-43-5	
Toxaphene	<0.156	mg/kg	0.502	0.156	1	04/16/24 18:02	04/17/24 03:28	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	41.3	%	10.0-135		1	04/16/24 18:02	04/17/24 03:28	2051-24-3	
Tetrachloro-m-xylene (S)	61.2	%	10.0-139		1	04/16/24 18:02	04/17/24 03:28	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00881	mg/kg	0.0879	0.00881	1	04/15/24 13:10	04/16/24 17:52	94-75-7	
Dalapon	<0.0142	mg/kg	0.0879	0.0142	1	04/15/24 13:10	04/16/24 17:52	127-20-8	
2,4-DB	<0.0373	mg/kg	0.0879	0.0373	1	04/15/24 13:10	04/16/24 17:52	94-82-6	
Dicamba	<0.0197	mg/kg	0.0879	0.0197	1	04/15/24 13:10	04/16/24 17:52	1918-00-9	
Dichlorprop	<0.0307	mg/kg	0.0879	0.0307	1	04/15/24 13:10	04/16/24 17:52	120-36-5	
Dinoseb	<0.00875	mg/kg	0.0879	0.00875	1	04/15/24 13:10	04/16/24 17:52	88-85-7	
MCPA	<0.556	mg/kg	8.16	0.556	1	04/15/24 13:10	04/16/24 17:52	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.461	mg/kg	8.16	0.461	1	04/15/24 13:10	04/16/24 17:52	93-65-2	
2,4,5-T	<0.0107	mg/kg	0.0879	0.0107	1	04/15/24 13:10	04/16/24 17:52	93-76-5	
2,4,5-TP (Silvex)	<0.0134	mg/kg	0.0879	0.0134	1	04/15/24 13:10	04/16/24 17:52	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	65.5	%	22.0-132		1	04/15/24 13:10	04/16/24 17:52	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<11.0	ug/kg	40.7	11.0	1	04/11/24 15:53	04/15/24 13:40	12674-11-2	
PCB-1221 (Aroclor 1221)	<13.7	ug/kg	40.7	13.7	1	04/11/24 15:53	04/15/24 13:40	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS05/SS-2 Lab ID: 60450516007 Collected: 04/08/24 12:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<13.7	ug/kg	40.7	13.7	1	04/11/24 15:53	04/15/24 13:40	11141-16-5	
PCB-1242 (Aroclor 1242)	<13.7	ug/kg	40.7	13.7	1	04/11/24 15:53	04/15/24 13:40	53469-21-9	
PCB-1248 (Aroclor 1248)	<13.7	ug/kg	40.7	13.7	1	04/11/24 15:53	04/15/24 13:40	12672-29-6	
PCB-1254 (Aroclor 1254)	<13.7	ug/kg	40.7	13.7	1	04/11/24 15:53	04/15/24 13:40	11097-69-1	
PCB-1260 (Aroclor 1260)	<13.7	ug/kg	40.7	13.7	1	04/11/24 15:53	04/15/24 13:40	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	87	%	20-120		1	04/11/24 15:53	04/15/24 13:40	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	26400	mg/kg	62.8	8.66	5	04/14/24 22:12	04/22/24 17:52	7429-90-5	
Antimony	0.464J	mg/kg	3.77	0.208	5	04/14/24 22:12	04/22/24 17:52	7440-36-0	B,J
Arsenic	11.2	mg/kg	1.26	0.126	5	04/14/24 22:12	04/22/24 17:52	7440-38-2	
Barium	218	mg/kg	3.14	0.191	5	04/14/24 22:12	04/22/24 17:52	7440-39-3	
Beryllium	0.823J	mg/kg	3.14	0.173	5	04/14/24 22:12	04/22/24 17:52	7440-41-7	J
Cadmium	0.123J	mg/kg	1.26	0.107	5	04/14/24 22:12	04/22/24 17:52	7440-43-9	J
Calcium	3240	mg/kg	628	94.8	5	04/14/24 22:12	04/22/24 17:52	7440-70-2	
Chromium	24.8	mg/kg	6.28	0.371	5	04/14/24 22:12	04/22/24 17:52	7440-47-3	
Cobalt	9.01	mg/kg	1.26	0.0580	5	04/14/24 22:12	04/22/24 17:52	7440-48-4	
Copper	20.8	mg/kg	6.28	0.166	5	04/14/24 22:12	04/22/24 17:52	7440-50-8	
Iron	27600	mg/kg	62.8	11.2	5	04/14/24 22:12	04/22/24 17:52	7439-89-6	
Lead	17.2	mg/kg	2.51	0.124	5	04/14/24 22:12	04/22/24 17:52	7439-92-1	
Magnesium	5290	mg/kg	628	57.6	5	04/14/24 22:12	04/22/24 17:52	7439-95-4	
Manganese	540	mg/kg	3.14	0.336	5	04/14/24 22:12	04/22/24 17:52	7439-96-5	
Molybdenum	0.967J	mg/kg	3.14	0.127	5	04/14/24 22:12	04/22/24 17:52	7439-98-7	J
Nickel	23.5	mg/kg	3.14	0.247	5	04/14/24 22:12	04/22/24 17:52	7440-02-0	
Potassium	2490	mg/kg	628	85.3	5	04/14/24 22:12	04/22/24 17:52	7440-09-7	
Selenium	0.696J	mg/kg	3.14	0.226	5	04/14/24 22:12	04/22/24 17:52	7782-49-2	J
Silver	<0.109	mg/kg	0.628	0.109	5	04/14/24 22:12	04/22/24 17:52	7440-22-4	
Sodium	<96.0	mg/kg	628	96.0	5	04/14/24 22:12	04/22/24 17:52	7440-23-5	
Thallium	0.397J	mg/kg	2.51	0.0816	5	04/14/24 22:12	04/22/24 17:52	7440-28-0	J
Vanadium	52.1	mg/kg	3.14	0.235	5	04/14/24 22:12	04/22/24 17:52	7440-62-2	
Zinc	65.0	mg/kg	31.4	0.929	5	04/14/24 22:12	04/22/24 17:52	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0226	mg/kg	0.0502	0.0226	1	04/12/24 15:32	04/13/24 11:08	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<87.6	ug/kg	408	87.6	1	04/10/24 14:25	04/12/24 13:57	83-32-9	
Acenaphthylene	<66.7	ug/kg	408	66.7	1	04/10/24 14:25	04/12/24 13:57	208-96-8	
Anthracene	<85.2	ug/kg	408	85.2	1	04/10/24 14:25	04/12/24 13:57	120-12-7	
Benzo(a)anthracene	<86.2	ug/kg	408	86.2	1	04/10/24 14:25	04/12/24 13:57	56-55-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS05/SS-2 Lab ID: 60450516007 Collected: 04/08/24 12:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>		Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Benzo(a)pyrene	<87.7	ug/kg	408	87.7	1	04/10/24 14:25	04/12/24 13:57	50-32-8	
Benzo(b)fluoranthene	<99.5	ug/kg	408	99.5	1	04/10/24 14:25	04/12/24 13:57	205-99-2	
Benzo(g,h,i)perylene	<70.8	ug/kg	408	70.8	1	04/10/24 14:25	04/12/24 13:57	191-24-2	
Benzo(k)fluoranthene	<87.7	ug/kg	408	87.7	1	04/10/24 14:25	04/12/24 13:57	207-08-9	
Benzoic Acid	<222	ug/kg	2060	222	1	04/10/24 14:25	04/12/24 13:57	65-85-0	
Benzyl alcohol	<74.9	ug/kg	815	74.9	1	04/10/24 14:25	04/12/24 13:57	100-51-6	
4-Bromophenylphenyl ether	<88.0	ug/kg	408	88.0	1	04/10/24 14:25	04/12/24 13:57	101-55-3	
Butylbenzylphthalate	<83.0	ug/kg	408	83.0	1	04/10/24 14:25	04/12/24 13:57	85-68-7	
Carbazole	<83.9	ug/kg	408	83.9	1	04/10/24 14:25	04/12/24 13:57	86-74-8	
4-Chloro-3-methylphenol	<85.5	ug/kg	815	85.5	1	04/10/24 14:25	04/12/24 13:57	59-50-7	
4-Chloroaniline	<63.9	ug/kg	815	63.9	1	04/10/24 14:25	04/12/24 13:57	106-47-8	
bis(2-Chloroethoxy)methane	<81.0	ug/kg	408	81.0	1	04/10/24 14:25	04/12/24 13:57	111-91-1	
bis(2-Chloroethyl) ether	<82.3	ug/kg	408	82.3	1	04/10/24 14:25	04/12/24 13:57	111-44-4	
bis(2-Chloroisopropyl) ether	<88.3	ug/kg	408	88.3	1	04/10/24 14:25	04/12/24 13:57	108-60-1	
2-Chloronaphthalene	<85.9	ug/kg	408	85.9	1	04/10/24 14:25	04/12/24 13:57	91-58-7	
2-Chlorophenol	<83.3	ug/kg	408	83.3	1	04/10/24 14:25	04/12/24 13:57	95-57-8	
4-Chlorophenylphenyl ether	<87.5	ug/kg	408	87.5	1	04/10/24 14:25	04/12/24 13:57	7005-72-3	
Chrysene	<90.8	ug/kg	408	90.8	1	04/10/24 14:25	04/12/24 13:57	218-01-9	
Dibenz(a,h)anthracene	<73.3	ug/kg	408	73.3	1	04/10/24 14:25	04/12/24 13:57	53-70-3	
Dibenzofuran	<87.1	ug/kg	408	87.1	1	04/10/24 14:25	04/12/24 13:57	132-64-9	
1,2-Dichlorobenzene	<81.2	ug/kg	408	81.2	1	04/10/24 14:25	04/12/24 13:57	95-50-1	
1,3-Dichlorobenzene	<79.7	ug/kg	408	79.7	1	04/10/24 14:25	04/12/24 13:57	541-73-1	
1,4-Dichlorobenzene	<78.6	ug/kg	408	78.6	1	04/10/24 14:25	04/12/24 13:57	106-46-7	
3,3'-Dichlorobenzidine	<40.0	ug/kg	815	40.0	1	04/10/24 14:25	04/12/24 13:57	91-94-1	
2,4-Dichlorophenol	<81.7	ug/kg	408	81.7	1	04/10/24 14:25	04/12/24 13:57	120-83-2	
Diethylphthalate	<93.2	ug/kg	408	93.2	1	04/10/24 14:25	04/12/24 13:57	84-66-2	
2,4-Dimethylphenol	<59.3	ug/kg	408	59.3	1	04/10/24 14:25	04/12/24 13:57	105-67-9	
Dimethylphthalate	<84.6	ug/kg	408	84.6	1	04/10/24 14:25	04/12/24 13:57	131-11-3	
Di-n-butylphthalate	<96.5	ug/kg	408	96.5	1	04/10/24 14:25	04/12/24 13:57	84-74-2	
4,6-Dinitro-2-methylphenol	<70.5	ug/kg	2060	70.5	1	04/10/24 14:25	04/12/24 13:57	534-52-1	
2,4-Dinitrophenol	<123	ug/kg	2060	123	1	04/10/24 14:25	04/12/24 13:57	51-28-5	
2,4-Dinitrotoluene	<91.8	ug/kg	408	91.8	1	04/10/24 14:25	04/12/24 13:57	121-14-2	
2,6-Dinitrotoluene	<79.4	ug/kg	408	79.4	1	04/10/24 14:25	04/12/24 13:57	606-20-2	
Di-n-octylphthalate	<99.2	ug/kg	408	99.2	1	04/10/24 14:25	04/12/24 13:57	117-84-0	
bis(2-Ethylhexyl)phthalate	<91.5	ug/kg	408	91.5	1	04/10/24 14:25	04/12/24 13:57	117-81-7	
Fluoranthene	<89.8	ug/kg	408	89.8	1	04/10/24 14:25	04/12/24 13:57	206-44-0	
Fluorene	<86.7	ug/kg	408	86.7	1	04/10/24 14:25	04/12/24 13:57	86-73-7	
Hexachloro-1,3-butadiene	<87.3	ug/kg	408	87.3	1	04/10/24 14:25	04/12/24 13:57	87-68-3	
Hexachlorobenzene	<85.2	ug/kg	408	85.2	1	04/10/24 14:25	04/12/24 13:57	118-74-1	
Hexachlorocyclopentadiene	<251	ug/kg	408	251	1	04/10/24 14:25	04/12/24 13:57	77-47-4	
Hexachloroethane	<74.7	ug/kg	408	74.7	1	04/10/24 14:25	04/12/24 13:57	67-72-1	
Indeno(1,2,3-cd)pyrene	<83.4	ug/kg	408	83.4	1	04/10/24 14:25	04/12/24 13:57	193-39-5	
Isophorone	<78.8	ug/kg	408	78.8	1	04/10/24 14:25	04/12/24 13:57	78-59-1	
2-Methylnaphthalene	<82.7	ug/kg	408	82.7	1	04/10/24 14:25	04/12/24 13:57	91-57-6	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS05/SS-2 Lab ID: 60450516007 Collected: 04/08/24 12:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<74.2	ug/kg	408	74.2	1	04/10/24 14:25	04/12/24 13:57	95-48-7	
3&4-Methylphenol(m&p Cresol)	<75.7	ug/kg	408	75.7	1	04/10/24 14:25	04/12/24 13:57	15831-10-4	
Naphthalene	<87.7	ug/kg	408	87.7	1	04/10/24 14:25	04/12/24 13:57	91-20-3	
2-Nitroaniline	<67.6	ug/kg	815	67.6	1	04/10/24 14:25	04/12/24 13:57	88-74-4	
3-Nitroaniline	<63.5	ug/kg	815	63.5	1	04/10/24 14:25	04/12/24 13:57	99-09-2	
4-Nitroaniline	<69.8	ug/kg	815	69.8	1	04/10/24 14:25	04/12/24 13:57	100-01-6	
Nitrobenzene	<86.4	ug/kg	408	86.4	1	04/10/24 14:25	04/12/24 13:57	98-95-3	
2-Nitrophenol	<63.7	ug/kg	408	63.7	1	04/10/24 14:25	04/12/24 13:57	88-75-5	
4-Nitrophenol	<60.0	ug/kg	2060	60.0	1	04/10/24 14:25	04/12/24 13:57	100-02-7	
N-Nitroso-di-n-propylamine	<77.7	ug/kg	408	77.7	1	04/10/24 14:25	04/12/24 13:57	621-64-7	
N-Nitrosodiphenylamine	<81.0	ug/kg	408	81.0	1	04/10/24 14:25	04/12/24 13:57	86-30-6	
Pentachlorophenol	<135	ug/kg	2060	135	1	04/10/24 14:25	04/12/24 13:57	87-86-5	
Phenanthrene	<87.1	ug/kg	408	87.1	1	04/10/24 14:25	04/12/24 13:57	85-01-8	
Phenol	<76.7	ug/kg	408	76.7	1	04/10/24 14:25	04/12/24 13:57	108-95-2	
Pyrene	<87.0	ug/kg	408	87.0	1	04/10/24 14:25	04/12/24 13:57	129-00-0	
Pyridine	<60.4	ug/kg	408	60.4	1	04/10/24 14:25	04/12/24 13:57	110-86-1	
1,2,4-Trichlorobenzene	<85.4	ug/kg	408	85.4	1	04/10/24 14:25	04/12/24 13:57	120-82-1	
2,4,5-Trichlorophenol	<83.5	ug/kg	408	83.5	1	04/10/24 14:25	04/12/24 13:57	95-95-4	
2,4,6-Trichlorophenol	<75.4	ug/kg	408	75.4	1	04/10/24 14:25	04/12/24 13:57	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	74	%	30-120		1	04/10/24 14:25	04/12/24 13:57	4165-60-0	
2-Fluorobiphenyl (S)	65	%	40-120		1	04/10/24 14:25	04/12/24 13:57	321-60-8	
Terphenyl-d14 (S)	68	%	45-120		1	04/10/24 14:25	04/12/24 13:57	1718-51-0	
Phenol-d6 (S)	76	%	40-120		1	04/10/24 14:25	04/12/24 13:57	13127-88-3	
2-Fluorophenol (S)	74	%	40-120		1	04/10/24 14:25	04/12/24 13:57	367-12-4	
2,4,6-Tribromophenol (S)	77	%	35-120		1	04/10/24 14:25	04/12/24 13:57	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	31.3	mg/kg	18.5	6.3	1	04/11/24 13:51	04/12/24 13:00		
TPH-DRO	<6.3	mg/kg	18.5	6.3	1	04/11/24 13:51	04/12/24 13:00		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	83	%	35-120		1	04/11/24 13:51	04/12/24 13:00	4165-60-0	
2-Fluorobiphenyl (S)	89	%	50-120		1	04/11/24 13:51	04/12/24 13:00	321-60-8	
Terphenyl-d14 (S)	91	%	45-120		1	04/11/24 13:51	04/12/24 13:00	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<88.7	ug/kg	93.0	88.7	1	04/10/24 09:05	04/10/24 14:24	67-64-1	
Benzene	<0.67	ug/kg	7.4	0.67	1	04/10/24 09:05	04/10/24 14:24	71-43-2	
Bromobenzene	<0.92	ug/kg	7.4	0.92	1	04/10/24 09:05	04/10/24 14:24	108-86-1	
Bromochloromethane	<1.1	ug/kg	7.4	1.1	1	04/10/24 09:05	04/10/24 14:24	74-97-5	
Bromodichloromethane	<1.3	ug/kg	19.2	1.3	1	04/10/24 09:05	04/10/24 14:24	75-27-4	
Bromoform	<0.57	ug/kg	19.2	0.57	1	04/10/24 09:05	04/10/24 14:24	75-25-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS05/SS-2 Lab ID: 60450516007 Collected: 04/08/24 12:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<9.1	ug/kg	19.2	9.1	1	04/10/24 09:05	04/10/24 14:24	74-83-9	
2-Butanone (MEK)	<47.1	ug/kg	93.0	47.1	1	04/10/24 09:05	04/10/24 14:24	78-93-3	
n-Butylbenzene	<0.71	ug/kg	7.4	0.71	1	04/10/24 09:05	04/10/24 14:24	104-51-8	
sec-Butylbenzene	<0.73	ug/kg	7.4	0.73	1	04/10/24 09:05	04/10/24 14:24	135-98-8	
tert-Butylbenzene	<0.48	ug/kg	7.4	0.48	1	04/10/24 09:05	04/10/24 14:24	98-06-6	
Carbon disulfide	<3.4	ug/kg	7.4	3.4	1	04/10/24 09:05	04/10/24 14:24	75-15-0	
Carbon tetrachloride	<2.5	ug/kg	7.4	2.5	1	04/10/24 09:05	04/10/24 14:24	56-23-5	
Chlorobenzene	<0.43	ug/kg	7.4	0.43	1	04/10/24 09:05	04/10/24 14:24	108-90-7	
Chloroethane	<12.2	ug/kg	36.9	12.2	1	04/10/24 09:05	04/10/24 14:24	75-00-3	
Chloroform	<2.7	ug/kg	7.4	2.7	1	04/10/24 09:05	04/10/24 14:24	67-66-3	
Chloromethane	<1.8	ug/kg	19.2	1.8	1	04/10/24 09:05	04/10/24 14:24	74-87-3	
2-Chlorotoluene	<1.0	ug/kg	7.4	1.0	1	04/10/24 09:05	04/10/24 14:24	95-49-8	
4-Chlorotoluene	<0.58	ug/kg	7.4	0.58	1	04/10/24 09:05	04/10/24 14:24	106-43-4	
1,2-Dibromo-3-chloropropane	<4.9	ug/kg	19.2	4.9	1	04/10/24 09:05	04/10/24 14:24	96-12-8	
Dibromochloromethane	<0.45	ug/kg	7.4	0.45	1	04/10/24 09:05	04/10/24 14:24	124-48-1	
1,2-Dibromoethane (EDB)	<0.78	ug/kg	7.4	0.78	1	04/10/24 09:05	04/10/24 14:24	106-93-4	
Dibromomethane	<2.2	ug/kg	7.4	2.2	1	04/10/24 09:05	04/10/24 14:24	74-95-3	
1,2-Dichlorobenzene	<1.2	ug/kg	7.4	1.2	1	04/10/24 09:05	04/10/24 14:24	95-50-1	
1,3-Dichlorobenzene	<0.93	ug/kg	7.4	0.93	1	04/10/24 09:05	04/10/24 14:24	541-73-1	
1,4-Dichlorobenzene	<1.3	ug/kg	7.4	1.3	1	04/10/24 09:05	04/10/24 14:24	106-46-7	
Dichlorodifluoromethane	<1.4	ug/kg	19.2	1.4	1	04/10/24 09:05	04/10/24 14:24	75-71-8	
1,1-Dichloroethane	<1.7	ug/kg	7.4	1.7	1	04/10/24 09:05	04/10/24 14:24	75-34-3	
1,2-Dichloroethane	<1.4	ug/kg	7.4	1.4	1	04/10/24 09:05	04/10/24 14:24	107-06-2	
1,2-Dichloroethene (Total)	<2.8	ug/kg	14.8	2.8	1	04/10/24 09:05	04/10/24 14:24	540-59-0	
1,1-Dichloroethene	<3.0	ug/kg	7.4	3.0	1	04/10/24 09:05	04/10/24 14:24	75-35-4	
cis-1,2-Dichloroethene	<1.4	ug/kg	7.4	1.4	1	04/10/24 09:05	04/10/24 14:24	156-59-2	
trans-1,2-Dichloroethene	<1.6	ug/kg	7.4	1.6	1	04/10/24 09:05	04/10/24 14:24	156-60-5	
1,2-Dichloropropane	<1.5	ug/kg	7.4	1.5	1	04/10/24 09:05	04/10/24 14:24	78-87-5	
1,3-Dichloropropane	<0.29	ug/kg	7.4	0.29	1	04/10/24 09:05	04/10/24 14:24	142-28-9	
2,2-Dichloropropane	<2.2	ug/kg	7.4	2.2	1	04/10/24 09:05	04/10/24 14:24	594-20-7	
1,1-Dichloropropene	<1.6	ug/kg	7.4	1.6	1	04/10/24 09:05	04/10/24 14:24	563-58-6	
cis-1,3-Dichloropropene	<1.1	ug/kg	7.4	1.1	1	04/10/24 09:05	04/10/24 14:24	10061-01-5	
trans-1,3-Dichloropropene	<0.89	ug/kg	7.4	0.89	1	04/10/24 09:05	04/10/24 14:24	10061-02-6	
Ethylbenzene	<1.3	ug/kg	7.4	1.3	1	04/10/24 09:05	04/10/24 14:24	100-41-4	
Hexachloro-1,3-butadiene	<1.3	ug/kg	7.4	1.3	1	04/10/24 09:05	04/10/24 14:24	87-68-3	
2-Hexanone	<15.4	ug/kg	93.0	15.4	1	04/10/24 09:05	04/10/24 14:24	591-78-6	
Isopropylbenzene (Cumene)	<0.47	ug/kg	7.4	0.47	1	04/10/24 09:05	04/10/24 14:24	98-82-8	
p-Isopropyltoluene	<0.64	ug/kg	7.4	0.64	1	04/10/24 09:05	04/10/24 14:24	99-87-6	
Methylene Chloride	<28.6	ug/kg	36.9	28.6	1	04/10/24 09:05	04/10/24 14:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	<10.3	ug/kg	93.0	10.3	1	04/10/24 09:05	04/10/24 14:24	108-10-1	
Methyl-tert-butyl ether	<1.4	ug/kg	7.4	1.4	1	04/10/24 09:05	04/10/24 14:24	1634-04-4	
Naphthalene	<1.1	ug/kg	14.8	1.1	1	04/10/24 09:05	04/10/24 14:24	91-20-3	
n-Propylbenzene	<0.90	ug/kg	7.4	0.90	1	04/10/24 09:05	04/10/24 14:24	103-65-1	
Styrene	<0.60	ug/kg	7.4	0.60	1	04/10/24 09:05	04/10/24 14:24	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS05/SS-2 Lab ID: 60450516007 Collected: 04/08/24 12:50 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<1.0	ug/kg	7.4	1.0	1	04/10/24 09:05	04/10/24 14:24	630-20-6	
1,1,2,2-Tetrachloroethane	<1.0	ug/kg	7.4	1.0	1	04/10/24 09:05	04/10/24 14:24	79-34-5	
Tetrachloroethene	<0.79	ug/kg	7.4	0.79	1	04/10/24 09:05	04/10/24 14:24	127-18-4	
Toluene	<6.6	ug/kg	29.5	6.6	1	04/10/24 09:05	04/10/24 14:24	108-88-3	
1,2,3-Trichlorobenzene	<0.86	ug/kg	7.4	0.86	1	04/10/24 09:05	04/10/24 14:24	87-61-6	
1,2,4-Trichlorobenzene	<0.72	ug/kg	7.4	0.72	1	04/10/24 09:05	04/10/24 14:24	120-82-1	
1,1,1-Trichloroethane	<1.5	ug/kg	7.4	1.5	1	04/10/24 09:05	04/10/24 14:24	71-55-6	
1,1,2-Trichloroethane	<1.1	ug/kg	7.4	1.1	1	04/10/24 09:05	04/10/24 14:24	79-00-5	
Trichloroethene	<2.8	ug/kg	7.4	2.8	1	04/10/24 09:05	04/10/24 14:24	79-01-6	
Trichlorofluoromethane	<14.2	ug/kg	19.2	14.2	1	04/10/24 09:05	04/10/24 14:24	75-69-4	
1,2,3-Trichloropropane	<2.3	ug/kg	7.4	2.3	1	04/10/24 09:05	04/10/24 14:24	96-18-4	
1,2,4-Trimethylbenzene	<1.0	ug/kg	7.4	1.0	1	04/10/24 09:05	04/10/24 14:24	95-63-6	
1,3,5-Trimethylbenzene	<0.64	ug/kg	7.4	0.64	1	04/10/24 09:05	04/10/24 14:24	108-67-8	
Vinyl chloride	<1.4	ug/kg	19.2	1.4	1	04/10/24 09:05	04/10/24 14:24	75-01-4	
Xylene (Total)	<5.4	ug/kg	22.1	5.4	1	04/10/24 09:05	04/10/24 14:24	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	108	%	80-120		1	04/10/24 09:05	04/10/24 14:24	2037-26-5	
4-Bromofluorobenzene (S)	100	%	83-119		1	04/10/24 09:05	04/10/24 14:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/10/24 09:05	04/10/24 14:24	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.077	mg/kg	0.57	0.077	1	04/11/24 07:56	04/11/24 12:18		
<b>Surrogates</b>									
Toluene-d8 (S)	101	%	78-122		1	04/11/24 07:56	04/11/24 12:18	2037-26-5	
4-Bromofluorobenzene (S)	109	%	69-133		1	04/11/24 07:56	04/11/24 12:18	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/11/24 07:56	04/11/24 12:18	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	19.6	%	0.50	0.50	1		04/10/24 15:43		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	79.7	%			1	04/12/24 08:46	04/12/24 08:57		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	1.2J	mg/kg	1.3	1.0	1	04/15/24 09:34	04/16/24 15:19	7664-41-7	L2
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.15	mg/kg	0.19	0.15	1	04/18/24 08:30	04/18/24 11:42	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS05/SS-2** Lab ID: **60450516007** Collected: 04/08/24 12:50 Received: 04/08/24 17:34 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<b>10.8J</b>	mg/kg	12.1	6.8	10	04/10/24 08:00	04/11/24 18:24	14797-55-8	B
Nitrite as N	<b>&lt;6.3</b>	mg/kg	12.1	6.3	10	04/10/24 08:00	04/11/24 18:24	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS04/SS-1 Lab ID: 60450516008 Collected: 04/08/24 14:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00454	mg/kg	0.0241	0.00454	1	04/16/24 18:02	04/16/24 23:50	309-00-2	
alpha-BHC	<0.00444	mg/kg	0.0241	0.00444	1	04/16/24 18:02	04/16/24 23:50	319-84-6	
beta-BHC	<0.00458	mg/kg	0.0241	0.00458	1	04/16/24 18:02	04/16/24 23:50	319-85-7	
delta-BHC	<0.00418	mg/kg	0.0241	0.00418	1	04/16/24 18:02	04/16/24 23:50	319-86-8	
gamma-BHC (Lindane)	<0.00415	mg/kg	0.0241	0.00415	1	04/16/24 18:02	04/16/24 23:50	58-89-9	
Chlordane (Technical)	<0.124	mg/kg	0.362	0.124	1	04/16/24 18:02	04/16/24 23:50	57-74-9	
4,4'-DDD	<0.00447	mg/kg	0.0241	0.00447	1	04/16/24 18:02	04/16/24 23:50	72-54-8	
4,4'-DDE	<0.00442	mg/kg	0.0241	0.00442	1	04/16/24 18:02	04/16/24 23:50	72-55-9	
4,4'-DDT	<0.00757	mg/kg	0.0241	0.00757	1	04/16/24 18:02	04/16/24 23:50	50-29-3	
Dieldrin	<0.00415	mg/kg	0.0241	0.00415	1	04/16/24 18:02	04/16/24 23:50	60-57-1	
Endosulfan I	<0.00438	mg/kg	0.0241	0.00438	1	04/16/24 18:02	04/16/24 23:50	959-98-8	
Endosulfan II	<0.00404	mg/kg	0.0241	0.00404	1	04/16/24 18:02	04/16/24 23:50	33213-65-9	
Endosulfan sulfate	<0.00439	mg/kg	0.0241	0.00439	1	04/16/24 18:02	04/16/24 23:50	1031-07-8	
Endrin	<0.00423	mg/kg	0.0241	0.00423	1	04/16/24 18:02	04/16/24 23:50	72-20-8	LO
Endrin aldehyde	<0.00409	mg/kg	0.0241	0.00409	1	04/16/24 18:02	04/16/24 23:50	7421-93-4	
Endrin ketone	<0.00858	mg/kg	0.0241	0.00858	1	04/16/24 18:02	04/16/24 23:50	53494-70-5	
Hexachlorobenzene	<0.00418	mg/kg	0.0241	0.00418	1	04/16/24 18:02	04/16/24 23:50	118-74-1	
Heptachlor	<0.00517	mg/kg	0.0241	0.00517	1	04/16/24 18:02	04/16/24 23:50	76-44-8	
Heptachlor epoxide	<0.00409	mg/kg	0.0241	0.00409	1	04/16/24 18:02	04/16/24 23:50	1024-57-3	
Methoxychlor	<0.00584	mg/kg	0.0241	0.00584	1	04/16/24 18:02	04/16/24 23:50	72-43-5	
Toxaphene	<0.150	mg/kg	0.483	0.150	1	04/16/24 18:02	04/16/24 23:50	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	54.6	%	10.0-135		1	04/16/24 18:02	04/16/24 23:50	2051-24-3	
Tetrachloro-m-xylene (S)	66.7	%	10.0-139		1	04/16/24 18:02	04/16/24 23:50	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00847	mg/kg	0.0845	0.00847	1	04/15/24 13:10	04/16/24 18:02	94-75-7	
Dalapon	<0.0136	mg/kg	0.0845	0.0136	1	04/15/24 13:10	04/16/24 18:02	127-20-8	
2,4-DB	<0.0359	mg/kg	0.0845	0.0359	1	04/15/24 13:10	04/16/24 18:02	94-82-6	
Dicamba	<0.0190	mg/kg	0.0845	0.0190	1	04/15/24 13:10	04/16/24 18:02	1918-00-9	
Dichloroprop	<0.0296	mg/kg	0.0845	0.0296	1	04/15/24 13:10	04/16/24 18:02	120-36-5	
Dinoseb	<0.00841	mg/kg	0.0845	0.00841	1	04/15/24 13:10	04/16/24 18:02	88-85-7	
MCPA	<0.535	mg/kg	7.85	0.535	1	04/15/24 13:10	04/16/24 18:02	94-74-6	MH,R1
2-(2-methyl-4-chlorophenoxy)pa	<0.443	mg/kg	7.85	0.443	1	04/15/24 13:10	04/16/24 18:02	93-65-2	
2,4,5-T	<0.0103	mg/kg	0.0845	0.0103	1	04/15/24 13:10	04/16/24 18:02	93-76-5	
2,4,5-TP (Silvex)	<0.0129	mg/kg	0.0845	0.0129	1	04/15/24 13:10	04/16/24 18:02	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	67.9	%	22.0-132		1	04/15/24 13:10	04/16/24 18:02	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.2	ug/kg	37.9	10.2	1	04/11/24 15:53	04/15/24 14:10	12674-11-2	
PCB-1221 (Aroclor 1221)	<12.7	ug/kg	37.9	12.7	1	04/11/24 15:53	04/15/24 14:10	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS04/SS-1 Lab ID: 60450516008 Collected: 04/08/24 14:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<12.7	ug/kg	37.9	12.7	1	04/11/24 15:53	04/15/24 14:10	11141-16-5	
PCB-1242 (Aroclor 1242)	<12.7	ug/kg	37.9	12.7	1	04/11/24 15:53	04/15/24 14:10	53469-21-9	
PCB-1248 (Aroclor 1248)	<12.7	ug/kg	37.9	12.7	1	04/11/24 15:53	04/15/24 14:10	12672-29-6	
PCB-1254 (Aroclor 1254)	<12.7	ug/kg	37.9	12.7	1	04/11/24 15:53	04/15/24 14:10	11097-69-1	
PCB-1260 (Aroclor 1260)	<12.7	ug/kg	37.9	12.7	1	04/11/24 15:53	04/15/24 14:10	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	76	%	20-120		1	04/11/24 15:53	04/15/24 14:10	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	17800	mg/kg	60.4	8.33	5	04/15/24 09:27	04/17/24 21:54	7429-90-5	P6,PH
Antimony	0.653J	mg/kg	3.62	0.200	5	04/15/24 09:27	04/17/24 21:54	7440-36-0	B,J,PH
Arsenic	6.23	mg/kg	1.21	0.121	5	04/15/24 09:27	04/17/24 21:54	7440-38-2	
Barium	217	mg/kg	3.02	0.183	5	04/15/24 09:27	04/17/24 23:37	7440-39-3	
Beryllium	0.875J	mg/kg	3.02	0.167	5	04/15/24 09:27	04/17/24 21:54	7440-41-7	J
Cadmium	0.251J	mg/kg	1.21	0.103	5	04/15/24 09:27	04/17/24 21:54	7440-43-9	J
Calcium	2620	mg/kg	604	91.1	5	04/15/24 09:27	04/17/24 21:54	7440-70-2	
Chromium	19.5	mg/kg	6.04	0.357	5	04/15/24 09:27	04/17/24 21:54	7440-47-3	
Cobalt	9.03	mg/kg	1.21	0.0558	5	04/15/24 09:27	04/17/24 21:54	7440-48-4	
Copper	12.4	mg/kg	6.04	0.159	5	04/15/24 09:27	04/17/24 21:54	7440-50-8	
Iron	17800	mg/kg	60.4	10.8	5	04/15/24 09:27	04/17/24 21:54	7439-89-6	P6,PH
Lead	13.9	mg/kg	2.41	0.120	5	04/15/24 09:27	04/17/24 21:54	7439-92-1	
Magnesium	2630	mg/kg	604	55.4	5	04/15/24 09:27	04/17/24 21:54	7439-95-4	MH
Manganese	906	mg/kg	3.02	0.324	5	04/15/24 09:27	04/17/24 21:54	7439-96-5	P6,PH, R1
Molybdenum	0.895J	mg/kg	3.02	0.122	5	04/15/24 09:27	04/17/24 21:54	7439-98-7	J
Nickel	18.8	mg/kg	3.02	0.238	5	04/15/24 09:27	04/17/24 21:54	7440-02-0	
Potassium	2550	mg/kg	604	82.1	5	04/15/24 09:27	04/17/24 21:54	7440-09-7	MH
Selenium	0.417J	mg/kg	3.02	0.217	5	04/15/24 09:27	04/17/24 21:54	7782-49-2	J
Silver	<0.104	mg/kg	0.604	0.104	5	04/15/24 09:27	04/17/24 21:54	7440-22-4	
Sodium	<92.3	mg/kg	604	92.3	5	04/15/24 09:27	04/17/24 21:54	7440-23-5	
Thallium	0.290J	mg/kg	2.41	0.0785	5	04/15/24 09:27	04/17/24 21:54	7440-28-0	J
Vanadium	39.1	mg/kg	3.02	0.226	5	04/15/24 09:27	04/17/24 21:54	7440-62-2	
Zinc	48.4	mg/kg	30.2	0.893	5	04/15/24 09:27	04/17/24 21:54	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0217	mg/kg	0.0483	0.0217	1	04/12/24 15:37	04/13/24 09:41	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<83.2	ug/kg	387	83.2	1	04/10/24 14:25	04/12/24 14:19	83-32-9	
Acenaphthylene	<63.3	ug/kg	387	63.3	1	04/10/24 14:25	04/12/24 14:19	208-96-8	
Anthracene	<80.9	ug/kg	387	80.9	1	04/10/24 14:25	04/12/24 14:19	120-12-7	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS04/SS-1 Lab ID: 60450516008 Collected: 04/08/24 14:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)anthracene	<81.9	ug/kg	387	81.9	1	04/10/24 14:25	04/12/24 14:19	56-55-3	
Benzo(a)pyrene	<83.3	ug/kg	387	83.3	1	04/10/24 14:25	04/12/24 14:19	50-32-8	
Benzo(b)fluoranthene	<94.4	ug/kg	387	94.4	1	04/10/24 14:25	04/12/24 14:19	205-99-2	
Benzo(g,h,i)perylene	<67.2	ug/kg	387	67.2	1	04/10/24 14:25	04/12/24 14:19	191-24-2	
Benzo(k)fluoranthene	<83.3	ug/kg	387	83.3	1	04/10/24 14:25	04/12/24 14:19	207-08-9	
Benzoic Acid	<211	ug/kg	1960	211	1	04/10/24 14:25	04/12/24 14:19	65-85-0	
Benzyl alcohol	<71.1	ug/kg	774	71.1	1	04/10/24 14:25	04/12/24 14:19	100-51-6	
4-Bromophenylphenyl ether	<83.5	ug/kg	387	83.5	1	04/10/24 14:25	04/12/24 14:19	101-55-3	
Butylbenzylphthalate	<78.8	ug/kg	387	78.8	1	04/10/24 14:25	04/12/24 14:19	85-68-7	
Carbazole	<79.7	ug/kg	387	79.7	1	04/10/24 14:25	04/12/24 14:19	86-74-8	
4-Chloro-3-methylphenol	<81.2	ug/kg	774	81.2	1	04/10/24 14:25	04/12/24 14:19	59-50-7	
4-Chloroaniline	<60.6	ug/kg	774	60.6	1	04/10/24 14:25	04/12/24 14:19	106-47-8	
bis(2-Chloroethoxy)methane	<77.0	ug/kg	387	77.0	1	04/10/24 14:25	04/12/24 14:19	111-91-1	
bis(2-Chloroethyl) ether	<78.1	ug/kg	387	78.1	1	04/10/24 14:25	04/12/24 14:19	111-44-4	
bis(2-Chloroisopropyl) ether	<83.9	ug/kg	387	83.9	1	04/10/24 14:25	04/12/24 14:19	108-60-1	
2-Chloronaphthalene	<81.5	ug/kg	387	81.5	1	04/10/24 14:25	04/12/24 14:19	91-58-7	
2-Chlorophenol	<79.1	ug/kg	387	79.1	1	04/10/24 14:25	04/12/24 14:19	95-57-8	
4-Chlorophenylphenyl ether	<83.1	ug/kg	387	83.1	1	04/10/24 14:25	04/12/24 14:19	7005-72-3	
Chrysene	<86.2	ug/kg	387	86.2	1	04/10/24 14:25	04/12/24 14:19	218-01-9	
Dibenz(a,h)anthracene	<69.6	ug/kg	387	69.6	1	04/10/24 14:25	04/12/24 14:19	53-70-3	
Dibenzofuran	<82.7	ug/kg	387	82.7	1	04/10/24 14:25	04/12/24 14:19	132-64-9	
1,2-Dichlorobenzene	<77.1	ug/kg	387	77.1	1	04/10/24 14:25	04/12/24 14:19	95-50-1	
1,3-Dichlorobenzene	<75.7	ug/kg	387	75.7	1	04/10/24 14:25	04/12/24 14:19	541-73-1	
1,4-Dichlorobenzene	<74.6	ug/kg	387	74.6	1	04/10/24 14:25	04/12/24 14:19	106-46-7	
3,3'-Dichlorobenzidine	<38.0	ug/kg	774	38.0	1	04/10/24 14:25	04/12/24 14:19	91-94-1	M1
2,4-Dichlorophenol	<77.5	ug/kg	387	77.5	1	04/10/24 14:25	04/12/24 14:19	120-83-2	
Diethylphthalate	<88.4	ug/kg	387	88.4	1	04/10/24 14:25	04/12/24 14:19	84-66-2	
2,4-Dimethylphenol	<56.3	ug/kg	387	56.3	1	04/10/24 14:25	04/12/24 14:19	105-67-9	R1
Dimethylphthalate	<80.4	ug/kg	387	80.4	1	04/10/24 14:25	04/12/24 14:19	131-11-3	
Di-n-butylphthalate	<91.6	ug/kg	387	91.6	1	04/10/24 14:25	04/12/24 14:19	84-74-2	
4,6-Dinitro-2-methylphenol	<67.0	ug/kg	1960	67.0	1	04/10/24 14:25	04/12/24 14:19	534-52-1	
2,4-Dinitrophenol	<117	ug/kg	1960	117	1	04/10/24 14:25	04/12/24 14:19	51-28-5	
2,4-Dinitrotoluene	<87.2	ug/kg	387	87.2	1	04/10/24 14:25	04/12/24 14:19	121-14-2	
2,6-Dinitrotoluene	<75.4	ug/kg	387	75.4	1	04/10/24 14:25	04/12/24 14:19	606-20-2	
Di-n-octylphthalate	<94.2	ug/kg	387	94.2	1	04/10/24 14:25	04/12/24 14:19	117-84-0	
bis(2-Ethylhexyl)phthalate	<86.9	ug/kg	387	86.9	1	04/10/24 14:25	04/12/24 14:19	117-81-7	
Fluoranthene	<85.3	ug/kg	387	85.3	1	04/10/24 14:25	04/12/24 14:19	206-44-0	
Fluorene	<82.3	ug/kg	387	82.3	1	04/10/24 14:25	04/12/24 14:19	86-73-7	
Hexachloro-1,3-butadiene	<82.9	ug/kg	387	82.9	1	04/10/24 14:25	04/12/24 14:19	87-68-3	
Hexachlorobenzene	<80.9	ug/kg	387	80.9	1	04/10/24 14:25	04/12/24 14:19	118-74-1	
Hexachlorocyclopentadiene	<238	ug/kg	387	238	1	04/10/24 14:25	04/12/24 14:19	77-47-4	
Hexachloroethane	<71.0	ug/kg	387	71.0	1	04/10/24 14:25	04/12/24 14:19	67-72-1	
Indeno(1,2,3-cd)pyrene	<79.2	ug/kg	387	79.2	1	04/10/24 14:25	04/12/24 14:19	193-39-5	
Isophorone	<74.8	ug/kg	387	74.8	1	04/10/24 14:25	04/12/24 14:19	78-59-1	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS04/SS-1 Lab ID: 60450516008 Collected: 04/08/24 14:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylnaphthalene	<78.5	ug/kg	387	78.5	1	04/10/24 14:25	04/12/24 14:19	91-57-6	
2-Methylphenol(o-Cresol)	<70.5	ug/kg	387	70.5	1	04/10/24 14:25	04/12/24 14:19	95-48-7	M1,R1
3&4-Methylphenol(m&p Cresol)	<71.9	ug/kg	387	71.9	1	04/10/24 14:25	04/12/24 14:19	15831-10-4	M1,R1
Naphthalene	<83.3	ug/kg	387	83.3	1	04/10/24 14:25	04/12/24 14:19	91-20-3	
2-Nitroaniline	<64.2	ug/kg	774	64.2	1	04/10/24 14:25	04/12/24 14:19	88-74-4	
3-Nitroaniline	<60.3	ug/kg	774	60.3	1	04/10/24 14:25	04/12/24 14:19	99-09-2	
4-Nitroaniline	<66.3	ug/kg	774	66.3	1	04/10/24 14:25	04/12/24 14:19	100-01-6	
Nitrobenzene	<82.0	ug/kg	387	82.0	1	04/10/24 14:25	04/12/24 14:19	98-95-3	
2-Nitrophenol	<60.5	ug/kg	387	60.5	1	04/10/24 14:25	04/12/24 14:19	88-75-5	
4-Nitrophenol	<57.0	ug/kg	1960	57.0	1	04/10/24 14:25	04/12/24 14:19	100-02-7	
N-Nitroso-di-n-propylamine	<73.8	ug/kg	387	73.8	1	04/10/24 14:25	04/12/24 14:19	621-64-7	
N-Nitrosodiphenylamine	<77.0	ug/kg	387	77.0	1	04/10/24 14:25	04/12/24 14:19	86-30-6	
Pentachlorophenol	<128	ug/kg	1960	128	1	04/10/24 14:25	04/12/24 14:19	87-86-5	
Phenanthrene	<82.7	ug/kg	387	82.7	1	04/10/24 14:25	04/12/24 14:19	85-01-8	
Phenol	<72.8	ug/kg	387	72.8	1	04/10/24 14:25	04/12/24 14:19	108-95-2	
Pyrene	<82.6	ug/kg	387	82.6	1	04/10/24 14:25	04/12/24 14:19	129-00-0	
Pyridine	<57.4	ug/kg	387	57.4	1	04/10/24 14:25	04/12/24 14:19	110-86-1	
1,2,4-Trichlorobenzene	<81.1	ug/kg	387	81.1	1	04/10/24 14:25	04/12/24 14:19	120-82-1	
2,4,5-Trichlorophenol	<79.3	ug/kg	387	79.3	1	04/10/24 14:25	04/12/24 14:19	95-95-4	
2,4,6-Trichlorophenol	<71.6	ug/kg	387	71.6	1	04/10/24 14:25	04/12/24 14:19	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	71	%	30-120		1	04/10/24 14:25	04/12/24 14:19	4165-60-0	
2-Fluorobiphenyl (S)	64	%	40-120		1	04/10/24 14:25	04/12/24 14:19	321-60-8	
Terphenyl-d14 (S)	68	%	45-120		1	04/10/24 14:25	04/12/24 14:19	1718-51-0	
Phenol-d6 (S)	67	%	40-120		1	04/10/24 14:25	04/12/24 14:19	13127-88-3	
2-Fluorophenol (S)	62	%	40-120		1	04/10/24 14:25	04/12/24 14:19	367-12-4	
2,4,6-Tribromophenol (S)	72	%	35-120		1	04/10/24 14:25	04/12/24 14:19	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	14.2J	mg/kg	17.5	6.0	1	04/11/24 13:51	04/12/24 13:20		
TPH-DRO	<6.0	mg/kg	17.5	6.0	1	04/11/24 13:51	04/12/24 13:20		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	80	%	35-120		1	04/11/24 13:51	04/12/24 13:20	4165-60-0	
2-Fluorobiphenyl (S)	84	%	50-120		1	04/11/24 13:51	04/12/24 13:20	321-60-8	
Terphenyl-d14 (S)	86	%	45-120		1	04/11/24 13:51	04/12/24 13:20	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<76.8	ug/kg	80.5	76.8	1	04/10/24 09:05	04/10/24 14:45	67-64-1	
Benzene	<0.58	ug/kg	6.4	0.58	1	04/10/24 09:05	04/10/24 14:45	71-43-2	
Bromobenzene	<0.79	ug/kg	6.4	0.79	1	04/10/24 09:05	04/10/24 14:45	108-86-1	
Bromochloromethane	<0.95	ug/kg	6.4	0.95	1	04/10/24 09:05	04/10/24 14:45	74-97-5	
Bromodichloromethane	<1.1	ug/kg	16.6	1.1	1	04/10/24 09:05	04/10/24 14:45	75-27-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS04/SS-1 Lab ID: 60450516008 Collected: 04/08/24 14:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromoform	<0.50	ug/kg	16.6	0.50	1	04/10/24 09:05	04/10/24 14:45	75-25-2	
Bromomethane	<7.9	ug/kg	16.6	7.9	1	04/10/24 09:05	04/10/24 14:45	74-83-9	
2-Butanone (MEK)	<40.7	ug/kg	80.5	40.7	1	04/10/24 09:05	04/10/24 14:45	78-93-3	
n-Butylbenzene	<0.61	ug/kg	6.4	0.61	1	04/10/24 09:05	04/10/24 14:45	104-51-8	
sec-Butylbenzene	<0.63	ug/kg	6.4	0.63	1	04/10/24 09:05	04/10/24 14:45	135-98-8	
tert-Butylbenzene	<0.41	ug/kg	6.4	0.41	1	04/10/24 09:05	04/10/24 14:45	98-06-6	
Carbon disulfide	<3.0	ug/kg	6.4	3.0	1	04/10/24 09:05	04/10/24 14:45	75-15-0	
Carbon tetrachloride	<2.1	ug/kg	6.4	2.1	1	04/10/24 09:05	04/10/24 14:45	56-23-5	
Chlorobenzene	<0.37	ug/kg	6.4	0.37	1	04/10/24 09:05	04/10/24 14:45	108-90-7	
Chloroethane	<10.6	ug/kg	31.9	10.6	1	04/10/24 09:05	04/10/24 14:45	75-00-3	
Chloroform	<2.4	ug/kg	6.4	2.4	1	04/10/24 09:05	04/10/24 14:45	67-66-3	
Chloromethane	<1.6	ug/kg	16.6	1.6	1	04/10/24 09:05	04/10/24 14:45	74-87-3	
2-Chlorotoluene	<0.89	ug/kg	6.4	0.89	1	04/10/24 09:05	04/10/24 14:45	95-49-8	
4-Chlorotoluene	<0.50	ug/kg	6.4	0.50	1	04/10/24 09:05	04/10/24 14:45	106-43-4	
1,2-Dibromo-3-chloropropane	<4.3	ug/kg	16.6	4.3	1	04/10/24 09:05	04/10/24 14:45	96-12-8	
Dibromochloromethane	<0.39	ug/kg	6.4	0.39	1	04/10/24 09:05	04/10/24 14:45	124-48-1	
1,2-Dibromoethane (EDB)	<0.67	ug/kg	6.4	0.67	1	04/10/24 09:05	04/10/24 14:45	106-93-4	
Dibromomethane	<1.9	ug/kg	6.4	1.9	1	04/10/24 09:05	04/10/24 14:45	74-95-3	
1,2-Dichlorobenzene	<1.1	ug/kg	6.4	1.1	1	04/10/24 09:05	04/10/24 14:45	95-50-1	
1,3-Dichlorobenzene	<0.81	ug/kg	6.4	0.81	1	04/10/24 09:05	04/10/24 14:45	541-73-1	
1,4-Dichlorobenzene	<1.1	ug/kg	6.4	1.1	1	04/10/24 09:05	04/10/24 14:45	106-46-7	
Dichlorodifluoromethane	<1.2	ug/kg	16.6	1.2	1	04/10/24 09:05	04/10/24 14:45	75-71-8	
1,1-Dichloroethane	<1.5	ug/kg	6.4	1.5	1	04/10/24 09:05	04/10/24 14:45	75-34-3	
1,2-Dichloroethane	<1.2	ug/kg	6.4	1.2	1	04/10/24 09:05	04/10/24 14:45	107-06-2	
1,2-Dichloroethene (Total)	<2.4	ug/kg	12.8	2.4	1	04/10/24 09:05	04/10/24 14:45	540-59-0	
1,1-Dichloroethene	<2.6	ug/kg	6.4	2.6	1	04/10/24 09:05	04/10/24 14:45	75-35-4	
cis-1,2-Dichloroethene	<1.2	ug/kg	6.4	1.2	1	04/10/24 09:05	04/10/24 14:45	156-59-2	
trans-1,2-Dichloroethene	<1.4	ug/kg	6.4	1.4	1	04/10/24 09:05	04/10/24 14:45	156-60-5	
1,2-Dichloropropane	<1.3	ug/kg	6.4	1.3	1	04/10/24 09:05	04/10/24 14:45	78-87-5	
1,3-Dichloropropane	<0.25	ug/kg	6.4	0.25	1	04/10/24 09:05	04/10/24 14:45	142-28-9	
2,2-Dichloropropane	<1.9	ug/kg	6.4	1.9	1	04/10/24 09:05	04/10/24 14:45	594-20-7	
1,1-Dichloropropene	<1.4	ug/kg	6.4	1.4	1	04/10/24 09:05	04/10/24 14:45	563-58-6	
cis-1,3-Dichloropropene	<0.96	ug/kg	6.4	0.96	1	04/10/24 09:05	04/10/24 14:45	10061-01-5	
trans-1,3-Dichloropropene	<0.77	ug/kg	6.4	0.77	1	04/10/24 09:05	04/10/24 14:45	10061-02-6	
Ethylbenzene	<1.1	ug/kg	6.4	1.1	1	04/10/24 09:05	04/10/24 14:45	100-41-4	
Hexachloro-1,3-butadiene	<1.1	ug/kg	6.4	1.1	1	04/10/24 09:05	04/10/24 14:45	87-68-3	
2-Hexanone	<13.3	ug/kg	80.5	13.3	1	04/10/24 09:05	04/10/24 14:45	591-78-6	
Isopropylbenzene (Cumene)	<0.40	ug/kg	6.4	0.40	1	04/10/24 09:05	04/10/24 14:45	98-82-8	
p-Isopropyltoluene	1.2J	ug/kg	6.4	0.56	1	04/10/24 09:05	04/10/24 14:45	99-87-6	
Methylene Chloride	<24.8	ug/kg	31.9	24.8	1	04/10/24 09:05	04/10/24 14:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	<8.9	ug/kg	80.5	8.9	1	04/10/24 09:05	04/10/24 14:45	108-10-1	
Methyl-tert-butyl ether	<1.2	ug/kg	6.4	1.2	1	04/10/24 09:05	04/10/24 14:45	1634-04-4	
Naphthalene	<0.93	ug/kg	12.8	0.93	1	04/10/24 09:05	04/10/24 14:45	91-20-3	
n-Propylbenzene	<0.78	ug/kg	6.4	0.78	1	04/10/24 09:05	04/10/24 14:45	103-65-1	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS04/SS-1 Lab ID: 60450516008 Collected: 04/08/24 14:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Styrene	<0.52	ug/kg	6.4	0.52	1	04/10/24 09:05	04/10/24 14:45	100-42-5	
1,1,1,2-Tetrachloroethane	<0.91	ug/kg	6.4	0.91	1	04/10/24 09:05	04/10/24 14:45	630-20-6	
1,1,2,2-Tetrachloroethane	<0.90	ug/kg	6.4	0.90	1	04/10/24 09:05	04/10/24 14:45	79-34-5	
Tetrachloroethene	<0.68	ug/kg	6.4	0.68	1	04/10/24 09:05	04/10/24 14:45	127-18-4	
Toluene	<5.7	ug/kg	25.5	5.7	1	04/10/24 09:05	04/10/24 14:45	108-88-3	
1,2,3-Trichlorobenzene	<0.74	ug/kg	6.4	0.74	1	04/10/24 09:05	04/10/24 14:45	87-61-6	
1,2,4-Trichlorobenzene	<0.63	ug/kg	6.4	0.63	1	04/10/24 09:05	04/10/24 14:45	120-82-1	
1,1,1-Trichloroethane	<1.3	ug/kg	6.4	1.3	1	04/10/24 09:05	04/10/24 14:45	71-55-6	
1,1,2-Trichloroethane	<0.91	ug/kg	6.4	0.91	1	04/10/24 09:05	04/10/24 14:45	79-00-5	
Trichloroethene	<2.4	ug/kg	6.4	2.4	1	04/10/24 09:05	04/10/24 14:45	79-01-6	
Trichlorofluoromethane	<12.3	ug/kg	16.6	12.3	1	04/10/24 09:05	04/10/24 14:45	75-69-4	
1,2,3-Trichloropropane	<2.0	ug/kg	6.4	2.0	1	04/10/24 09:05	04/10/24 14:45	96-18-4	
1,2,4-Trimethylbenzene	<0.88	ug/kg	6.4	0.88	1	04/10/24 09:05	04/10/24 14:45	95-63-6	
1,3,5-Trimethylbenzene	<0.55	ug/kg	6.4	0.55	1	04/10/24 09:05	04/10/24 14:45	108-67-8	
Vinyl chloride	<1.2	ug/kg	16.6	1.2	1	04/10/24 09:05	04/10/24 14:45	75-01-4	
Xylene (Total)	<4.7	ug/kg	19.2	4.7	1	04/10/24 09:05	04/10/24 14:45	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	109	%	80-120		1	04/10/24 09:05	04/10/24 14:45	2037-26-5	
4-Bromofluorobenzene (S)	101	%	83-119		1	04/10/24 09:05	04/10/24 14:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/10/24 09:05	04/10/24 14:45	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.073	mg/kg	0.54	0.073	1	04/16/24 08:58	04/16/24 12:13		R1
<b>Surrogates</b>									
Toluene-d8 (S)	99	%	78-122		1	04/16/24 08:58	04/16/24 12:13	2037-26-5	
4-Bromofluorobenzene (S)	99	%	69-133		1	04/16/24 08:58	04/16/24 12:13	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/16/24 08:58	04/16/24 12:13	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	14.9	%	0.50	0.50	1		04/10/24 15:43		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	82.8	%			1	04/12/24 08:46	04/12/24 08:57		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<0.93	mg/kg	1.2	0.93	1	04/15/24 09:34	04/16/24 15:21	7664-41-7	L2,M0
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.14	mg/kg	0.17	0.14	1	04/18/24 08:30	04/18/24 11:43	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS04/SS-1** Lab ID: **60450516008** Collected: 04/08/24 14:00 Received: 04/08/24 17:34 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>		Analytical Method: EPA 9056 Preparation Method: EPA 9056 Pace Analytical Services - Kansas City							
Nitrate as N	<b>10.5J</b>	mg/kg	12.3	6.9	10	04/10/24 08:00	04/11/24 18:36	14797-55-8	B,M1
Nitrite as N	<b>9.3J</b>	mg/kg	12.3	6.4	10	04/10/24 08:00	04/11/24 18:36	14797-65-0	B,M1

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS04/SS-2 Lab ID: 60450516009 Collected: 04/08/24 14:30 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00465	mg/kg	0.0247	0.00465	1	04/16/24 18:02	04/17/24 03:37	309-00-2	
alpha-BHC	<0.00455	mg/kg	0.0247	0.00455	1	04/16/24 18:02	04/17/24 03:37	319-84-6	
beta-BHC	<0.00469	mg/kg	0.0247	0.00469	1	04/16/24 18:02	04/17/24 03:37	319-85-7	
delta-BHC	<0.00428	mg/kg	0.0247	0.00428	1	04/16/24 18:02	04/17/24 03:37	319-86-8	
gamma-BHC (Lindane)	<0.00425	mg/kg	0.0247	0.00425	1	04/16/24 18:02	04/17/24 03:37	58-89-9	
Chlordane (Technical)	<0.127	mg/kg	0.371	0.127	1	04/16/24 18:02	04/17/24 03:37	57-74-9	
4,4'-DDD	<0.00458	mg/kg	0.0247	0.00458	1	04/16/24 18:02	04/17/24 03:37	72-54-8	
4,4'-DDE	<0.00453	mg/kg	0.0247	0.00453	1	04/16/24 18:02	04/17/24 03:37	72-55-9	
4,4'-DDT	<0.00775	mg/kg	0.0247	0.00775	1	04/16/24 18:02	04/17/24 03:37	50-29-3	
Dieldrin	<0.00425	mg/kg	0.0247	0.00425	1	04/16/24 18:02	04/17/24 03:37	60-57-1	
Endosulfan I	<0.00449	mg/kg	0.0247	0.00449	1	04/16/24 18:02	04/17/24 03:37	959-98-8	
Endosulfan II	<0.00414	mg/kg	0.0247	0.00414	1	04/16/24 18:02	04/17/24 03:37	33213-65-9	
Endosulfan sulfate	<0.00450	mg/kg	0.0247	0.00450	1	04/16/24 18:02	04/17/24 03:37	1031-07-8	
Endrin	<0.00433	mg/kg	0.0247	0.00433	1	04/16/24 18:02	04/17/24 03:37	72-20-8	LO
Endrin aldehyde	<0.00419	mg/kg	0.0247	0.00419	1	04/16/24 18:02	04/17/24 03:37	7421-93-4	
Endrin ketone	<0.00879	mg/kg	0.0247	0.00879	1	04/16/24 18:02	04/17/24 03:37	53494-70-5	
Hexachlorobenzene	<0.00428	mg/kg	0.0247	0.00428	1	04/16/24 18:02	04/17/24 03:37	118-74-1	
Heptachlor	<0.00529	mg/kg	0.0247	0.00529	1	04/16/24 18:02	04/17/24 03:37	76-44-8	
Heptachlor epoxide	<0.00419	mg/kg	0.0247	0.00419	1	04/16/24 18:02	04/17/24 03:37	1024-57-3	
Methoxychlor	<0.00598	mg/kg	0.0247	0.00598	1	04/16/24 18:02	04/17/24 03:37	72-43-5	
Toxaphene	<0.153	mg/kg	0.495	0.153	1	04/16/24 18:02	04/17/24 03:37	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	52.5	%	10.0-135		1	04/16/24 18:02	04/17/24 03:37	2051-24-3	
Tetrachloro-m-xylene (S)	63.8	%	10.0-139		1	04/16/24 18:02	04/17/24 03:37	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00868	mg/kg	0.0866	0.00868	1	04/15/24 13:10	04/16/24 18:33	94-75-7	
Dalapon	<0.0140	mg/kg	0.0866	0.0140	1	04/15/24 13:10	04/16/24 18:33	127-20-8	
2,4-DB	<0.0367	mg/kg	0.0866	0.0367	1	04/15/24 13:10	04/16/24 18:33	94-82-6	
Dicamba	<0.0194	mg/kg	0.0866	0.0194	1	04/15/24 13:10	04/16/24 18:33	1918-00-9	
Dichlorprop	<0.0303	mg/kg	0.0866	0.0303	1	04/15/24 13:10	04/16/24 18:33	120-36-5	
Dinoseb	<0.00862	mg/kg	0.0866	0.00862	1	04/15/24 13:10	04/16/24 18:33	88-85-7	
MCPA	<0.548	mg/kg	8.04	0.548	1	04/15/24 13:10	04/16/24 18:33	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.454	mg/kg	8.04	0.454	1	04/15/24 13:10	04/16/24 18:33	93-65-2	
2,4,5-T	<0.0105	mg/kg	0.0866	0.0105	1	04/15/24 13:10	04/16/24 18:33	93-76-5	
2,4,5-TP (Silvex)	<0.0132	mg/kg	0.0866	0.0132	1	04/15/24 13:10	04/16/24 18:33	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	64.0	%	22.0-132		1	04/15/24 13:10	04/16/24 18:33	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.8	ug/kg	39.9	10.8	1	04/11/24 15:53	04/15/24 14:55	12674-11-2	
PCB-1221 (Aroclor 1221)	<13.4	ug/kg	39.9	13.4	1	04/11/24 15:53	04/15/24 14:55	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS04/SS-2 Lab ID: 60450516009 Collected: 04/08/24 14:30 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<13.4	ug/kg	39.9	13.4	1	04/11/24 15:53	04/15/24 14:55	11141-16-5	
PCB-1242 (Aroclor 1242)	<13.4	ug/kg	39.9	13.4	1	04/11/24 15:53	04/15/24 14:55	53469-21-9	
PCB-1248 (Aroclor 1248)	<13.4	ug/kg	39.9	13.4	1	04/11/24 15:53	04/15/24 14:55	12672-29-6	
PCB-1254 (Aroclor 1254)	<13.4	ug/kg	39.9	13.4	1	04/11/24 15:53	04/15/24 14:55	11097-69-1	
PCB-1260 (Aroclor 1260)	<13.4	ug/kg	39.9	13.4	1	04/11/24 15:53	04/15/24 14:55	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	83	%	20-120		1	04/11/24 15:53	04/15/24 14:55	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	28600	mg/kg	61.8	8.53	5	04/15/24 09:27	04/17/24 23:17	7429-90-5	
Antimony	0.986J	mg/kg	3.71	0.205	5	04/15/24 09:27	04/17/24 23:17	7440-36-0	B,J
Arsenic	8.28	mg/kg	1.24	0.124	5	04/15/24 09:27	04/17/24 23:17	7440-38-2	
Barium	209	mg/kg	3.09	0.188	5	04/25/24 09:16	04/25/24 15:53	7440-39-3	
Beryllium	0.935J	mg/kg	3.09	0.171	5	04/15/24 09:27	04/17/24 23:17	7440-41-7	J
Cadmium	0.308J	mg/kg	1.24	0.106	5	04/15/24 09:27	04/17/24 23:17	7440-43-9	J
Calcium	2980	mg/kg	618	93.4	5	04/15/24 09:27	04/17/24 23:17	7440-70-2	
Chromium	25.0	mg/kg	6.18	0.366	5	04/15/24 09:27	04/17/24 23:17	7440-47-3	
Cobalt	12.0	mg/kg	1.24	0.0571	5	04/15/24 09:27	04/17/24 23:17	7440-48-4	
Copper	16.6	mg/kg	6.18	0.163	5	04/15/24 09:27	04/17/24 23:17	7440-50-8	
Iron	23600	mg/kg	61.8	11.1	5	04/15/24 09:27	04/17/24 23:17	7439-89-6	
Lead	17.7	mg/kg	2.47	0.122	5	04/15/24 09:27	04/17/24 23:17	7439-92-1	
Magnesium	3950	mg/kg	618	56.8	5	04/15/24 09:27	04/17/24 23:17	7439-95-4	
Manganese	1020	mg/kg	3.09	0.331	5	04/15/24 09:27	04/17/24 23:17	7439-96-5	
Molybdenum	0.996J	mg/kg	3.09	0.125	5	04/15/24 09:27	04/17/24 23:17	7439-98-7	J
Nickel	25.8	mg/kg	3.09	0.244	5	04/15/24 09:27	04/17/24 23:17	7440-02-0	
Potassium	3240	mg/kg	618	84.1	5	04/15/24 09:27	04/17/24 23:17	7440-09-7	
Selenium	0.428J	mg/kg	3.09	0.223	5	04/15/24 09:27	04/17/24 23:17	7782-49-2	J
Silver	<0.107	mg/kg	0.618	0.107	5	04/15/24 09:27	04/17/24 23:17	7440-22-4	
Sodium	<94.6	mg/kg	618	94.6	5	04/15/24 09:27	04/17/24 23:17	7440-23-5	
Thallium	0.326J	mg/kg	2.47	0.0804	5	04/15/24 09:27	04/17/24 23:17	7440-28-0	J
Vanadium	52.2	mg/kg	3.09	0.231	5	04/15/24 09:27	04/17/24 23:17	7440-62-2	
Zinc	63.3	mg/kg	30.9	0.915	5	04/15/24 09:27	04/17/24 23:17	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0223	mg/kg	0.0495	0.0223	1	04/12/24 15:37	04/13/24 09:51	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<86.9	ug/kg	404	86.9	1	04/10/24 14:25	04/12/24 15:24	83-32-9	
Acenaphthylene	<66.2	ug/kg	404	66.2	1	04/10/24 14:25	04/12/24 15:24	208-96-8	
Anthracene	<84.5	ug/kg	404	84.5	1	04/10/24 14:25	04/12/24 15:24	120-12-7	
Benzo(a)anthracene	<85.5	ug/kg	404	85.5	1	04/10/24 14:25	04/12/24 15:24	56-55-3	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS04/SS-2 Lab ID: 60450516009 Collected: 04/08/24 14:30 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>		Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Benzo(a)pyrene	<87.0	ug/kg	404	87.0	1	04/10/24 14:25	04/12/24 15:24	50-32-8	
Benzo(b)fluoranthene	<98.6	ug/kg	404	98.6	1	04/10/24 14:25	04/12/24 15:24	205-99-2	
Benzo(g,h,i)perylene	<70.2	ug/kg	404	70.2	1	04/10/24 14:25	04/12/24 15:24	191-24-2	
Benzo(k)fluoranthene	<87.0	ug/kg	404	87.0	1	04/10/24 14:25	04/12/24 15:24	207-08-9	
Benzoic Acid	<221	ug/kg	2050	221	1	04/10/24 14:25	04/12/24 15:24	65-85-0	
Benzyl alcohol	<74.2	ug/kg	809	74.2	1	04/10/24 14:25	04/12/24 15:24	100-51-6	
4-Bromophenylphenyl ether	<87.2	ug/kg	404	87.2	1	04/10/24 14:25	04/12/24 15:24	101-55-3	
Butylbenzylphthalate	<82.3	ug/kg	404	82.3	1	04/10/24 14:25	04/12/24 15:24	85-68-7	
Carbazole	<83.2	ug/kg	404	83.2	1	04/10/24 14:25	04/12/24 15:24	86-74-8	
4-Chloro-3-methylphenol	<84.8	ug/kg	809	84.8	1	04/10/24 14:25	04/12/24 15:24	59-50-7	
4-Chloroaniline	<63.3	ug/kg	809	63.3	1	04/10/24 14:25	04/12/24 15:24	106-47-8	
bis(2-Chloroethoxy)methane	<80.4	ug/kg	404	80.4	1	04/10/24 14:25	04/12/24 15:24	111-91-1	
bis(2-Chloroethyl) ether	<81.6	ug/kg	404	81.6	1	04/10/24 14:25	04/12/24 15:24	111-44-4	
bis(2-Chloroisopropyl) ether	<87.6	ug/kg	404	87.6	1	04/10/24 14:25	04/12/24 15:24	108-60-1	
2-Chloronaphthalene	<85.1	ug/kg	404	85.1	1	04/10/24 14:25	04/12/24 15:24	91-58-7	
2-Chlorophenol	<82.6	ug/kg	404	82.6	1	04/10/24 14:25	04/12/24 15:24	95-57-8	
4-Chlorophenylphenyl ether	<86.7	ug/kg	404	86.7	1	04/10/24 14:25	04/12/24 15:24	7005-72-3	
Chrysene	<90.0	ug/kg	404	90.0	1	04/10/24 14:25	04/12/24 15:24	218-01-9	
Dibenz(a,h)anthracene	<72.6	ug/kg	404	72.6	1	04/10/24 14:25	04/12/24 15:24	53-70-3	
Dibenzofuran	<86.4	ug/kg	404	86.4	1	04/10/24 14:25	04/12/24 15:24	132-64-9	
1,2-Dichlorobenzene	<80.5	ug/kg	404	80.5	1	04/10/24 14:25	04/12/24 15:24	95-50-1	
1,3-Dichlorobenzene	<79.0	ug/kg	404	79.0	1	04/10/24 14:25	04/12/24 15:24	541-73-1	
1,4-Dichlorobenzene	<77.9	ug/kg	404	77.9	1	04/10/24 14:25	04/12/24 15:24	106-46-7	
3,3'-Dichlorobenzidine	<39.7	ug/kg	809	39.7	1	04/10/24 14:25	04/12/24 15:24	91-94-1	
2,4-Dichlorophenol	<81.0	ug/kg	404	81.0	1	04/10/24 14:25	04/12/24 15:24	120-83-2	
Diethylphthalate	<92.4	ug/kg	404	92.4	1	04/10/24 14:25	04/12/24 15:24	84-66-2	
2,4-Dimethylphenol	<58.8	ug/kg	404	58.8	1	04/10/24 14:25	04/12/24 15:24	105-67-9	
Dimethylphthalate	<83.9	ug/kg	404	83.9	1	04/10/24 14:25	04/12/24 15:24	131-11-3	
Di-n-butylphthalate	<95.7	ug/kg	404	95.7	1	04/10/24 14:25	04/12/24 15:24	84-74-2	
4,6-Dinitro-2-methylphenol	<70.0	ug/kg	2050	70.0	1	04/10/24 14:25	04/12/24 15:24	534-52-1	
2,4-Dinitrophenol	<122	ug/kg	2050	122	1	04/10/24 14:25	04/12/24 15:24	51-28-5	
2,4-Dinitrotoluene	<91.0	ug/kg	404	91.0	1	04/10/24 14:25	04/12/24 15:24	121-14-2	
2,6-Dinitrotoluene	<78.8	ug/kg	404	78.8	1	04/10/24 14:25	04/12/24 15:24	606-20-2	
Di-n-octylphthalate	<98.4	ug/kg	404	98.4	1	04/10/24 14:25	04/12/24 15:24	117-84-0	
bis(2-Ethylhexyl)phthalate	<90.8	ug/kg	404	90.8	1	04/10/24 14:25	04/12/24 15:24	117-81-7	
Fluoranthene	<89.1	ug/kg	404	89.1	1	04/10/24 14:25	04/12/24 15:24	206-44-0	
Fluorene	<86.0	ug/kg	404	86.0	1	04/10/24 14:25	04/12/24 15:24	86-73-7	
Hexachloro-1,3-butadiene	<86.6	ug/kg	404	86.6	1	04/10/24 14:25	04/12/24 15:24	87-68-3	
Hexachlorobenzene	<84.5	ug/kg	404	84.5	1	04/10/24 14:25	04/12/24 15:24	118-74-1	
Hexachlorocyclopentadiene	<249	ug/kg	404	249	1	04/10/24 14:25	04/12/24 15:24	77-47-4	
Hexachloroethane	<74.1	ug/kg	404	74.1	1	04/10/24 14:25	04/12/24 15:24	67-72-1	
Indeno(1,2,3-cd)pyrene	<82.7	ug/kg	404	82.7	1	04/10/24 14:25	04/12/24 15:24	193-39-5	
Isophorone	<78.2	ug/kg	404	78.2	1	04/10/24 14:25	04/12/24 15:24	78-59-1	
2-Methylnaphthalene	<82.0	ug/kg	404	82.0	1	04/10/24 14:25	04/12/24 15:24	91-57-6	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS04/SS-2 Lab ID: 60450516009 Collected: 04/08/24 14:30 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<73.6	ug/kg	404	73.6	1	04/10/24 14:25	04/12/24 15:24	95-48-7	
3&4-Methylphenol(m&p Cresol)	<75.1	ug/kg	404	75.1	1	04/10/24 14:25	04/12/24 15:24	15831-10-4	
Naphthalene	<87.0	ug/kg	404	87.0	1	04/10/24 14:25	04/12/24 15:24	91-20-3	
2-Nitroaniline	<67.0	ug/kg	809	67.0	1	04/10/24 14:25	04/12/24 15:24	88-74-4	
3-Nitroaniline	<63.0	ug/kg	809	63.0	1	04/10/24 14:25	04/12/24 15:24	99-09-2	
4-Nitroaniline	<69.2	ug/kg	809	69.2	1	04/10/24 14:25	04/12/24 15:24	100-01-6	
Nitrobenzene	<85.6	ug/kg	404	85.6	1	04/10/24 14:25	04/12/24 15:24	98-95-3	
2-Nitrophenol	<63.2	ug/kg	404	63.2	1	04/10/24 14:25	04/12/24 15:24	88-75-5	
4-Nitrophenol	<59.5	ug/kg	2050	59.5	1	04/10/24 14:25	04/12/24 15:24	100-02-7	
N-Nitroso-di-n-propylamine	<77.1	ug/kg	404	77.1	1	04/10/24 14:25	04/12/24 15:24	621-64-7	
N-Nitrosodiphenylamine	<80.4	ug/kg	404	80.4	1	04/10/24 14:25	04/12/24 15:24	86-30-6	
Pentachlorophenol	<134	ug/kg	2050	134	1	04/10/24 14:25	04/12/24 15:24	87-86-5	
Phenanthrene	<86.4	ug/kg	404	86.4	1	04/10/24 14:25	04/12/24 15:24	85-01-8	
Phenol	<76.1	ug/kg	404	76.1	1	04/10/24 14:25	04/12/24 15:24	108-95-2	
Pyrene	<86.2	ug/kg	404	86.2	1	04/10/24 14:25	04/12/24 15:24	129-00-0	
Pyridine	<59.9	ug/kg	404	59.9	1	04/10/24 14:25	04/12/24 15:24	110-86-1	
1,2,4-Trichlorobenzene	<84.7	ug/kg	404	84.7	1	04/10/24 14:25	04/12/24 15:24	120-82-1	
2,4,5-Trichlorophenol	<82.8	ug/kg	404	82.8	1	04/10/24 14:25	04/12/24 15:24	95-95-4	
2,4,6-Trichlorophenol	<74.7	ug/kg	404	74.7	1	04/10/24 14:25	04/12/24 15:24	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	70	%	30-120		1	04/10/24 14:25	04/12/24 15:24	4165-60-0	
2-Fluorobiphenyl (S)	63	%	40-120		1	04/10/24 14:25	04/12/24 15:24	321-60-8	
Terphenyl-d14 (S)	68	%	45-120		1	04/10/24 14:25	04/12/24 15:24	1718-51-0	
Phenol-d6 (S)	72	%	40-120		1	04/10/24 14:25	04/12/24 15:24	13127-88-3	
2-Fluorophenol (S)	68	%	40-120		1	04/10/24 14:25	04/12/24 15:24	367-12-4	
2,4,6-Tribromophenol (S)	74	%	35-120		1	04/10/24 14:25	04/12/24 15:24	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	18.6	mg/kg	18.4	6.3	1	04/11/24 13:51	04/12/24 14:18		
TPH-DRO	<6.3	mg/kg	18.4	6.3	1	04/11/24 13:51	04/12/24 14:18		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	75	%	35-120		1	04/11/24 13:51	04/12/24 14:18	4165-60-0	
2-Fluorobiphenyl (S)	81	%	50-120		1	04/11/24 13:51	04/12/24 14:18	321-60-8	
Terphenyl-d14 (S)	82	%	45-120		1	04/11/24 13:51	04/12/24 14:18	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<146	ug/kg	153	146	1	04/10/24 09:05	04/10/24 15:04	67-64-1	
Benzene	<1.1	ug/kg	12.1	1.1	1	04/10/24 09:05	04/10/24 15:04	71-43-2	
Bromobenzene	<1.5	ug/kg	12.1	1.5	1	04/10/24 09:05	04/10/24 15:04	108-86-1	
Bromochloromethane	<1.8	ug/kg	12.1	1.8	1	04/10/24 09:05	04/10/24 15:04	74-97-5	
Bromodichloromethane	<2.1	ug/kg	31.6	2.1	1	04/10/24 09:05	04/10/24 15:04	75-27-4	
Bromoform	<0.94	ug/kg	31.6	0.94	1	04/10/24 09:05	04/10/24 15:04	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS04/SS-2 Lab ID: 60450516009 Collected: 04/08/24 14:30 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<15.0	ug/kg	31.6	15.0	1	04/10/24 09:05	04/10/24 15:04	74-83-9	
2-Butanone (MEK)	<77.4	ug/kg	153	77.4	1	04/10/24 09:05	04/10/24 15:04	78-93-3	
n-Butylbenzene	<1.2	ug/kg	12.1	1.2	1	04/10/24 09:05	04/10/24 15:04	104-51-8	
sec-Butylbenzene	<1.2	ug/kg	12.1	1.2	1	04/10/24 09:05	04/10/24 15:04	135-98-8	
tert-Butylbenzene	<0.79	ug/kg	12.1	0.79	1	04/10/24 09:05	04/10/24 15:04	98-06-6	
Carbon disulfide	<5.6	ug/kg	12.1	5.6	1	04/10/24 09:05	04/10/24 15:04	75-15-0	
Carbon tetrachloride	<4.1	ug/kg	12.1	4.1	1	04/10/24 09:05	04/10/24 15:04	56-23-5	
Chlorobenzene	<0.71	ug/kg	12.1	0.71	1	04/10/24 09:05	04/10/24 15:04	108-90-7	
Chloroethane	<20.1	ug/kg	60.7	20.1	1	04/10/24 09:05	04/10/24 15:04	75-00-3	
Chloroform	<4.5	ug/kg	12.1	4.5	1	04/10/24 09:05	04/10/24 15:04	67-66-3	
Chloromethane	<3.0	ug/kg	31.6	3.0	1	04/10/24 09:05	04/10/24 15:04	74-87-3	
2-Chlorotoluene	<1.7	ug/kg	12.1	1.7	1	04/10/24 09:05	04/10/24 15:04	95-49-8	
4-Chlorotoluene	<0.96	ug/kg	12.1	0.96	1	04/10/24 09:05	04/10/24 15:04	106-43-4	
1,2-Dibromo-3-chloropropane	<8.1	ug/kg	31.6	8.1	1	04/10/24 09:05	04/10/24 15:04	96-12-8	
Dibromochloromethane	<0.73	ug/kg	12.1	0.73	1	04/10/24 09:05	04/10/24 15:04	124-48-1	
1,2-Dibromoethane (EDB)	<1.3	ug/kg	12.1	1.3	1	04/10/24 09:05	04/10/24 15:04	106-93-4	
Dibromomethane	<3.6	ug/kg	12.1	3.6	1	04/10/24 09:05	04/10/24 15:04	74-95-3	
1,2-Dichlorobenzene	<2.0	ug/kg	12.1	2.0	1	04/10/24 09:05	04/10/24 15:04	95-50-1	
1,3-Dichlorobenzene	<1.5	ug/kg	12.1	1.5	1	04/10/24 09:05	04/10/24 15:04	541-73-1	
1,4-Dichlorobenzene	<2.1	ug/kg	12.1	2.1	1	04/10/24 09:05	04/10/24 15:04	106-46-7	
Dichlorodifluoromethane	<2.3	ug/kg	31.6	2.3	1	04/10/24 09:05	04/10/24 15:04	75-71-8	
1,1-Dichloroethane	<2.8	ug/kg	12.1	2.8	1	04/10/24 09:05	04/10/24 15:04	75-34-3	
1,2-Dichloroethane	<2.3	ug/kg	12.1	2.3	1	04/10/24 09:05	04/10/24 15:04	107-06-2	
1,2-Dichloroethene (Total)	<4.6	ug/kg	24.3	4.6	1	04/10/24 09:05	04/10/24 15:04	540-59-0	
1,1-Dichloroethene	<4.9	ug/kg	12.1	4.9	1	04/10/24 09:05	04/10/24 15:04	75-35-4	
cis-1,2-Dichloroethene	<2.3	ug/kg	12.1	2.3	1	04/10/24 09:05	04/10/24 15:04	156-59-2	
trans-1,2-Dichloroethene	<2.7	ug/kg	12.1	2.7	1	04/10/24 09:05	04/10/24 15:04	156-60-5	
1,2-Dichloropropane	<2.5	ug/kg	12.1	2.5	1	04/10/24 09:05	04/10/24 15:04	78-87-5	
1,3-Dichloropropane	<0.47	ug/kg	12.1	0.47	1	04/10/24 09:05	04/10/24 15:04	142-28-9	
2,2-Dichloropropane	<3.7	ug/kg	12.1	3.7	1	04/10/24 09:05	04/10/24 15:04	594-20-7	
1,1-Dichloropropene	<2.6	ug/kg	12.1	2.6	1	04/10/24 09:05	04/10/24 15:04	563-58-6	
cis-1,3-Dichloropropene	<1.8	ug/kg	12.1	1.8	1	04/10/24 09:05	04/10/24 15:04	10061-01-5	
trans-1,3-Dichloropropene	<1.5	ug/kg	12.1	1.5	1	04/10/24 09:05	04/10/24 15:04	10061-02-6	
Ethylbenzene	<2.1	ug/kg	12.1	2.1	1	04/10/24 09:05	04/10/24 15:04	100-41-4	
Hexachloro-1,3-butadiene	<2.2	ug/kg	12.1	2.2	1	04/10/24 09:05	04/10/24 15:04	87-68-3	
2-Hexanone	<25.2	ug/kg	153	25.2	1	04/10/24 09:05	04/10/24 15:04	591-78-6	
Isopropylbenzene (Cumene)	<0.76	ug/kg	12.1	0.76	1	04/10/24 09:05	04/10/24 15:04	98-82-8	
p-Isopropyltoluene	<1.1	ug/kg	12.1	1.1	1	04/10/24 09:05	04/10/24 15:04	99-87-6	
Methylene Chloride	<47.1	ug/kg	60.7	47.1	1	04/10/24 09:05	04/10/24 15:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	<17.0	ug/kg	153	17.0	1	04/10/24 09:05	04/10/24 15:04	108-10-1	
Methyl-tert-butyl ether	<2.3	ug/kg	12.1	2.3	1	04/10/24 09:05	04/10/24 15:04	1634-04-4	
Naphthalene	<1.8	ug/kg	24.3	1.8	1	04/10/24 09:05	04/10/24 15:04	91-20-3	
n-Propylbenzene	<1.5	ug/kg	12.1	1.5	1	04/10/24 09:05	04/10/24 15:04	103-65-1	
Styrene	<0.98	ug/kg	12.1	0.98	1	04/10/24 09:05	04/10/24 15:04	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS04/SS-2 Lab ID: 60450516009 Collected: 04/08/24 14:30 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<1.7	ug/kg	12.1	1.7	1	04/10/24 09:05	04/10/24 15:04	630-20-6	
1,1,2,2-Tetrachloroethane	<1.7	ug/kg	12.1	1.7	1	04/10/24 09:05	04/10/24 15:04	79-34-5	
Tetrachloroethene	<1.3	ug/kg	12.1	1.3	1	04/10/24 09:05	04/10/24 15:04	127-18-4	
Toluene	<10.8	ug/kg	48.5	10.8	1	04/10/24 09:05	04/10/24 15:04	108-88-3	
1,2,3-Trichlorobenzene	<1.4	ug/kg	12.1	1.4	1	04/10/24 09:05	04/10/24 15:04	87-61-6	
1,2,4-Trichlorobenzene	<1.2	ug/kg	12.1	1.2	1	04/10/24 09:05	04/10/24 15:04	120-82-1	
1,1,1-Trichloroethane	<2.5	ug/kg	12.1	2.5	1	04/10/24 09:05	04/10/24 15:04	71-55-6	
1,1,2-Trichloroethane	<1.7	ug/kg	12.1	1.7	1	04/10/24 09:05	04/10/24 15:04	79-00-5	
Trichloroethene	<4.6	ug/kg	12.1	4.6	1	04/10/24 09:05	04/10/24 15:04	79-01-6	
Trichlorofluoromethane	<23.3	ug/kg	31.6	23.3	1	04/10/24 09:05	04/10/24 15:04	75-69-4	
1,2,3-Trichloropropane	<3.7	ug/kg	12.1	3.7	1	04/10/24 09:05	04/10/24 15:04	96-18-4	
1,2,4-Trimethylbenzene	<1.7	ug/kg	12.1	1.7	1	04/10/24 09:05	04/10/24 15:04	95-63-6	
1,3,5-Trimethylbenzene	<1.1	ug/kg	12.1	1.1	1	04/10/24 09:05	04/10/24 15:04	108-67-8	
Vinyl chloride	<2.2	ug/kg	31.6	2.2	1	04/10/24 09:05	04/10/24 15:04	75-01-4	
Xylene (Total)	<8.9	ug/kg	36.4	8.9	1	04/10/24 09:05	04/10/24 15:04	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	107	%	80-120		1	04/10/24 09:05	04/10/24 15:04	2037-26-5	
4-Bromofluorobenzene (S)	100	%	83-119		1	04/10/24 09:05	04/10/24 15:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1	04/10/24 09:05	04/10/24 15:04	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.081	mg/kg	0.60	0.081	1	04/11/24 07:56	04/11/24 12:50		
<b>Surrogates</b>									
Toluene-d8 (S)	102	%	78-122		1	04/11/24 07:56	04/11/24 12:50	2037-26-5	
4-Bromofluorobenzene (S)	110	%	69-133		1	04/11/24 07:56	04/11/24 12:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/11/24 07:56	04/11/24 12:50	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	19.0	%	0.50	0.50	1		04/10/24 15:43		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	80.9	%			1	04/12/24 08:46	04/12/24 08:57		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	1.6	mg/kg	1.3	1.0	1	04/15/24 09:34	04/16/24 15:27	7664-41-7	L2
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.15	mg/kg	0.18	0.15	1	04/18/24 08:30	04/18/24 11:47	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS04/SS-2** Lab ID: **60450516009** Collected: 04/08/24 14:30 Received: 04/08/24 17:34 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<7.1	mg/kg	12.6	7.1	10	04/10/24 08:00	04/11/24 19:26	14797-55-8	
Nitrite as N	<6.6	mg/kg	12.6	6.6	10	04/10/24 08:00	04/11/24 19:26	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS08/SS-1 Lab ID: 60450516010 Collected: 04/08/24 15:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00463	mg/kg	0.0246	0.00463	1	04/16/24 18:02	04/17/24 03:46	309-00-2	
alpha-BHC	<0.00453	mg/kg	0.0246	0.00453	1	04/16/24 18:02	04/17/24 03:46	319-84-6	
beta-BHC	<0.00467	mg/kg	0.0246	0.00467	1	04/16/24 18:02	04/17/24 03:46	319-85-7	
delta-BHC	<0.00426	mg/kg	0.0246	0.00426	1	04/16/24 18:02	04/17/24 03:46	319-86-8	
gamma-BHC (Lindane)	<0.00423	mg/kg	0.0246	0.00423	1	04/16/24 18:02	04/17/24 03:46	58-89-9	
Chlordane (Technical)	<0.127	mg/kg	0.369	0.127	1	04/16/24 18:02	04/17/24 03:46	57-74-9	
4,4'-DDD	<0.00455	mg/kg	0.0246	0.00455	1	04/16/24 18:02	04/17/24 03:46	72-54-8	
4,4'-DDE	<0.00451	mg/kg	0.0246	0.00451	1	04/16/24 18:02	04/17/24 03:46	72-55-9	
4,4'-DDT	<0.00772	mg/kg	0.0246	0.00772	1	04/16/24 18:02	04/17/24 03:46	50-29-3	
Dieldrin	<0.00423	mg/kg	0.0246	0.00423	1	04/16/24 18:02	04/17/24 03:46	60-57-1	
Endosulfan I	<0.00447	mg/kg	0.0246	0.00447	1	04/16/24 18:02	04/17/24 03:46	959-98-8	
Endosulfan II	<0.00412	mg/kg	0.0246	0.00412	1	04/16/24 18:02	04/17/24 03:46	33213-65-9	
Endosulfan sulfate	<0.00448	mg/kg	0.0246	0.00448	1	04/16/24 18:02	04/17/24 03:46	1031-07-8	
Endrin	<0.00431	mg/kg	0.0246	0.00431	1	04/16/24 18:02	04/17/24 03:46	72-20-8	LO
Endrin aldehyde	<0.00417	mg/kg	0.0246	0.00417	1	04/16/24 18:02	04/17/24 03:46	7421-93-4	
Endrin ketone	<0.00875	mg/kg	0.0246	0.00875	1	04/16/24 18:02	04/17/24 03:46	53494-70-5	
Hexachlorobenzene	<0.00426	mg/kg	0.0246	0.00426	1	04/16/24 18:02	04/17/24 03:46	118-74-1	
Heptachlor	<0.00527	mg/kg	0.0246	0.00527	1	04/16/24 18:02	04/17/24 03:46	76-44-8	
Heptachlor epoxide	<0.00417	mg/kg	0.0246	0.00417	1	04/16/24 18:02	04/17/24 03:46	1024-57-3	
Methoxychlor	<0.00596	mg/kg	0.0246	0.00596	1	04/16/24 18:02	04/17/24 03:46	72-43-5	
Toxaphene	<0.153	mg/kg	0.492	0.153	1	04/16/24 18:02	04/17/24 03:46	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	64.1	%	10.0-135		1	04/16/24 18:02	04/17/24 03:46	2051-24-3	
Tetrachloro-m-xylene (S)	67.4	%	10.0-139		1	04/16/24 18:02	04/17/24 03:46	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00864	mg/kg	0.0862	0.00864	1	04/15/24 13:10	04/16/24 18:43	94-75-7	
Dalapon	<0.0139	mg/kg	0.0862	0.0139	1	04/15/24 13:10	04/16/24 18:43	127-20-8	
2,4-DB	<0.0366	mg/kg	0.0862	0.0366	1	04/15/24 13:10	04/16/24 18:43	94-82-6	
Dicamba	<0.0193	mg/kg	0.0862	0.0193	1	04/15/24 13:10	04/16/24 18:43	1918-00-9	
Dichlorprop	<0.0302	mg/kg	0.0862	0.0302	1	04/15/24 13:10	04/16/24 18:43	120-36-5	
Dinoseb	<0.00858	mg/kg	0.0862	0.00858	1	04/15/24 13:10	04/16/24 18:43	88-85-7	
MCPA	<0.545	mg/kg	8.00	0.545	1	04/15/24 13:10	04/16/24 18:43	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.452	mg/kg	8.00	0.452	1	04/15/24 13:10	04/16/24 18:43	93-65-2	
2,4,5-T	<0.0105	mg/kg	0.0862	0.0105	1	04/15/24 13:10	04/16/24 18:43	93-76-5	
2,4,5-TP (Silvex)	<0.0132	mg/kg	0.0862	0.0132	1	04/15/24 13:10	04/16/24 18:43	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	68.7	%	22.0-132		1	04/15/24 13:10	04/16/24 18:43	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.7	ug/kg	39.7	10.7	1	04/11/24 15:53	04/19/24 02:54	12674-11-2	
PCB-1221 (Aroclor 1221)	<13.4	ug/kg	39.7	13.4	1	04/11/24 15:53	04/19/24 02:54	11104-28-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS08/SS-1 Lab ID: 60450516010 Collected: 04/08/24 15:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<13.4	ug/kg	39.7	13.4	1	04/11/24 15:53	04/19/24 02:54	11141-16-5	
PCB-1242 (Aroclor 1242)	<13.4	ug/kg	39.7	13.4	1	04/11/24 15:53	04/19/24 02:54	53469-21-9	
PCB-1248 (Aroclor 1248)	<13.4	ug/kg	39.7	13.4	1	04/11/24 15:53	04/19/24 02:54	12672-29-6	
PCB-1254 (Aroclor 1254)	<13.4	ug/kg	39.7	13.4	1	04/11/24 15:53	04/19/24 02:54	11097-69-1	
PCB-1260 (Aroclor 1260)	<13.4	ug/kg	39.7	13.4	1	04/11/24 15:53	04/19/24 02:54	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	93	%	20-120		1	04/11/24 15:53	04/19/24 02:54	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3051									
Pace National - Mt. Juliet									
Aluminum	13300	mg/kg	615	84.9	50	04/18/24 10:47	04/19/24 18:45	7429-90-5	
Antimony	0.238J	mg/kg	3.69	0.204	5	04/18/24 10:47	04/20/24 12:45	7440-36-0	B,J
Arsenic	5.10	mg/kg	1.23	0.123	5	04/18/24 10:47	04/19/24 18:28	7440-38-2	
Barium	197	mg/kg	3.08	0.187	5	04/18/24 10:47	04/19/24 18:28	7440-39-3	
Beryllium	1.30J	mg/kg	3.08	0.170	5	04/18/24 10:47	04/19/24 18:28	7440-41-7	J
Cadmium	0.171J	mg/kg	1.23	0.105	5	04/18/24 10:47	04/19/24 18:28	7440-43-9	J
Calcium	5820	mg/kg	615	92.9	5	04/18/24 10:47	04/19/24 18:28	7440-70-2	
Chromium	14.5	mg/kg	6.15	0.364	5	04/18/24 10:47	04/19/24 18:28	7440-47-3	
Cobalt	11.4	mg/kg	1.23	0.0569	5	04/18/24 10:47	04/19/24 18:28	7440-48-4	
Copper	13.9	mg/kg	6.15	0.162	5	04/18/24 10:47	04/19/24 18:28	7440-50-8	
Iron	17900	mg/kg	615	110	50	04/18/24 10:47	04/19/24 18:45	7439-89-6	
Lead	16.1	mg/kg	2.46	0.122	5	04/18/24 10:47	04/19/24 18:28	7439-92-1	
Magnesium	2340	mg/kg	615	56.5	5	04/18/24 10:47	04/19/24 18:28	7439-95-4	
Manganese	894	mg/kg	30.8	3.30	50	04/18/24 10:47	04/19/24 18:45	7439-96-5	
Molybdenum	0.404J	mg/kg	3.08	0.124	5	04/18/24 10:47	04/19/24 18:28	7439-98-7	J
Nickel	22.5	mg/kg	3.08	0.243	5	04/18/24 10:47	04/19/24 18:28	7440-02-0	
Potassium	993	mg/kg	615	83.7	5	04/18/24 10:47	04/19/24 18:28	7440-09-7	
Selenium	0.874J	mg/kg	3.08	0.222	5	04/18/24 10:47	04/19/24 18:28	7782-49-2	J
Silver	<0.106	mg/kg	0.615	0.106	5	04/18/24 10:47	04/19/24 18:28	7440-22-4	
Sodium	276J	mg/kg	615	94.2	5	04/18/24 10:47	04/19/24 18:28	7440-23-5	J
Thallium	0.309J	mg/kg	2.46	0.0800	5	04/18/24 10:47	04/19/24 18:28	7440-28-0	J
Vanadium	23.6	mg/kg	3.08	0.230	5	04/18/24 10:47	04/19/24 18:28	7440-62-2	
Zinc	34.9	mg/kg	30.8	0.911	5	04/18/24 10:47	04/19/24 18:28	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0222	mg/kg	0.0492	0.0222	1	04/12/24 15:37	04/13/24 09:53	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<87.5	ug/kg	407	87.5	1	04/10/24 14:25	04/12/24 15:45	83-32-9	
Acenaphthylene	<66.6	ug/kg	407	66.6	1	04/10/24 14:25	04/12/24 15:45	208-96-8	
Anthracene	<85.1	ug/kg	407	85.1	1	04/10/24 14:25	04/12/24 15:45	120-12-7	
Benzo(a)anthracene	<86.1	ug/kg	407	86.1	1	04/10/24 14:25	04/12/24 15:45	56-55-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS08/SS-1 Lab ID: 60450516010 Collected: 04/08/24 15:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<87.6	ug/kg	407	87.6	1	04/10/24 14:25	04/12/24 15:45	50-32-8	
Benzo(b)fluoranthene	<99.3	ug/kg	407	99.3	1	04/10/24 14:25	04/12/24 15:45	205-99-2	
Benzo(g,h,i)perylene	<70.7	ug/kg	407	70.7	1	04/10/24 14:25	04/12/24 15:45	191-24-2	
Benzo(k)fluoranthene	<87.6	ug/kg	407	87.6	1	04/10/24 14:25	04/12/24 15:45	207-08-9	
Benzoic Acid	<222	ug/kg	2060	222	1	04/10/24 14:25	04/12/24 15:45	65-85-0	
Benzyl alcohol	<74.8	ug/kg	814	74.8	1	04/10/24 14:25	04/12/24 15:45	100-51-6	
4-Bromophenylphenyl ether	<87.9	ug/kg	407	87.9	1	04/10/24 14:25	04/12/24 15:45	101-55-3	
Butylbenzylphthalate	<82.9	ug/kg	407	82.9	1	04/10/24 14:25	04/12/24 15:45	85-68-7	
Carbazole	<83.8	ug/kg	407	83.8	1	04/10/24 14:25	04/12/24 15:45	86-74-8	
4-Chloro-3-methylphenol	<85.4	ug/kg	814	85.4	1	04/10/24 14:25	04/12/24 15:45	59-50-7	
4-Chloroaniline	<63.8	ug/kg	814	63.8	1	04/10/24 14:25	04/12/24 15:45	106-47-8	
bis(2-Chloroethoxy)methane	<80.9	ug/kg	407	80.9	1	04/10/24 14:25	04/12/24 15:45	111-91-1	
bis(2-Chloroethyl) ether	<82.2	ug/kg	407	82.2	1	04/10/24 14:25	04/12/24 15:45	111-44-4	
bis(2-Chloroisopropyl) ether	<88.2	ug/kg	407	88.2	1	04/10/24 14:25	04/12/24 15:45	108-60-1	
2-Chloronaphthalene	<85.8	ug/kg	407	85.8	1	04/10/24 14:25	04/12/24 15:45	91-58-7	
2-Chlorophenol	<83.2	ug/kg	407	83.2	1	04/10/24 14:25	04/12/24 15:45	95-57-8	
4-Chlorophenylphenyl ether	<87.4	ug/kg	407	87.4	1	04/10/24 14:25	04/12/24 15:45	7005-72-3	
Chrysene	<90.7	ug/kg	407	90.7	1	04/10/24 14:25	04/12/24 15:45	218-01-9	
Dibenz(a,h)anthracene	<73.2	ug/kg	407	73.2	1	04/10/24 14:25	04/12/24 15:45	53-70-3	
Dibenzofuran	<87.0	ug/kg	407	87.0	1	04/10/24 14:25	04/12/24 15:45	132-64-9	
1,2-Dichlorobenzene	<81.1	ug/kg	407	81.1	1	04/10/24 14:25	04/12/24 15:45	95-50-1	
1,3-Dichlorobenzene	<79.6	ug/kg	407	79.6	1	04/10/24 14:25	04/12/24 15:45	541-73-1	
1,4-Dichlorobenzene	<78.5	ug/kg	407	78.5	1	04/10/24 14:25	04/12/24 15:45	106-46-7	
3,3'-Dichlorobenzidine	<40.0	ug/kg	814	40.0	1	04/10/24 14:25	04/12/24 15:45	91-94-1	
2,4-Dichlorophenol	<81.6	ug/kg	407	81.6	1	04/10/24 14:25	04/12/24 15:45	120-83-2	
Diethylphthalate	<93.0	ug/kg	407	93.0	1	04/10/24 14:25	04/12/24 15:45	84-66-2	
2,4-Dimethylphenol	<59.2	ug/kg	407	59.2	1	04/10/24 14:25	04/12/24 15:45	105-67-9	
Dimethylphthalate	<84.5	ug/kg	407	84.5	1	04/10/24 14:25	04/12/24 15:45	131-11-3	
Di-n-butylphthalate	<96.4	ug/kg	407	96.4	1	04/10/24 14:25	04/12/24 15:45	84-74-2	
4,6-Dinitro-2-methylphenol	<70.5	ug/kg	2060	70.5	1	04/10/24 14:25	04/12/24 15:45	534-52-1	
2,4-Dinitrophenol	<123	ug/kg	2060	123	1	04/10/24 14:25	04/12/24 15:45	51-28-5	
2,4-Dinitrotoluene	<91.7	ug/kg	407	91.7	1	04/10/24 14:25	04/12/24 15:45	121-14-2	
2,6-Dinitrotoluene	<79.3	ug/kg	407	79.3	1	04/10/24 14:25	04/12/24 15:45	606-20-2	
Di-n-octylphthalate	<99.1	ug/kg	407	99.1	1	04/10/24 14:25	04/12/24 15:45	117-84-0	
bis(2-Ethylhexyl)phthalate	<91.4	ug/kg	407	91.4	1	04/10/24 14:25	04/12/24 15:45	117-81-7	
Fluoranthene	<89.7	ug/kg	407	89.7	1	04/10/24 14:25	04/12/24 15:45	206-44-0	
Fluorene	<86.6	ug/kg	407	86.6	1	04/10/24 14:25	04/12/24 15:45	86-73-7	
Hexachloro-1,3-butadiene	<87.2	ug/kg	407	87.2	1	04/10/24 14:25	04/12/24 15:45	87-68-3	
Hexachlorobenzene	<85.1	ug/kg	407	85.1	1	04/10/24 14:25	04/12/24 15:45	118-74-1	
Hexachlorocyclopentadiene	<250	ug/kg	407	250	1	04/10/24 14:25	04/12/24 15:45	77-47-4	
Hexachloroethane	<74.6	ug/kg	407	74.6	1	04/10/24 14:25	04/12/24 15:45	67-72-1	
Indeno(1,2,3-cd)pyrene	<83.3	ug/kg	407	83.3	1	04/10/24 14:25	04/12/24 15:45	193-39-5	
Isophorone	<78.7	ug/kg	407	78.7	1	04/10/24 14:25	04/12/24 15:45	78-59-1	
2-Methylnaphthalene	<82.5	ug/kg	407	82.5	1	04/10/24 14:25	04/12/24 15:45	91-57-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS08/SS-1 Lab ID: 60450516010 Collected: 04/08/24 15:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<74.2	ug/kg	407	74.2	1	04/10/24 14:25	04/12/24 15:45	95-48-7	
3&4-Methylphenol(m&p Cresol)	<75.6	ug/kg	407	75.6	1	04/10/24 14:25	04/12/24 15:45	15831-10-4	
Naphthalene	<87.6	ug/kg	407	87.6	1	04/10/24 14:25	04/12/24 15:45	91-20-3	
2-Nitroaniline	<67.5	ug/kg	814	67.5	1	04/10/24 14:25	04/12/24 15:45	88-74-4	
3-Nitroaniline	<63.4	ug/kg	814	63.4	1	04/10/24 14:25	04/12/24 15:45	99-09-2	
4-Nitroaniline	<69.7	ug/kg	814	69.7	1	04/10/24 14:25	04/12/24 15:45	100-01-6	
Nitrobenzene	<86.2	ug/kg	407	86.2	1	04/10/24 14:25	04/12/24 15:45	98-95-3	
2-Nitrophenol	<63.7	ug/kg	407	63.7	1	04/10/24 14:25	04/12/24 15:45	88-75-5	
4-Nitrophenol	<60.0	ug/kg	2060	60.0	1	04/10/24 14:25	04/12/24 15:45	100-02-7	
N-Nitroso-di-n-propylamine	<77.6	ug/kg	407	77.6	1	04/10/24 14:25	04/12/24 15:45	621-64-7	
N-Nitrosodiphenylamine	<80.9	ug/kg	407	80.9	1	04/10/24 14:25	04/12/24 15:45	86-30-6	
Pentachlorophenol	<134	ug/kg	2060	134	1	04/10/24 14:25	04/12/24 15:45	87-86-5	
Phenanthrene	<87.0	ug/kg	407	87.0	1	04/10/24 14:25	04/12/24 15:45	85-01-8	
Phenol	<76.6	ug/kg	407	76.6	1	04/10/24 14:25	04/12/24 15:45	108-95-2	
Pyrene	<86.9	ug/kg	407	86.9	1	04/10/24 14:25	04/12/24 15:45	129-00-0	
Pyridine	<60.3	ug/kg	407	60.3	1	04/10/24 14:25	04/12/24 15:45	110-86-1	
1,2,4-Trichlorobenzene	<85.3	ug/kg	407	85.3	1	04/10/24 14:25	04/12/24 15:45	120-82-1	
2,4,5-Trichlorophenol	<83.4	ug/kg	407	83.4	1	04/10/24 14:25	04/12/24 15:45	95-95-4	
2,4,6-Trichlorophenol	<75.3	ug/kg	407	75.3	1	04/10/24 14:25	04/12/24 15:45	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	72	%	30-120		1	04/10/24 14:25	04/12/24 15:45	4165-60-0	
2-Fluorobiphenyl (S)	64	%	40-120		1	04/10/24 14:25	04/12/24 15:45	321-60-8	
Terphenyl-d14 (S)	70	%	45-120		1	04/10/24 14:25	04/12/24 15:45	1718-51-0	
Phenol-d6 (S)	70	%	40-120		1	04/10/24 14:25	04/12/24 15:45	13127-88-3	
2-Fluorophenol (S)	66	%	40-120		1	04/10/24 14:25	04/12/24 15:45	367-12-4	
2,4,6-Tribromophenol (S)	74	%	35-120		1	04/10/24 14:25	04/12/24 15:45	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	56.0	mg/kg	18.4	6.2	1	04/11/24 13:51	04/12/24 14:38		
TPH-DRO	<6.2	mg/kg	18.4	6.2	1	04/11/24 13:51	04/12/24 14:38		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	89	%	35-120		1	04/11/24 13:51	04/12/24 14:38	4165-60-0	
2-Fluorobiphenyl (S)	93	%	50-120		1	04/11/24 13:51	04/12/24 14:38	321-60-8	
Terphenyl-d14 (S)	98	%	45-120		1	04/11/24 13:51	04/12/24 14:38	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<86.3	ug/kg	90.4	86.3	1	04/10/24 09:05	04/10/24 15:24	67-64-1	
Benzene	<0.66	ug/kg	7.2	0.66	1	04/10/24 09:05	04/10/24 15:24	71-43-2	
Bromobenzene	<0.89	ug/kg	7.2	0.89	1	04/10/24 09:05	04/10/24 15:24	108-86-1	
Bromochloromethane	<1.1	ug/kg	7.2	1.1	1	04/10/24 09:05	04/10/24 15:24	74-97-5	
Bromodichloromethane	<1.2	ug/kg	18.7	1.2	1	04/10/24 09:05	04/10/24 15:24	75-27-4	
Bromoform	<0.56	ug/kg	18.7	0.56	1	04/10/24 09:05	04/10/24 15:24	75-25-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS08/SS-1 Lab ID: 60450516010 Collected: 04/08/24 15:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<8.9	ug/kg	18.7	8.9	1	04/10/24 09:05	04/10/24 15:24	74-83-9	
2-Butanone (MEK)	<45.8	ug/kg	90.4	45.8	1	04/10/24 09:05	04/10/24 15:24	78-93-3	
n-Butylbenzene	<0.69	ug/kg	7.2	0.69	1	04/10/24 09:05	04/10/24 15:24	104-51-8	
sec-Butylbenzene	<0.71	ug/kg	7.2	0.71	1	04/10/24 09:05	04/10/24 15:24	135-98-8	
tert-Butylbenzene	<0.47	ug/kg	7.2	0.47	1	04/10/24 09:05	04/10/24 15:24	98-06-6	
Carbon disulfide	<3.3	ug/kg	7.2	3.3	1	04/10/24 09:05	04/10/24 15:24	75-15-0	
Carbon tetrachloride	<2.4	ug/kg	7.2	2.4	1	04/10/24 09:05	04/10/24 15:24	56-23-5	
Chlorobenzene	<0.42	ug/kg	7.2	0.42	1	04/10/24 09:05	04/10/24 15:24	108-90-7	
Chloroethane	<11.9	ug/kg	35.9	11.9	1	04/10/24 09:05	04/10/24 15:24	75-00-3	
Chloroform	<2.6	ug/kg	7.2	2.6	1	04/10/24 09:05	04/10/24 15:24	67-66-3	
Chloromethane	<1.8	ug/kg	18.7	1.8	1	04/10/24 09:05	04/10/24 15:24	74-87-3	
2-Chlorotoluene	<1.0	ug/kg	7.2	1.0	1	04/10/24 09:05	04/10/24 15:24	95-49-8	
4-Chlorotoluene	<0.57	ug/kg	7.2	0.57	1	04/10/24 09:05	04/10/24 15:24	106-43-4	
1,2-Dibromo-3-chloropropane	<4.8	ug/kg	18.7	4.8	1	04/10/24 09:05	04/10/24 15:24	96-12-8	
Dibromochloromethane	<0.43	ug/kg	7.2	0.43	1	04/10/24 09:05	04/10/24 15:24	124-48-1	
1,2-Dibromoethane (EDB)	<0.75	ug/kg	7.2	0.75	1	04/10/24 09:05	04/10/24 15:24	106-93-4	
Dibromomethane	<2.1	ug/kg	7.2	2.1	1	04/10/24 09:05	04/10/24 15:24	74-95-3	
1,2-Dichlorobenzene	<1.2	ug/kg	7.2	1.2	1	04/10/24 09:05	04/10/24 15:24	95-50-1	
1,3-Dichlorobenzene	<0.91	ug/kg	7.2	0.91	1	04/10/24 09:05	04/10/24 15:24	541-73-1	
1,4-Dichlorobenzene	<1.3	ug/kg	7.2	1.3	1	04/10/24 09:05	04/10/24 15:24	106-46-7	
Dichlorodifluoromethane	<1.4	ug/kg	18.7	1.4	1	04/10/24 09:05	04/10/24 15:24	75-71-8	
1,1-Dichloroethane	<1.7	ug/kg	7.2	1.7	1	04/10/24 09:05	04/10/24 15:24	75-34-3	
1,2-Dichloroethane	<1.4	ug/kg	7.2	1.4	1	04/10/24 09:05	04/10/24 15:24	107-06-2	
1,2-Dichloroethene (Total)	<2.7	ug/kg	14.4	2.7	1	04/10/24 09:05	04/10/24 15:24	540-59-0	
1,1-Dichloroethene	<2.9	ug/kg	7.2	2.9	1	04/10/24 09:05	04/10/24 15:24	75-35-4	
cis-1,2-Dichloroethene	<1.3	ug/kg	7.2	1.3	1	04/10/24 09:05	04/10/24 15:24	156-59-2	
trans-1,2-Dichloroethene	<1.6	ug/kg	7.2	1.6	1	04/10/24 09:05	04/10/24 15:24	156-60-5	
1,2-Dichloropropane	<1.5	ug/kg	7.2	1.5	1	04/10/24 09:05	04/10/24 15:24	78-87-5	
1,3-Dichloropropane	<0.28	ug/kg	7.2	0.28	1	04/10/24 09:05	04/10/24 15:24	142-28-9	
2,2-Dichloropropane	<2.2	ug/kg	7.2	2.2	1	04/10/24 09:05	04/10/24 15:24	594-20-7	
1,1-Dichloropropene	<1.6	ug/kg	7.2	1.6	1	04/10/24 09:05	04/10/24 15:24	563-58-6	
cis-1,3-Dichloropropene	<1.1	ug/kg	7.2	1.1	1	04/10/24 09:05	04/10/24 15:24	10061-01-5	
trans-1,3-Dichloropropene	<0.86	ug/kg	7.2	0.86	1	04/10/24 09:05	04/10/24 15:24	10061-02-6	
Ethylbenzene	<1.2	ug/kg	7.2	1.2	1	04/10/24 09:05	04/10/24 15:24	100-41-4	
Hexachloro-1,3-butadiene	<1.3	ug/kg	7.2	1.3	1	04/10/24 09:05	04/10/24 15:24	87-68-3	
2-Hexanone	<14.9	ug/kg	90.4	14.9	1	04/10/24 09:05	04/10/24 15:24	591-78-6	
Isopropylbenzene (Cumene)	<0.45	ug/kg	7.2	0.45	1	04/10/24 09:05	04/10/24 15:24	98-82-8	
p-Isopropyltoluene	<0.62	ug/kg	7.2	0.62	1	04/10/24 09:05	04/10/24 15:24	99-87-6	
Methylene Chloride	<27.8	ug/kg	35.9	27.8	1	04/10/24 09:05	04/10/24 15:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	<10.0	ug/kg	90.4	10.0	1	04/10/24 09:05	04/10/24 15:24	108-10-1	
Methyl-tert-butyl ether	<1.4	ug/kg	7.2	1.4	1	04/10/24 09:05	04/10/24 15:24	1634-04-4	
Naphthalene	<1.0	ug/kg	14.4	1.0	1	04/10/24 09:05	04/10/24 15:24	91-20-3	
n-Propylbenzene	<0.87	ug/kg	7.2	0.87	1	04/10/24 09:05	04/10/24 15:24	103-65-1	
Styrene	<0.58	ug/kg	7.2	0.58	1	04/10/24 09:05	04/10/24 15:24	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS08/SS-1 Lab ID: 60450516010 Collected: 04/08/24 15:00 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<1.0	ug/kg	7.2	1.0	1	04/10/24 09:05	04/10/24 15:24	630-20-6	
1,1,2,2-Tetrachloroethane	<1.0	ug/kg	7.2	1.0	1	04/10/24 09:05	04/10/24 15:24	79-34-5	
Tetrachloroethene	<0.76	ug/kg	7.2	0.76	1	04/10/24 09:05	04/10/24 15:24	127-18-4	
Toluene	<6.4	ug/kg	28.7	6.4	1	04/10/24 09:05	04/10/24 15:24	108-88-3	
1,2,3-Trichlorobenzene	<0.84	ug/kg	7.2	0.84	1	04/10/24 09:05	04/10/24 15:24	87-61-6	
1,2,4-Trichlorobenzene	<0.70	ug/kg	7.2	0.70	1	04/10/24 09:05	04/10/24 15:24	120-82-1	
1,1,1-Trichloroethane	<1.5	ug/kg	7.2	1.5	1	04/10/24 09:05	04/10/24 15:24	71-55-6	
1,1,2-Trichloroethane	<1.0	ug/kg	7.2	1.0	1	04/10/24 09:05	04/10/24 15:24	79-00-5	
Trichloroethene	<2.7	ug/kg	7.2	2.7	1	04/10/24 09:05	04/10/24 15:24	79-01-6	
Trichlorofluoromethane	<13.8	ug/kg	18.7	13.8	1	04/10/24 09:05	04/10/24 15:24	75-69-4	
1,2,3-Trichloropropane	<2.2	ug/kg	7.2	2.2	1	04/10/24 09:05	04/10/24 15:24	96-18-4	
1,2,4-Trimethylbenzene	<0.99	ug/kg	7.2	0.99	1	04/10/24 09:05	04/10/24 15:24	95-63-6	
1,3,5-Trimethylbenzene	<0.62	ug/kg	7.2	0.62	1	04/10/24 09:05	04/10/24 15:24	108-67-8	
Vinyl chloride	<1.3	ug/kg	18.7	1.3	1	04/10/24 09:05	04/10/24 15:24	75-01-4	
Xylene (Total)	<5.3	ug/kg	21.5	5.3	1	04/10/24 09:05	04/10/24 15:24	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	107	%	80-120		1	04/10/24 09:05	04/10/24 15:24	2037-26-5	
4-Bromofluorobenzene (S)	101	%	83-119		1	04/10/24 09:05	04/10/24 15:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1	04/10/24 09:05	04/10/24 15:24	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.084	mg/kg	0.62	0.084	1	04/11/24 07:56	04/11/24 13:06		
<b>Surrogates</b>									
Toluene-d8 (S)	101	%	78-122		1	04/11/24 07:56	04/11/24 13:06	2037-26-5	
4-Bromofluorobenzene (S)	112	%	69-133		1	04/11/24 07:56	04/11/24 13:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/11/24 07:56	04/11/24 13:06	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	19.2	%	0.50	0.50	1		04/10/24 15:43		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	81.2	%			1	04/12/24 08:46	04/12/24 08:57		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<0.92	mg/kg	1.2	0.92	1	04/15/24 09:34	04/16/24 15:28	7664-41-7	L2
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	0.15J	mg/kg	0.18	0.15	1	04/18/24 08:30	04/18/24 11:49	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS08/SS-1** Lab ID: **60450516010** Collected: 04/08/24 15:00 Received: 04/08/24 17:34 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<b>13.3</b>	mg/kg	11.9	6.7	10	04/10/24 08:00	04/11/24 19:38	14797-55-8	B
Nitrite as N	<b>&lt;6.2</b>	mg/kg	11.9	6.2	10	04/10/24 08:00	04/11/24 19:38	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS08/SS-2 Lab ID: 60450516011 Collected: 04/08/24 15:10 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00480	mg/kg	0.0255	0.00480	1	04/16/24 21:20	04/17/24 04:58	309-00-2	
alpha-BHC	<0.00470	mg/kg	0.0255	0.00470	1	04/16/24 21:20	04/17/24 04:58	319-84-6	
beta-BHC	<0.00484	mg/kg	0.0255	0.00484	1	04/16/24 21:20	04/17/24 04:58	319-85-7	
delta-BHC	<0.00441	mg/kg	0.0255	0.00441	1	04/16/24 21:20	04/17/24 04:58	319-86-8	
gamma-BHC (Lindane)	<0.00439	mg/kg	0.0255	0.00439	1	04/16/24 21:20	04/17/24 04:58	58-89-9	
Chlordane (Technical)	<0.131	mg/kg	0.383	0.131	1	04/16/24 21:20	04/17/24 04:58	57-74-9	
4,4'-DDD	<0.00472	mg/kg	0.0255	0.00472	1	04/16/24 21:20	04/17/24 04:58	72-54-8	
4,4'-DDE	<0.00467	mg/kg	0.0255	0.00467	1	04/16/24 21:20	04/17/24 04:58	72-55-9	
4,4'-DDT	<0.00800	mg/kg	0.0255	0.00800	1	04/16/24 21:20	04/17/24 04:58	50-29-3	
Dieldrin	<0.00439	mg/kg	0.0255	0.00439	1	04/16/24 21:20	04/17/24 04:58	60-57-1	
Endosulfan I	<0.00463	mg/kg	0.0255	0.00463	1	04/16/24 21:20	04/17/24 04:58	959-98-8	
Endosulfan II	<0.00427	mg/kg	0.0255	0.00427	1	04/16/24 21:20	04/17/24 04:58	33213-65-9	
Endosulfan sulfate	<0.00464	mg/kg	0.0255	0.00464	1	04/16/24 21:20	04/17/24 04:58	1031-07-8	
Endrin	<0.00447	mg/kg	0.0255	0.00447	1	04/16/24 21:20	04/17/24 04:58	72-20-8	
Endrin aldehyde	<0.00433	mg/kg	0.0255	0.00433	1	04/16/24 21:20	04/17/24 04:58	7421-93-4	
Endrin ketone	<0.00907	mg/kg	0.0255	0.00907	1	04/16/24 21:20	04/17/24 04:58	53494-70-5	
Hexachlorobenzene	<0.00441	mg/kg	0.0255	0.00441	1	04/16/24 21:20	04/17/24 04:58	118-74-1	
Heptachlor	<0.00546	mg/kg	0.0255	0.00546	1	04/16/24 21:20	04/17/24 04:58	76-44-8	
Heptachlor epoxide	<0.00433	mg/kg	0.0255	0.00433	1	04/16/24 21:20	04/17/24 04:58	1024-57-3	
Methoxychlor	<0.00618	mg/kg	0.0255	0.00618	1	04/16/24 21:20	04/17/24 04:58	72-43-5	
Toxaphene	<0.158	mg/kg	0.510	0.158	1	04/16/24 21:20	04/17/24 04:58	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	57.7	%	10.0-135		1	04/16/24 21:20	04/17/24 04:58	2051-24-3	
Tetrachloro-m-xylene (S)	71.1	%	10.0-139		1	04/16/24 21:20	04/17/24 04:58	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00896	mg/kg	0.0893	0.00896	1	04/15/24 13:10	04/16/24 18:53	94-75-7	
Dalapon	<0.0144	mg/kg	0.0893	0.0144	1	04/15/24 13:10	04/16/24 18:53	127-20-8	
2,4-DB	<0.0379	mg/kg	0.0893	0.0379	1	04/15/24 13:10	04/16/24 18:53	94-82-6	
Dicamba	<0.0200	mg/kg	0.0893	0.0200	1	04/15/24 13:10	04/16/24 18:53	1918-00-9	
Dichlorprop	<0.0313	mg/kg	0.0893	0.0313	1	04/15/24 13:10	04/16/24 18:53	120-36-5	
Dinoseb	<0.00889	mg/kg	0.0893	0.00889	1	04/15/24 13:10	04/16/24 18:53	88-85-7	
MCPA	<0.565	mg/kg	8.29	0.565	1	04/15/24 13:10	04/16/24 18:53	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.468	mg/kg	8.29	0.468	1	04/15/24 13:10	04/16/24 18:53	93-65-2	
2,4,5-T	<0.0109	mg/kg	0.0893	0.0109	1	04/15/24 13:10	04/16/24 18:53	93-76-5	
2,4,5-TP (Silvex)	<0.0137	mg/kg	0.0893	0.0137	1	04/15/24 13:10	04/16/24 18:53	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	68.1	%	22.0-132		1	04/15/24 13:10	04/16/24 18:53	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.8	ug/kg	40.2	10.8	1	04/11/24 15:53	04/19/24 03:09	12674-11-2	
PCB-1221 (Aroclor 1221)	<13.5	ug/kg	40.2	13.5	1	04/11/24 15:53	04/19/24 03:09	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS08/SS-2 Lab ID: 60450516011 Collected: 04/08/24 15:10 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<13.5	ug/kg	40.2	13.5	1	04/11/24 15:53	04/19/24 03:09	11141-16-5	
PCB-1242 (Aroclor 1242)	<13.5	ug/kg	40.2	13.5	1	04/11/24 15:53	04/19/24 03:09	53469-21-9	
PCB-1248 (Aroclor 1248)	<13.5	ug/kg	40.2	13.5	1	04/11/24 15:53	04/19/24 03:09	12672-29-6	
PCB-1254 (Aroclor 1254)	<13.5	ug/kg	40.2	13.5	1	04/11/24 15:53	04/19/24 03:09	11097-69-1	
PCB-1260 (Aroclor 1260)	<13.5	ug/kg	40.2	13.5	1	04/11/24 15:53	04/19/24 03:09	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	89	%	20-120		1	04/11/24 15:53	04/19/24 03:09	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	42100	mg/kg	63.8	8.80	5	04/15/24 09:27	04/17/24 23:20	7429-90-5	
Antimony	0.962J	mg/kg	3.83	0.212	5	04/15/24 09:27	04/17/24 23:20	7440-36-0	B,J
Arsenic	14.7	mg/kg	1.28	0.128	5	04/15/24 09:27	04/17/24 23:20	7440-38-2	
Barium	215	mg/kg	3.19	0.194	5	04/25/24 09:16	04/25/24 16:09	7440-39-3	
Beryllium	1.80J	mg/kg	3.19	0.176	5	04/15/24 09:27	04/17/24 23:20	7440-41-7	J
Cadmium	0.234J	mg/kg	1.28	0.109	5	04/15/24 09:27	04/17/24 23:20	7440-43-9	J
Calcium	6110	mg/kg	638	96.3	5	04/15/24 09:27	04/17/24 23:20	7440-70-2	
Chromium	46.1	mg/kg	6.38	0.378	5	04/15/24 09:27	04/17/24 23:20	7440-47-3	
Cobalt	13.9	mg/kg	1.28	0.0589	5	04/15/24 09:27	04/17/24 23:20	7440-48-4	
Copper	19.9	mg/kg	6.38	0.168	5	04/15/24 09:27	04/17/24 23:20	7440-50-8	
Iron	43600	mg/kg	63.8	11.4	5	04/15/24 09:27	04/17/24 23:20	7439-89-6	
Lead	23.0	mg/kg	2.55	0.126	5	04/15/24 09:27	04/17/24 23:20	7439-92-1	
Magnesium	5450	mg/kg	638	58.6	5	04/15/24 09:27	04/17/24 23:20	7439-95-4	
Manganese	2540	mg/kg	3.19	0.342	5	04/15/24 09:27	04/17/24 23:20	7439-96-5	
Molybdenum	3.37	mg/kg	3.19	0.129	5	04/15/24 09:27	04/17/24 23:20	7439-98-7	
Nickel	53.6	mg/kg	3.19	0.251	5	04/15/24 09:27	04/17/24 23:20	7440-02-0	
Potassium	6180	mg/kg	638	86.8	5	04/15/24 09:27	04/17/24 23:20	7440-09-7	
Selenium	0.345J	mg/kg	3.19	0.230	5	04/15/24 09:27	04/17/24 23:20	7782-49-2	J
Silver	<0.110	mg/kg	0.638	0.110	5	04/15/24 09:27	04/17/24 23:20	7440-22-4	
Sodium	444J	mg/kg	638	97.6	5	04/15/24 09:27	04/17/24 23:20	7440-23-5	J
Thallium	0.405J	mg/kg	2.55	0.0829	5	04/15/24 09:27	04/17/24 23:20	7440-28-0	J
Vanadium	67.1	mg/kg	3.19	0.239	5	04/15/24 09:27	04/17/24 23:20	7440-62-2	
Zinc	58.3	mg/kg	31.9	0.944	5	04/15/24 09:27	04/17/24 23:20	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0230	mg/kg	0.0510	0.0230	1	04/12/24 15:37	04/13/24 09:56	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<176	ug/kg	817	176	2	04/10/24 14:25	04/12/24 16:07	83-32-9	
Acenaphthylene	<134	ug/kg	817	134	2	04/10/24 14:25	04/12/24 16:07	208-96-8	
Anthracene	<171	ug/kg	817	171	2	04/10/24 14:25	04/12/24 16:07	120-12-7	
Benzo(a)anthracene	<173	ug/kg	817	173	2	04/10/24 14:25	04/12/24 16:07	56-55-3	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS08/SS-2 Lab ID: 60450516011 Collected: 04/08/24 15:10 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<176	ug/kg	817	176	2	04/10/24 14:25	04/12/24 16:07	50-32-8	
Benzo(b)fluoranthene	<199	ug/kg	817	199	2	04/10/24 14:25	04/12/24 16:07	205-99-2	
Benzo(g,h,i)perylene	<142	ug/kg	817	142	2	04/10/24 14:25	04/12/24 16:07	191-24-2	
Benzo(k)fluoranthene	<176	ug/kg	817	176	2	04/10/24 14:25	04/12/24 16:07	207-08-9	
Benzoic Acid	<446	ug/kg	4140	446	2	04/10/24 14:25	04/12/24 16:07	65-85-0	
Benzyl alcohol	<150	ug/kg	1630	150	2	04/10/24 14:25	04/12/24 16:07	100-51-6	
4-Bromophenylphenyl ether	<176	ug/kg	817	176	2	04/10/24 14:25	04/12/24 16:07	101-55-3	
Butylbenzylphthalate	<166	ug/kg	817	166	2	04/10/24 14:25	04/12/24 16:07	85-68-7	
Carbazole	<168	ug/kg	817	168	2	04/10/24 14:25	04/12/24 16:07	86-74-8	
4-Chloro-3-methylphenol	<171	ug/kg	1630	171	2	04/10/24 14:25	04/12/24 16:07	59-50-7	
4-Chloroaniline	<128	ug/kg	1630	128	2	04/10/24 14:25	04/12/24 16:07	106-47-8	
bis(2-Chloroethoxy)methane	<162	ug/kg	817	162	2	04/10/24 14:25	04/12/24 16:07	111-91-1	
bis(2-Chloroethyl) ether	<165	ug/kg	817	165	2	04/10/24 14:25	04/12/24 16:07	111-44-4	
bis(2-Chloroisopropyl) ether	<177	ug/kg	817	177	2	04/10/24 14:25	04/12/24 16:07	108-60-1	
2-Chloronaphthalene	<172	ug/kg	817	172	2	04/10/24 14:25	04/12/24 16:07	91-58-7	
2-Chlorophenol	<167	ug/kg	817	167	2	04/10/24 14:25	04/12/24 16:07	95-57-8	
4-Chlorophenylphenyl ether	<175	ug/kg	817	175	2	04/10/24 14:25	04/12/24 16:07	7005-72-3	
Chrysene	<182	ug/kg	817	182	2	04/10/24 14:25	04/12/24 16:07	218-01-9	
Dibenz(a,h)anthracene	<147	ug/kg	817	147	2	04/10/24 14:25	04/12/24 16:07	53-70-3	
Dibenzofuran	<175	ug/kg	817	175	2	04/10/24 14:25	04/12/24 16:07	132-64-9	
1,2-Dichlorobenzene	<163	ug/kg	817	163	2	04/10/24 14:25	04/12/24 16:07	95-50-1	
1,3-Dichlorobenzene	<160	ug/kg	817	160	2	04/10/24 14:25	04/12/24 16:07	541-73-1	
1,4-Dichlorobenzene	<158	ug/kg	817	158	2	04/10/24 14:25	04/12/24 16:07	106-46-7	
3,3'-Dichlorobenzidine	<80.3	ug/kg	1630	80.3	2	04/10/24 14:25	04/12/24 16:07	91-94-1	
2,4-Dichlorophenol	<164	ug/kg	817	164	2	04/10/24 14:25	04/12/24 16:07	120-83-2	
Diethylphthalate	<187	ug/kg	817	187	2	04/10/24 14:25	04/12/24 16:07	84-66-2	
2,4-Dimethylphenol	<119	ug/kg	817	119	2	04/10/24 14:25	04/12/24 16:07	105-67-9	
Dimethylphthalate	<170	ug/kg	817	170	2	04/10/24 14:25	04/12/24 16:07	131-11-3	
Di-n-butylphthalate	<193	ug/kg	817	193	2	04/10/24 14:25	04/12/24 16:07	84-74-2	
4,6-Dinitro-2-methylphenol	<141	ug/kg	4140	141	2	04/10/24 14:25	04/12/24 16:07	534-52-1	
2,4-Dinitrophenol	<247	ug/kg	4140	247	2	04/10/24 14:25	04/12/24 16:07	51-28-5	
2,4-Dinitrotoluene	<184	ug/kg	817	184	2	04/10/24 14:25	04/12/24 16:07	121-14-2	
2,6-Dinitrotoluene	<159	ug/kg	817	159	2	04/10/24 14:25	04/12/24 16:07	606-20-2	
Di-n-octylphthalate	<199	ug/kg	817	199	2	04/10/24 14:25	04/12/24 16:07	117-84-0	
bis(2-Ethylhexyl)phthalate	<184	ug/kg	817	184	2	04/10/24 14:25	04/12/24 16:07	117-81-7	
Fluoranthene	<180	ug/kg	817	180	2	04/10/24 14:25	04/12/24 16:07	206-44-0	
Fluorene	<174	ug/kg	817	174	2	04/10/24 14:25	04/12/24 16:07	86-73-7	
Hexachloro-1,3-butadiene	<175	ug/kg	817	175	2	04/10/24 14:25	04/12/24 16:07	87-68-3	
Hexachlorobenzene	<171	ug/kg	817	171	2	04/10/24 14:25	04/12/24 16:07	118-74-1	
Hexachlorocyclopentadiene	<503	ug/kg	817	503	2	04/10/24 14:25	04/12/24 16:07	77-47-4	
Hexachloroethane	<150	ug/kg	817	150	2	04/10/24 14:25	04/12/24 16:07	67-72-1	
Indeno(1,2,3-cd)pyrene	<167	ug/kg	817	167	2	04/10/24 14:25	04/12/24 16:07	193-39-5	
Isophorone	<158	ug/kg	817	158	2	04/10/24 14:25	04/12/24 16:07	78-59-1	
2-Methylnaphthalene	<166	ug/kg	817	166	2	04/10/24 14:25	04/12/24 16:07	91-57-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS08/SS-2 Lab ID: 60450516011 Collected: 04/08/24 15:10 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<149	ug/kg	817	149	2	04/10/24 14:25	04/12/24 16:07	95-48-7	
3&4-Methylphenol(m&p Cresol)	<152	ug/kg	817	152	2	04/10/24 14:25	04/12/24 16:07	15831-10-4	
Naphthalene	<176	ug/kg	817	176	2	04/10/24 14:25	04/12/24 16:07	91-20-3	
2-Nitroaniline	<135	ug/kg	1630	135	2	04/10/24 14:25	04/12/24 16:07	88-74-4	
3-Nitroaniline	<127	ug/kg	1630	127	2	04/10/24 14:25	04/12/24 16:07	99-09-2	
4-Nitroaniline	<140	ug/kg	1630	140	2	04/10/24 14:25	04/12/24 16:07	100-01-6	
Nitrobenzene	<173	ug/kg	817	173	2	04/10/24 14:25	04/12/24 16:07	98-95-3	
2-Nitrophenol	<128	ug/kg	817	128	2	04/10/24 14:25	04/12/24 16:07	88-75-5	
4-Nitrophenol	<120	ug/kg	4140	120	2	04/10/24 14:25	04/12/24 16:07	100-02-7	
N-Nitroso-di-n-propylamine	<156	ug/kg	817	156	2	04/10/24 14:25	04/12/24 16:07	621-64-7	
N-Nitrosodiphenylamine	<162	ug/kg	817	162	2	04/10/24 14:25	04/12/24 16:07	86-30-6	
Pentachlorophenol	<270	ug/kg	4140	270	2	04/10/24 14:25	04/12/24 16:07	87-86-5	
Phenanthrene	<175	ug/kg	817	175	2	04/10/24 14:25	04/12/24 16:07	85-01-8	
Phenol	<154	ug/kg	817	154	2	04/10/24 14:25	04/12/24 16:07	108-95-2	
Pyrene	<174	ug/kg	817	174	2	04/10/24 14:25	04/12/24 16:07	129-00-0	
Pyridine	<121	ug/kg	817	121	2	04/10/24 14:25	04/12/24 16:07	110-86-1	
1,2,4-Trichlorobenzene	<171	ug/kg	817	171	2	04/10/24 14:25	04/12/24 16:07	120-82-1	
2,4,5-Trichlorophenol	<167	ug/kg	817	167	2	04/10/24 14:25	04/12/24 16:07	95-95-4	
2,4,6-Trichlorophenol	<151	ug/kg	817	151	2	04/10/24 14:25	04/12/24 16:07	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	75	%	30-120		2	04/10/24 14:25	04/12/24 16:07	4165-60-0	D3
2-Fluorobiphenyl (S)	68	%	40-120		2	04/10/24 14:25	04/12/24 16:07	321-60-8	
Terphenyl-d14 (S)	73	%	45-120		2	04/10/24 14:25	04/12/24 16:07	1718-51-0	
Phenol-d6 (S)	75	%	40-120		2	04/10/24 14:25	04/12/24 16:07	13127-88-3	
2-Fluorophenol (S)	71	%	40-120		2	04/10/24 14:25	04/12/24 16:07	367-12-4	
2,4,6-Tribromophenol (S)	79	%	35-120		2	04/10/24 14:25	04/12/24 16:07	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	51.9	mg/kg	18.4	6.3	1	04/11/24 13:51	04/12/24 14:57		
TPH-DRO	<6.3	mg/kg	18.4	6.3	1	04/11/24 13:51	04/12/24 14:57		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	86	%	35-120		1	04/11/24 13:51	04/12/24 14:57	4165-60-0	
2-Fluorobiphenyl (S)	92	%	50-120		1	04/11/24 13:51	04/12/24 14:57	321-60-8	
Terphenyl-d14 (S)	94	%	45-120		1	04/11/24 13:51	04/12/24 14:57	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<157	ug/kg	164	157	1	04/10/24 09:05	04/10/24 15:44	67-64-1	
Benzene	<1.2	ug/kg	13.0	1.2	1	04/10/24 09:05	04/10/24 15:44	71-43-2	
Bromobenzene	<1.6	ug/kg	13.0	1.6	1	04/10/24 09:05	04/10/24 15:44	108-86-1	
Bromochloromethane	<1.9	ug/kg	13.0	1.9	1	04/10/24 09:05	04/10/24 15:44	74-97-5	
Bromodichloromethane	<2.2	ug/kg	33.9	2.2	1	04/10/24 09:05	04/10/24 15:44	75-27-4	
Bromoform	<1.0	ug/kg	33.9	1.0	1	04/10/24 09:05	04/10/24 15:44	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS08/SS-2 Lab ID: 60450516011 Collected: 04/08/24 15:10 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Bromomethane	<16.1	ug/kg	33.9	16.1	1	04/10/24 09:05	04/10/24 15:44	74-83-9	
2-Butanone (MEK)	<83.2	ug/kg	164	83.2	1	04/10/24 09:05	04/10/24 15:44	78-93-3	
n-Butylbenzene	<1.3	ug/kg	13.0	1.3	1	04/10/24 09:05	04/10/24 15:44	104-51-8	
sec-Butylbenzene	<1.3	ug/kg	13.0	1.3	1	04/10/24 09:05	04/10/24 15:44	135-98-8	
tert-Butylbenzene	<0.85	ug/kg	13.0	0.85	1	04/10/24 09:05	04/10/24 15:44	98-06-6	
Carbon disulfide	<6.0	ug/kg	13.0	6.0	1	04/10/24 09:05	04/10/24 15:44	75-15-0	
Carbon tetrachloride	<4.4	ug/kg	13.0	4.4	1	04/10/24 09:05	04/10/24 15:44	56-23-5	
Chlorobenzene	<0.76	ug/kg	13.0	0.76	1	04/10/24 09:05	04/10/24 15:44	108-90-7	
Chloroethane	<21.6	ug/kg	65.2	21.6	1	04/10/24 09:05	04/10/24 15:44	75-00-3	
Chloroform	<4.8	ug/kg	13.0	4.8	1	04/10/24 09:05	04/10/24 15:44	67-66-3	
Chloromethane	<3.2	ug/kg	33.9	3.2	1	04/10/24 09:05	04/10/24 15:44	74-87-3	
2-Chlorotoluene	<1.8	ug/kg	13.0	1.8	1	04/10/24 09:05	04/10/24 15:44	95-49-8	
4-Chlorotoluene	<1.0	ug/kg	13.0	1.0	1	04/10/24 09:05	04/10/24 15:44	106-43-4	
1,2-Dibromo-3-chloropropane	<8.7	ug/kg	33.9	8.7	1	04/10/24 09:05	04/10/24 15:44	96-12-8	
Dibromochloromethane	<0.79	ug/kg	13.0	0.79	1	04/10/24 09:05	04/10/24 15:44	124-48-1	
1,2-Dibromoethane (EDB)	<1.4	ug/kg	13.0	1.4	1	04/10/24 09:05	04/10/24 15:44	106-93-4	
Dibromomethane	<3.8	ug/kg	13.0	3.8	1	04/10/24 09:05	04/10/24 15:44	74-95-3	
1,2-Dichlorobenzene	<2.2	ug/kg	13.0	2.2	1	04/10/24 09:05	04/10/24 15:44	95-50-1	
1,3-Dichlorobenzene	<1.7	ug/kg	13.0	1.7	1	04/10/24 09:05	04/10/24 15:44	541-73-1	
1,4-Dichlorobenzene	<2.3	ug/kg	13.0	2.3	1	04/10/24 09:05	04/10/24 15:44	106-46-7	
Dichlorodifluoromethane	<2.5	ug/kg	33.9	2.5	1	04/10/24 09:05	04/10/24 15:44	75-71-8	
1,1-Dichloroethane	<3.0	ug/kg	13.0	3.0	1	04/10/24 09:05	04/10/24 15:44	75-34-3	
1,2-Dichloroethane	<2.5	ug/kg	13.0	2.5	1	04/10/24 09:05	04/10/24 15:44	107-06-2	
1,2-Dichloroethene (Total)	<4.9	ug/kg	26.1	4.9	1	04/10/24 09:05	04/10/24 15:44	540-59-0	
1,1-Dichloroethene	<5.3	ug/kg	13.0	5.3	1	04/10/24 09:05	04/10/24 15:44	75-35-4	
cis-1,2-Dichloroethene	<2.4	ug/kg	13.0	2.4	1	04/10/24 09:05	04/10/24 15:44	156-59-2	
trans-1,2-Dichloroethene	<2.9	ug/kg	13.0	2.9	1	04/10/24 09:05	04/10/24 15:44	156-60-5	
1,2-Dichloropropane	<2.7	ug/kg	13.0	2.7	1	04/10/24 09:05	04/10/24 15:44	78-87-5	
1,3-Dichloropropane	<0.51	ug/kg	13.0	0.51	1	04/10/24 09:05	04/10/24 15:44	142-28-9	
2,2-Dichloropropane	<3.9	ug/kg	13.0	3.9	1	04/10/24 09:05	04/10/24 15:44	594-20-7	
1,1-Dichloropropene	<2.8	ug/kg	13.0	2.8	1	04/10/24 09:05	04/10/24 15:44	563-58-6	
cis-1,3-Dichloropropene	<2.0	ug/kg	13.0	2.0	1	04/10/24 09:05	04/10/24 15:44	10061-01-5	
trans-1,3-Dichloropropene	<1.6	ug/kg	13.0	1.6	1	04/10/24 09:05	04/10/24 15:44	10061-02-6	
Ethylbenzene	<2.3	ug/kg	13.0	2.3	1	04/10/24 09:05	04/10/24 15:44	100-41-4	
Hexachloro-1,3-butadiene	<2.3	ug/kg	13.0	2.3	1	04/10/24 09:05	04/10/24 15:44	87-68-3	
2-Hexanone	<27.1	ug/kg	164	27.1	1	04/10/24 09:05	04/10/24 15:44	591-78-6	
Isopropylbenzene (Cumene)	<0.82	ug/kg	13.0	0.82	1	04/10/24 09:05	04/10/24 15:44	98-82-8	
p-Isopropyltoluene	<1.1	ug/kg	13.0	1.1	1	04/10/24 09:05	04/10/24 15:44	99-87-6	
Methylene Chloride	<50.6	ug/kg	65.2	50.6	1	04/10/24 09:05	04/10/24 15:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	<18.3	ug/kg	164	18.3	1	04/10/24 09:05	04/10/24 15:44	108-10-1	
Methyl-tert-butyl ether	<2.5	ug/kg	13.0	2.5	1	04/10/24 09:05	04/10/24 15:44	1634-04-4	
Naphthalene	<1.9	ug/kg	26.1	1.9	1	04/10/24 09:05	04/10/24 15:44	91-20-3	
n-Propylbenzene	<1.6	ug/kg	13.0	1.6	1	04/10/24 09:05	04/10/24 15:44	103-65-1	
Styrene	<1.1	ug/kg	13.0	1.1	1	04/10/24 09:05	04/10/24 15:44	100-42-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS08/SS-2** Lab ID: **60450516011** Collected: 04/08/24 15:10 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<1.9	ug/kg	13.0	1.9	1	04/10/24 09:05	04/10/24 15:44	630-20-6	
1,1,2,2-Tetrachloroethane	<1.8	ug/kg	13.0	1.8	1	04/10/24 09:05	04/10/24 15:44	79-34-5	
Tetrachloroethene	<1.4	ug/kg	13.0	1.4	1	04/10/24 09:05	04/10/24 15:44	127-18-4	
Toluene	<11.6	ug/kg	52.2	11.6	1	04/10/24 09:05	04/10/24 15:44	108-88-3	
1,2,3-Trichlorobenzene	<1.5	ug/kg	13.0	1.5	1	04/10/24 09:05	04/10/24 15:44	87-61-6	
1,2,4-Trichlorobenzene	<1.3	ug/kg	13.0	1.3	1	04/10/24 09:05	04/10/24 15:44	120-82-1	
1,1,1-Trichloroethane	<2.7	ug/kg	13.0	2.7	1	04/10/24 09:05	04/10/24 15:44	71-55-6	
1,1,2-Trichloroethane	<1.9	ug/kg	13.0	1.9	1	04/10/24 09:05	04/10/24 15:44	79-00-5	
Trichloroethene	<4.9	ug/kg	13.0	4.9	1	04/10/24 09:05	04/10/24 15:44	79-01-6	
Trichlorofluoromethane	<25.0	ug/kg	33.9	25.0	1	04/10/24 09:05	04/10/24 15:44	75-69-4	
1,2,3-Trichloropropane	<4.0	ug/kg	13.0	4.0	1	04/10/24 09:05	04/10/24 15:44	96-18-4	
1,2,4-Trimethylbenzene	<1.8	ug/kg	13.0	1.8	1	04/10/24 09:05	04/10/24 15:44	95-63-6	
1,3,5-Trimethylbenzene	<1.1	ug/kg	13.0	1.1	1	04/10/24 09:05	04/10/24 15:44	108-67-8	
Vinyl chloride	<2.4	ug/kg	33.9	2.4	1	04/10/24 09:05	04/10/24 15:44	75-01-4	
Xylene (Total)	<9.6	ug/kg	39.1	9.6	1	04/10/24 09:05	04/10/24 15:44	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	109	%	80-120		1	04/10/24 09:05	04/10/24 15:44	2037-26-5	
4-Bromofluorobenzene (S)	101	%	83-119		1	04/10/24 09:05	04/10/24 15:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/10/24 09:05	04/10/24 15:44	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.080	mg/kg	0.59	0.080	1	04/11/24 07:56	04/11/24 13:22		
<b>Surrogates</b>									
Toluene-d8 (S)	102	%	78-122		1	04/11/24 07:56	04/11/24 13:22	2037-26-5	
4-Bromofluorobenzene (S)	113	%	69-133		1	04/11/24 07:56	04/11/24 13:22	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/11/24 07:56	04/11/24 13:22	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	19.3	%	0.50	0.50	1		04/10/24 15:43		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	78.4	%			1	04/12/24 08:46	04/12/24 08:57		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<1.0	mg/kg	1.3	1.0	1	04/15/24 09:34	04/16/24 15:35	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.14	mg/kg	0.17	0.14	1	04/18/24 08:30	04/18/24 11:50	57-12-5	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS08/SS-2** Lab ID: **60450516011** Collected: 04/08/24 15:10 Received: 04/08/24 17:34 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<b>15.1</b>	mg/kg	11.8	6.6	10	04/10/24 08:00	04/11/24 20:15	14797-55-8	B
Nitrite as N	<b>&lt;6.1</b>	mg/kg	11.8	6.1	10	04/10/24 08:00	04/11/24 20:15	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS07/SS-1 Lab ID: 60450516012 Collected: 04/08/24 15:30 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00456	mg/kg	0.0243	0.00456	1	04/16/24 21:20	04/17/24 05:08	309-00-2	
alpha-BHC	<0.00447	mg/kg	0.0243	0.00447	1	04/16/24 21:20	04/17/24 05:08	319-84-6	
beta-BHC	<0.00460	mg/kg	0.0243	0.00460	1	04/16/24 21:20	04/17/24 05:08	319-85-7	
delta-BHC	<0.00420	mg/kg	0.0243	0.00420	1	04/16/24 21:20	04/17/24 05:08	319-86-8	
gamma-BHC (Lindane)	<0.00418	mg/kg	0.0243	0.00418	1	04/16/24 21:20	04/17/24 05:08	58-89-9	
Chlordane (Technical)	<0.125	mg/kg	0.364	0.125	1	04/16/24 21:20	04/17/24 05:08	57-74-9	
4,4'-DDD	<0.00449	mg/kg	0.0243	0.00449	1	04/16/24 21:20	04/17/24 05:08	72-54-8	
4,4'-DDE	<0.00444	mg/kg	0.0243	0.00444	1	04/16/24 21:20	04/17/24 05:08	72-55-9	
4,4'-DDT	<0.00761	mg/kg	0.0243	0.00761	1	04/16/24 21:20	04/17/24 05:08	50-29-3	
Dieldrin	<0.00418	mg/kg	0.0243	0.00418	1	04/16/24 21:20	04/17/24 05:08	60-57-1	
Endosulfan I	<0.00441	mg/kg	0.0243	0.00441	1	04/16/24 21:20	04/17/24 05:08	959-98-8	
Endosulfan II	<0.00407	mg/kg	0.0243	0.00407	1	04/16/24 21:20	04/17/24 05:08	33213-65-9	
Endosulfan sulfate	<0.00442	mg/kg	0.0243	0.00442	1	04/16/24 21:20	04/17/24 05:08	1031-07-8	
Endrin	<0.00425	mg/kg	0.0243	0.00425	1	04/16/24 21:20	04/17/24 05:08	72-20-8	
Endrin aldehyde	<0.00412	mg/kg	0.0243	0.00412	1	04/16/24 21:20	04/17/24 05:08	7421-93-4	
Endrin ketone	<0.00863	mg/kg	0.0243	0.00863	1	04/16/24 21:20	04/17/24 05:08	53494-70-5	
Hexachlorobenzene	<0.00420	mg/kg	0.0243	0.00420	1	04/16/24 21:20	04/17/24 05:08	118-74-1	
Heptachlor	<0.00520	mg/kg	0.0243	0.00520	1	04/16/24 21:20	04/17/24 05:08	76-44-8	
Heptachlor epoxide	<0.00412	mg/kg	0.0243	0.00412	1	04/16/24 21:20	04/17/24 05:08	1024-57-3	
Methoxychlor	<0.00588	mg/kg	0.0243	0.00588	1	04/16/24 21:20	04/17/24 05:08	72-43-5	
Toxaphene	<0.151	mg/kg	0.486	0.151	1	04/16/24 21:20	04/17/24 05:08	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	50.2	%	10.0-135		1	04/16/24 21:20	04/17/24 05:08	2051-24-3	
Tetrachloro-m-xylene (S)	66.7	%	10.0-139		1	04/16/24 21:20	04/17/24 05:08	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00852	mg/kg	0.0850	0.00852	1	04/15/24 13:10	04/16/24 19:34	94-75-7	
Dalapon	<0.0137	mg/kg	0.0850	0.0137	1	04/15/24 13:10	04/16/24 19:34	127-20-8	
2,4-DB	<0.0361	mg/kg	0.0850	0.0361	1	04/15/24 13:10	04/16/24 19:34	94-82-6	
Dicamba	<0.0191	mg/kg	0.0850	0.0191	1	04/15/24 13:10	04/16/24 19:34	1918-00-9	
Dichlorprop	<0.0297	mg/kg	0.0850	0.0297	1	04/15/24 13:10	04/16/24 19:34	120-36-5	
Dinoseb	<0.00846	mg/kg	0.0850	0.00846	1	04/15/24 13:10	04/16/24 19:34	88-85-7	
MCPA	<0.538	mg/kg	7.89	0.538	1	04/15/24 13:10	04/16/24 19:34	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.446	mg/kg	7.89	0.446	1	04/15/24 13:10	04/16/24 19:34	93-65-2	
2,4,5-T	<0.0103	mg/kg	0.0850	0.0103	1	04/15/24 13:10	04/16/24 19:34	93-76-5	
2,4,5-TP (Silvex)	<0.0130	mg/kg	0.0850	0.0130	1	04/15/24 13:10	04/16/24 19:34	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	68.7	%	22.0-132		1	04/15/24 13:10	04/16/24 19:34	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.8	ug/kg	39.9	10.8	1	04/11/24 15:53	04/19/24 03:24	12674-11-2	
PCB-1221 (Aroclor 1221)	<13.4	ug/kg	39.9	13.4	1	04/11/24 15:53	04/19/24 03:24	11104-28-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS07/SS-1 Lab ID: 60450516012 Collected: 04/08/24 15:30 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<13.4	ug/kg	39.9	13.4	1	04/11/24 15:53	04/19/24 03:24	11141-16-5	
PCB-1242 (Aroclor 1242)	<13.4	ug/kg	39.9	13.4	1	04/11/24 15:53	04/19/24 03:24	53469-21-9	
PCB-1248 (Aroclor 1248)	<13.4	ug/kg	39.9	13.4	1	04/11/24 15:53	04/19/24 03:24	12672-29-6	
PCB-1254 (Aroclor 1254)	<13.4	ug/kg	39.9	13.4	1	04/11/24 15:53	04/19/24 03:24	11097-69-1	
PCB-1260 (Aroclor 1260)	<13.4	ug/kg	39.9	13.4	1	04/11/24 15:53	04/19/24 03:24	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	86	%	20-120		1	04/11/24 15:53	04/19/24 03:24	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	27000	mg/kg	60.7	8.38	5	04/15/24 09:27	04/17/24 23:23	7429-90-5	
Antimony	0.615J	mg/kg	3.64	0.202	5	04/15/24 09:27	04/17/24 23:23	7440-36-0	B,J
Arsenic	10.2	mg/kg	1.21	0.121	5	04/15/24 09:27	04/17/24 23:23	7440-38-2	
Barium	227	mg/kg	12.1	0.738	20	04/25/24 09:16	04/25/24 15:39	7440-39-3	
Beryllium	1.10J	mg/kg	3.03	0.168	5	04/15/24 09:27	04/17/24 23:23	7440-41-7	J
Cadmium	0.283J	mg/kg	1.21	0.104	5	04/15/24 09:27	04/17/24 23:23	7440-43-9	J
Calcium	5070	mg/kg	607	91.7	5	04/15/24 09:27	04/17/24 23:23	7440-70-2	
Chromium	26.8	mg/kg	6.07	0.359	5	04/15/24 09:27	04/17/24 23:23	7440-47-3	
Cobalt	10.9	mg/kg	1.21	0.0561	5	04/15/24 09:27	04/17/24 23:23	7440-48-4	
Copper	17.3	mg/kg	6.07	0.160	5	04/15/24 09:27	04/17/24 23:23	7440-50-8	
Iron	25700	mg/kg	60.7	10.9	5	04/15/24 09:27	04/17/24 23:23	7439-89-6	
Lead	16.1	mg/kg	2.43	0.120	5	04/15/24 09:27	04/17/24 23:23	7439-92-1	
Magnesium	4800	mg/kg	607	55.7	5	04/15/24 09:27	04/17/24 23:23	7439-95-4	
Manganese	931	mg/kg	3.03	0.325	5	04/15/24 09:27	04/17/24 23:23	7439-96-5	
Molybdenum	1.04J	mg/kg	3.03	0.123	5	04/15/24 09:27	04/17/24 23:23	7439-98-7	J
Nickel	27.5	mg/kg	3.03	0.239	5	04/15/24 09:27	04/17/24 23:23	7440-02-0	
Potassium	2620	mg/kg	607	82.5	5	04/15/24 09:27	04/17/24 23:23	7440-09-7	
Selenium	0.325J	mg/kg	3.03	0.219	5	04/15/24 09:27	04/17/24 23:23	7782-49-2	J
Silver	<0.105	mg/kg	0.607	0.105	5	04/15/24 09:27	04/17/24 23:23	7440-22-4	
Sodium	131J	mg/kg	607	92.9	5	04/15/24 09:27	04/17/24 23:23	7440-23-5	J
Thallium	0.289J	mg/kg	2.43	0.0789	5	04/15/24 09:27	04/17/24 23:23	7440-28-0	J
Vanadium	53.2	mg/kg	3.03	0.227	5	04/15/24 09:27	04/17/24 23:23	7440-62-2	
Zinc	58.6	mg/kg	30.3	0.898	5	04/15/24 09:27	04/17/24 23:23	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0219	mg/kg	0.0486	0.0219	1	04/12/24 15:37	04/13/24 09:58	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<86.4	ug/kg	402	86.4	1	04/10/24 14:25	04/12/24 16:29	83-32-9	
Acenaphthylene	<65.8	ug/kg	402	65.8	1	04/10/24 14:25	04/12/24 16:29	208-96-8	
Anthracene	<84.1	ug/kg	402	84.1	1	04/10/24 14:25	04/12/24 16:29	120-12-7	
Benzo(a)anthracene	<85.1	ug/kg	402	85.1	1	04/10/24 14:25	04/12/24 16:29	56-55-3	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS07/SS-1 Lab ID: 60450516012 Collected: 04/08/24 15:30 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>		Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Benzo(a)pyrene	<86.5	ug/kg	402	86.5	1	04/10/24 14:25	04/12/24 16:29	50-32-8	
Benzo(b)fluoranthene	<98.1	ug/kg	402	98.1	1	04/10/24 14:25	04/12/24 16:29	205-99-2	
Benzo(g,h,i)perylene	<69.8	ug/kg	402	69.8	1	04/10/24 14:25	04/12/24 16:29	191-24-2	
Benzo(k)fluoranthene	<86.5	ug/kg	402	86.5	1	04/10/24 14:25	04/12/24 16:29	207-08-9	
Benzoic Acid	<219	ug/kg	2040	219	1	04/10/24 14:25	04/12/24 16:29	65-85-0	
Benzyl alcohol	<73.9	ug/kg	805	73.9	1	04/10/24 14:25	04/12/24 16:29	100-51-6	
4-Bromophenylphenyl ether	<86.8	ug/kg	402	86.8	1	04/10/24 14:25	04/12/24 16:29	101-55-3	
Butylbenzylphthalate	<81.9	ug/kg	402	81.9	1	04/10/24 14:25	04/12/24 16:29	85-68-7	
Carbazole	<82.8	ug/kg	402	82.8	1	04/10/24 14:25	04/12/24 16:29	86-74-8	
4-Chloro-3-methylphenol	<84.4	ug/kg	805	84.4	1	04/10/24 14:25	04/12/24 16:29	59-50-7	
4-Chloroaniline	<63.0	ug/kg	805	63.0	1	04/10/24 14:25	04/12/24 16:29	106-47-8	
bis(2-Chloroethoxy)methane	<80.0	ug/kg	402	80.0	1	04/10/24 14:25	04/12/24 16:29	111-91-1	
bis(2-Chloroethyl) ether	<81.2	ug/kg	402	81.2	1	04/10/24 14:25	04/12/24 16:29	111-44-4	
bis(2-Chloroisopropyl) ether	<87.2	ug/kg	402	87.2	1	04/10/24 14:25	04/12/24 16:29	108-60-1	
2-Chloronaphthalene	<84.7	ug/kg	402	84.7	1	04/10/24 14:25	04/12/24 16:29	91-58-7	
2-Chlorophenol	<82.2	ug/kg	402	82.2	1	04/10/24 14:25	04/12/24 16:29	95-57-8	
4-Chlorophenylphenyl ether	<86.3	ug/kg	402	86.3	1	04/10/24 14:25	04/12/24 16:29	7005-72-3	
Chrysene	<89.6	ug/kg	402	89.6	1	04/10/24 14:25	04/12/24 16:29	218-01-9	
Dibenz(a,h)anthracene	<72.3	ug/kg	402	72.3	1	04/10/24 14:25	04/12/24 16:29	53-70-3	
Dibenzofuran	<85.9	ug/kg	402	85.9	1	04/10/24 14:25	04/12/24 16:29	132-64-9	
1,2-Dichlorobenzene	<80.1	ug/kg	402	80.1	1	04/10/24 14:25	04/12/24 16:29	95-50-1	
1,3-Dichlorobenzene	<78.6	ug/kg	402	78.6	1	04/10/24 14:25	04/12/24 16:29	541-73-1	
1,4-Dichlorobenzene	<77.5	ug/kg	402	77.5	1	04/10/24 14:25	04/12/24 16:29	106-46-7	
3,3'-Dichlorobenzidine	<39.5	ug/kg	805	39.5	1	04/10/24 14:25	04/12/24 16:29	91-94-1	
2,4-Dichlorophenol	<80.6	ug/kg	402	80.6	1	04/10/24 14:25	04/12/24 16:29	120-83-2	
Diethylphthalate	<91.9	ug/kg	402	91.9	1	04/10/24 14:25	04/12/24 16:29	84-66-2	
2,4-Dimethylphenol	<58.5	ug/kg	402	58.5	1	04/10/24 14:25	04/12/24 16:29	105-67-9	
Dimethylphthalate	<83.5	ug/kg	402	83.5	1	04/10/24 14:25	04/12/24 16:29	131-11-3	
Di-n-butylphthalate	<95.2	ug/kg	402	95.2	1	04/10/24 14:25	04/12/24 16:29	84-74-2	
4,6-Dinitro-2-methylphenol	<69.6	ug/kg	2040	69.6	1	04/10/24 14:25	04/12/24 16:29	534-52-1	
2,4-Dinitrophenol	<122	ug/kg	2040	122	1	04/10/24 14:25	04/12/24 16:29	51-28-5	
2,4-Dinitrotoluene	<90.6	ug/kg	402	90.6	1	04/10/24 14:25	04/12/24 16:29	121-14-2	
2,6-Dinitrotoluene	<78.4	ug/kg	402	78.4	1	04/10/24 14:25	04/12/24 16:29	606-20-2	
Di-n-octylphthalate	<97.9	ug/kg	402	97.9	1	04/10/24 14:25	04/12/24 16:29	117-84-0	
bis(2-Ethylhexyl)phthalate	<90.3	ug/kg	402	90.3	1	04/10/24 14:25	04/12/24 16:29	117-81-7	
Fluoranthene	<88.6	ug/kg	402	88.6	1	04/10/24 14:25	04/12/24 16:29	206-44-0	
Fluorene	<85.6	ug/kg	402	85.6	1	04/10/24 14:25	04/12/24 16:29	86-73-7	
Hexachloro-1,3-butadiene	<86.2	ug/kg	402	86.2	1	04/10/24 14:25	04/12/24 16:29	87-68-3	
Hexachlorobenzene	<84.1	ug/kg	402	84.1	1	04/10/24 14:25	04/12/24 16:29	118-74-1	
Hexachlorocyclopentadiene	<247	ug/kg	402	247	1	04/10/24 14:25	04/12/24 16:29	77-47-4	
Hexachloroethane	<73.7	ug/kg	402	73.7	1	04/10/24 14:25	04/12/24 16:29	67-72-1	
Indeno(1,2,3-cd)pyrene	<82.3	ug/kg	402	82.3	1	04/10/24 14:25	04/12/24 16:29	193-39-5	
Isophorone	<77.8	ug/kg	402	77.8	1	04/10/24 14:25	04/12/24 16:29	78-59-1	
2-Methylnaphthalene	<81.5	ug/kg	402	81.5	1	04/10/24 14:25	04/12/24 16:29	91-57-6	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS07/SS-1 Lab ID: 60450516012 Collected: 04/08/24 15:30 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<73.3	ug/kg	402	73.3	1	04/10/24 14:25	04/12/24 16:29	95-48-7	
3&4-Methylphenol(m&p Cresol)	<74.7	ug/kg	402	74.7	1	04/10/24 14:25	04/12/24 16:29	15831-10-4	
Naphthalene	<86.5	ug/kg	402	86.5	1	04/10/24 14:25	04/12/24 16:29	91-20-3	
2-Nitroaniline	<66.7	ug/kg	805	66.7	1	04/10/24 14:25	04/12/24 16:29	88-74-4	
3-Nitroaniline	<62.7	ug/kg	805	62.7	1	04/10/24 14:25	04/12/24 16:29	99-09-2	
4-Nitroaniline	<68.9	ug/kg	805	68.9	1	04/10/24 14:25	04/12/24 16:29	100-01-6	
Nitrobenzene	<85.2	ug/kg	402	85.2	1	04/10/24 14:25	04/12/24 16:29	98-95-3	
2-Nitrophenol	<62.9	ug/kg	402	62.9	1	04/10/24 14:25	04/12/24 16:29	88-75-5	
4-Nitrophenol	<59.2	ug/kg	2040	59.2	1	04/10/24 14:25	04/12/24 16:29	100-02-7	
N-Nitroso-di-n-propylamine	<76.7	ug/kg	402	76.7	1	04/10/24 14:25	04/12/24 16:29	621-64-7	
N-Nitrosodiphenylamine	<80.0	ug/kg	402	80.0	1	04/10/24 14:25	04/12/24 16:29	86-30-6	
Pentachlorophenol	<133	ug/kg	2040	133	1	04/10/24 14:25	04/12/24 16:29	87-86-5	
Phenanthrene	<85.9	ug/kg	402	85.9	1	04/10/24 14:25	04/12/24 16:29	85-01-8	
Phenol	<75.7	ug/kg	402	75.7	1	04/10/24 14:25	04/12/24 16:29	108-95-2	
Pyrene	<85.8	ug/kg	402	85.8	1	04/10/24 14:25	04/12/24 16:29	129-00-0	
Pyridine	<59.6	ug/kg	402	59.6	1	04/10/24 14:25	04/12/24 16:29	110-86-1	
1,2,4-Trichlorobenzene	<84.2	ug/kg	402	84.2	1	04/10/24 14:25	04/12/24 16:29	120-82-1	
2,4,5-Trichlorophenol	<82.4	ug/kg	402	82.4	1	04/10/24 14:25	04/12/24 16:29	95-95-4	
2,4,6-Trichlorophenol	<74.4	ug/kg	402	74.4	1	04/10/24 14:25	04/12/24 16:29	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	73	%	30-120		1	04/10/24 14:25	04/12/24 16:29	4165-60-0	
2-Fluorobiphenyl (S)	63	%	40-120		1	04/10/24 14:25	04/12/24 16:29	321-60-8	
Terphenyl-d14 (S)	67	%	45-120		1	04/10/24 14:25	04/12/24 16:29	1718-51-0	
Phenol-d6 (S)	72	%	40-120		1	04/10/24 14:25	04/12/24 16:29	13127-88-3	
2-Fluorophenol (S)	71	%	40-120		1	04/10/24 14:25	04/12/24 16:29	367-12-4	
2,4,6-Tribromophenol (S)	75	%	35-120		1	04/10/24 14:25	04/12/24 16:29	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	24.7	mg/kg	18.1	6.2	1	04/11/24 13:51	04/12/24 15:17		
TPH-DRO	<6.2	mg/kg	18.1	6.2	1	04/11/24 13:51	04/12/24 15:17		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	81	%	35-120		1	04/11/24 13:51	04/12/24 15:17	4165-60-0	
2-Fluorobiphenyl (S)	87	%	50-120		1	04/11/24 13:51	04/12/24 15:17	321-60-8	
Terphenyl-d14 (S)	89	%	45-120		1	04/11/24 13:51	04/12/24 15:17	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<83.3	ug/kg	87.3	83.3	1	04/10/24 09:05	04/10/24 16:03	67-64-1	
Benzene	<0.63	ug/kg	6.9	0.63	1	04/10/24 09:05	04/10/24 16:03	71-43-2	
Bromobenzene	<0.86	ug/kg	6.9	0.86	1	04/10/24 09:05	04/10/24 16:03	108-86-1	
Bromochloromethane	<1.0	ug/kg	6.9	1.0	1	04/10/24 09:05	04/10/24 16:03	74-97-5	
Bromodichloromethane	<1.2	ug/kg	18.0	1.2	1	04/10/24 09:05	04/10/24 16:03	75-27-4	
Bromoform	<0.54	ug/kg	18.0	0.54	1	04/10/24 09:05	04/10/24 16:03	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS07/SS-1 Lab ID: 60450516012 Collected: 04/08/24 15:30 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Bromomethane	<8.5	ug/kg	18.0	8.5	1	04/10/24 09:05	04/10/24 16:03	74-83-9	
2-Butanone (MEK)	<44.2	ug/kg	87.3	44.2	1	04/10/24 09:05	04/10/24 16:03	78-93-3	
n-Butylbenzene	<0.67	ug/kg	6.9	0.67	1	04/10/24 09:05	04/10/24 16:03	104-51-8	
sec-Butylbenzene	<0.68	ug/kg	6.9	0.68	1	04/10/24 09:05	04/10/24 16:03	135-98-8	
tert-Butylbenzene	<0.45	ug/kg	6.9	0.45	1	04/10/24 09:05	04/10/24 16:03	98-06-6	
Carbon disulfide	<3.2	ug/kg	6.9	3.2	1	04/10/24 09:05	04/10/24 16:03	75-15-0	
Carbon tetrachloride	<2.3	ug/kg	6.9	2.3	1	04/10/24 09:05	04/10/24 16:03	56-23-5	
Chlorobenzene	<0.40	ug/kg	6.9	0.40	1	04/10/24 09:05	04/10/24 16:03	108-90-7	
Chloroethane	<11.5	ug/kg	34.6	11.5	1	04/10/24 09:05	04/10/24 16:03	75-00-3	
Chloroform	<2.5	ug/kg	6.9	2.5	1	04/10/24 09:05	04/10/24 16:03	67-66-3	
Chloromethane	<1.7	ug/kg	18.0	1.7	1	04/10/24 09:05	04/10/24 16:03	74-87-3	
2-Chlorotoluene	<0.97	ug/kg	6.9	0.97	1	04/10/24 09:05	04/10/24 16:03	95-49-8	
4-Chlorotoluene	<0.55	ug/kg	6.9	0.55	1	04/10/24 09:05	04/10/24 16:03	106-43-4	
1,2-Dibromo-3-chloropropane	<4.6	ug/kg	18.0	4.6	1	04/10/24 09:05	04/10/24 16:03	96-12-8	
Dibromochloromethane	<0.42	ug/kg	6.9	0.42	1	04/10/24 09:05	04/10/24 16:03	124-48-1	
1,2-Dibromoethane (EDB)	<0.73	ug/kg	6.9	0.73	1	04/10/24 09:05	04/10/24 16:03	106-93-4	
Dibromomethane	<2.0	ug/kg	6.9	2.0	1	04/10/24 09:05	04/10/24 16:03	74-95-3	
1,2-Dichlorobenzene	<1.2	ug/kg	6.9	1.2	1	04/10/24 09:05	04/10/24 16:03	95-50-1	
1,3-Dichlorobenzene	<0.88	ug/kg	6.9	0.88	1	04/10/24 09:05	04/10/24 16:03	541-73-1	
1,4-Dichlorobenzene	<1.2	ug/kg	6.9	1.2	1	04/10/24 09:05	04/10/24 16:03	106-46-7	
Dichlorodifluoromethane	<1.3	ug/kg	18.0	1.3	1	04/10/24 09:05	04/10/24 16:03	75-71-8	
1,1-Dichloroethane	<1.6	ug/kg	6.9	1.6	1	04/10/24 09:05	04/10/24 16:03	75-34-3	
1,2-Dichloroethane	<1.3	ug/kg	6.9	1.3	1	04/10/24 09:05	04/10/24 16:03	107-06-2	
1,2-Dichloroethene (Total)	<2.6	ug/kg	13.9	2.6	1	04/10/24 09:05	04/10/24 16:03	540-59-0	
1,1-Dichloroethene	<2.8	ug/kg	6.9	2.8	1	04/10/24 09:05	04/10/24 16:03	75-35-4	
cis-1,2-Dichloroethene	<1.3	ug/kg	6.9	1.3	1	04/10/24 09:05	04/10/24 16:03	156-59-2	
trans-1,2-Dichloroethene	<1.5	ug/kg	6.9	1.5	1	04/10/24 09:05	04/10/24 16:03	156-60-5	
1,2-Dichloropropane	<1.4	ug/kg	6.9	1.4	1	04/10/24 09:05	04/10/24 16:03	78-87-5	
1,3-Dichloropropane	<0.27	ug/kg	6.9	0.27	1	04/10/24 09:05	04/10/24 16:03	142-28-9	
2,2-Dichloropropane	<2.1	ug/kg	6.9	2.1	1	04/10/24 09:05	04/10/24 16:03	594-20-7	
1,1-Dichloropropene	<1.5	ug/kg	6.9	1.5	1	04/10/24 09:05	04/10/24 16:03	563-58-6	
cis-1,3-Dichloropropene	<1.0	ug/kg	6.9	1.0	1	04/10/24 09:05	04/10/24 16:03	10061-01-5	
trans-1,3-Dichloropropene	<0.83	ug/kg	6.9	0.83	1	04/10/24 09:05	04/10/24 16:03	10061-02-6	
Ethylbenzene	<1.2	ug/kg	6.9	1.2	1	04/10/24 09:05	04/10/24 16:03	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/kg	6.9	1.2	1	04/10/24 09:05	04/10/24 16:03	87-68-3	
2-Hexanone	<14.4	ug/kg	87.3	14.4	1	04/10/24 09:05	04/10/24 16:03	591-78-6	
Isopropylbenzene (Cumene)	<0.44	ug/kg	6.9	0.44	1	04/10/24 09:05	04/10/24 16:03	98-82-8	
p-Isopropyltoluene	<0.60	ug/kg	6.9	0.60	1	04/10/24 09:05	04/10/24 16:03	99-87-6	
Methylene Chloride	<26.9	ug/kg	34.6	26.9	1	04/10/24 09:05	04/10/24 16:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	<9.7	ug/kg	87.3	9.7	1	04/10/24 09:05	04/10/24 16:03	108-10-1	
Methyl-tert-butyl ether	<1.3	ug/kg	6.9	1.3	1	04/10/24 09:05	04/10/24 16:03	1634-04-4	
Naphthalene	<1.0	ug/kg	13.9	1.0	1	04/10/24 09:05	04/10/24 16:03	91-20-3	
n-Propylbenzene	<0.84	ug/kg	6.9	0.84	1	04/10/24 09:05	04/10/24 16:03	103-65-1	
Styrene	<0.56	ug/kg	6.9	0.56	1	04/10/24 09:05	04/10/24 16:03	100-42-5	

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**ANALYTICAL RESULTS**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

**Sample: SS07/SS-1**      **Lab ID: 60450516012**      Collected: 04/08/24 15:30      Received: 04/08/24 17:34      Matrix: Solid**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C    Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<0.98	ug/kg	6.9	0.98	1	04/10/24 09:05	04/10/24 16:03	630-20-6	
1,1,2,2-Tetrachloroethane	<0.97	ug/kg	6.9	0.97	1	04/10/24 09:05	04/10/24 16:03	79-34-5	
Tetrachloroethene	<0.74	ug/kg	6.9	0.74	1	04/10/24 09:05	04/10/24 16:03	127-18-4	
Toluene	<6.2	ug/kg	27.7	6.2	1	04/10/24 09:05	04/10/24 16:03	108-88-3	
1,2,3-Trichlorobenzene	<0.81	ug/kg	6.9	0.81	1	04/10/24 09:05	04/10/24 16:03	87-61-6	
1,2,4-Trichlorobenzene	<0.68	ug/kg	6.9	0.68	1	04/10/24 09:05	04/10/24 16:03	120-82-1	
1,1,1-Trichloroethane	<1.4	ug/kg	6.9	1.4	1	04/10/24 09:05	04/10/24 16:03	71-55-6	
1,1,2-Trichloroethane	<0.99	ug/kg	6.9	0.99	1	04/10/24 09:05	04/10/24 16:03	79-00-5	
Trichloroethene	<2.6	ug/kg	6.9	2.6	1	04/10/24 09:05	04/10/24 16:03	79-01-6	
Trichlorofluoromethane	<13.3	ug/kg	18.0	13.3	1	04/10/24 09:05	04/10/24 16:03	75-69-4	
1,2,3-Trichloropropane	<2.1	ug/kg	6.9	2.1	1	04/10/24 09:05	04/10/24 16:03	96-18-4	
1,2,4-Trimethylbenzene	<0.95	ug/kg	6.9	0.95	1	04/10/24 09:05	04/10/24 16:03	95-63-6	
1,3,5-Trimethylbenzene	<0.60	ug/kg	6.9	0.60	1	04/10/24 09:05	04/10/24 16:03	108-67-8	
Vinyl chloride	<1.3	ug/kg	18.0	1.3	1	04/10/24 09:05	04/10/24 16:03	75-01-4	
Xylene (Total)	<5.1	ug/kg	20.8	5.1	1	04/10/24 09:05	04/10/24 16:03	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	106	%	80-120		1	04/10/24 09:05	04/10/24 16:03	2037-26-5	
4-Bromofluorobenzene (S)	101	%	83-119		1	04/10/24 09:05	04/10/24 16:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/10/24 09:05	04/10/24 16:03	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.081	mg/kg	0.60	0.081	1	04/11/24 07:56	04/11/24 13:37		
<b>Surrogates</b>									
Toluene-d8 (S)	101	%	78-122		1	04/11/24 07:56	04/11/24 13:37	2037-26-5	
4-Bromofluorobenzene (S)	106	%	69-133		1	04/11/24 07:56	04/11/24 13:37	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/11/24 07:56	04/11/24 13:37	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	18.1	%	0.50	0.50	1		04/10/24 15:43		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G    Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	82.4	%			1	04/12/24 08:46	04/12/24 08:57		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1    Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	2.9	mg/kg	1.2	0.94	1	04/15/24 09:34	04/16/24 15:37	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E    Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.14	mg/kg	0.17	0.14	1	04/18/24 08:30	04/18/24 11:54	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS07/SS-1** Lab ID: **60450516012** Collected: 04/08/24 15:30 Received: 04/08/24 17:34 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>		Analytical Method: EPA 9056 Preparation Method: EPA 9056 Pace Analytical Services - Kansas City							
Nitrate as N	<b>10.2J</b>	mg/kg	12.3	6.9	10	04/10/24 08:00	04/11/24 20:27	14797-55-8	B
Nitrite as N	<b>&lt;6.4</b>	mg/kg	12.3	6.4	10	04/10/24 08:00	04/11/24 20:27	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS07/SS-2 Lab ID: 60450516013 Collected: 04/08/24 15:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00460	mg/kg	0.0245	0.00460	1	04/16/24 21:20	04/17/24 05:19	309-00-2	
alpha-BHC	<0.00450	mg/kg	0.0245	0.00450	1	04/16/24 21:20	04/17/24 05:19	319-84-6	
beta-BHC	<0.00464	mg/kg	0.0245	0.00464	1	04/16/24 21:20	04/17/24 05:19	319-85-7	
delta-BHC	<0.00424	mg/kg	0.0245	0.00424	1	04/16/24 21:20	04/17/24 05:19	319-86-8	
gamma-BHC (Lindane)	<0.00421	mg/kg	0.0245	0.00421	1	04/16/24 21:20	04/17/24 05:19	58-89-9	
Chlordane (Technical)	<0.126	mg/kg	0.367	0.126	1	04/16/24 21:20	04/17/24 05:19	57-74-9	
4,4'-DDD	<0.00453	mg/kg	0.0245	0.00453	1	04/16/24 21:20	04/17/24 05:19	72-54-8	
4,4'-DDE	<0.00448	mg/kg	0.0245	0.00448	1	04/16/24 21:20	04/17/24 05:19	72-55-9	
4,4'-DDT	<0.00767	mg/kg	0.0245	0.00767	1	04/16/24 21:20	04/17/24 05:19	50-29-3	
Dieldrin	<0.00421	mg/kg	0.0245	0.00421	1	04/16/24 21:20	04/17/24 05:19	60-57-1	
Endosulfan I	<0.00444	mg/kg	0.0245	0.00444	1	04/16/24 21:20	04/17/24 05:19	959-98-8	
Endosulfan II	<0.00410	mg/kg	0.0245	0.00410	1	04/16/24 21:20	04/17/24 05:19	33213-65-9	
Endosulfan sulfate	<0.00446	mg/kg	0.0245	0.00446	1	04/16/24 21:20	04/17/24 05:19	1031-07-8	
Endrin	<0.00428	mg/kg	0.0245	0.00428	1	04/16/24 21:20	04/17/24 05:19	72-20-8	
Endrin aldehyde	<0.00415	mg/kg	0.0245	0.00415	1	04/16/24 21:20	04/17/24 05:19	7421-93-4	
Endrin ketone	<0.00870	mg/kg	0.0245	0.00870	1	04/16/24 21:20	04/17/24 05:19	53494-70-5	
Hexachlorobenzene	<0.00424	mg/kg	0.0245	0.00424	1	04/16/24 21:20	04/17/24 05:19	118-74-1	
Heptachlor	<0.00524	mg/kg	0.0245	0.00524	1	04/16/24 21:20	04/17/24 05:19	76-44-8	
Heptachlor epoxide	<0.00415	mg/kg	0.0245	0.00415	1	04/16/24 21:20	04/17/24 05:19	1024-57-3	
Methoxychlor	<0.00592	mg/kg	0.0245	0.00592	1	04/16/24 21:20	04/17/24 05:19	72-43-5	
Toxaphene	<0.152	mg/kg	0.490	0.152	1	04/16/24 21:20	04/17/24 05:19	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	60.6	%	10.0-135		1	04/16/24 21:20	04/17/24 05:19	2051-24-3	
Tetrachloro-m-xylene (S)	71.0	%	10.0-139		1	04/16/24 21:20	04/17/24 05:19	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00859	mg/kg	0.0857	0.00859	1	04/15/24 13:10	04/16/24 19:45	94-75-7	
Dalapon	<0.0138	mg/kg	0.0857	0.0138	1	04/15/24 13:10	04/16/24 19:45	127-20-8	
2,4-DB	<0.0364	mg/kg	0.0857	0.0364	1	04/15/24 13:10	04/16/24 19:45	94-82-6	
Dicamba	<0.0192	mg/kg	0.0857	0.0192	1	04/15/24 13:10	04/16/24 19:45	1918-00-9	
Dichlorprop	<0.0300	mg/kg	0.0857	0.0300	1	04/15/24 13:10	04/16/24 19:45	120-36-5	
Dinoseb	<0.00853	mg/kg	0.0857	0.00853	1	04/15/24 13:10	04/16/24 19:45	88-85-7	
MCPA	<0.542	mg/kg	7.96	0.542	1	04/15/24 13:10	04/16/24 19:45	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.449	mg/kg	7.96	0.449	1	04/15/24 13:10	04/16/24 19:45	93-65-2	
2,4,5-T	<0.0104	mg/kg	0.0857	0.0104	1	04/15/24 13:10	04/16/24 19:45	93-76-5	
2,4,5-TP (Silvex)	<0.0131	mg/kg	0.0857	0.0131	1	04/15/24 13:10	04/16/24 19:45	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	69.5	%	22.0-132		1	04/15/24 13:10	04/16/24 19:45	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.8	ug/kg	40.0	10.8	1	04/12/24 10:44	04/19/24 04:24	12674-11-2	
PCB-1221 (Aroclor 1221)	<13.5	ug/kg	40.0	13.5	1	04/12/24 10:44	04/19/24 04:24	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS07/SS-2 Lab ID: 60450516013 Collected: 04/08/24 15:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<13.5	ug/kg	40.0	13.5	1	04/12/24 10:44	04/19/24 04:24	11141-16-5	
PCB-1242 (Aroclor 1242)	<13.5	ug/kg	40.0	13.5	1	04/12/24 10:44	04/19/24 04:24	53469-21-9	
PCB-1248 (Aroclor 1248)	<13.5	ug/kg	40.0	13.5	1	04/12/24 10:44	04/19/24 04:24	12672-29-6	
PCB-1254 (Aroclor 1254)	<13.5	ug/kg	40.0	13.5	1	04/12/24 10:44	04/19/24 04:24	11097-69-1	
PCB-1260 (Aroclor 1260)	<13.5	ug/kg	40.0	13.5	1	04/12/24 10:44	04/19/24 04:24	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	90	%	20-120		1	04/12/24 10:44	04/19/24 04:24	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	25100	mg/kg	61.2	8.45	5	04/15/24 09:27	04/17/24 23:26	7429-90-5	
Antimony	0.576J	mg/kg	3.67	0.203	5	04/15/24 09:27	04/17/24 23:26	7440-36-0	B,J
Arsenic	10.0	mg/kg	1.22	0.122	5	04/15/24 09:27	04/17/24 23:26	7440-38-2	
Barium	153	mg/kg	3.06	0.186	5	04/25/24 09:16	04/25/24 16:16	7440-39-3	
Beryllium	1.11J	mg/kg	3.06	0.169	5	04/15/24 09:27	04/17/24 23:26	7440-41-7	J
Cadmium	0.259J	mg/kg	1.22	0.105	5	04/15/24 09:27	04/17/24 23:26	7440-43-9	J
Calcium	4420	mg/kg	612	92.4	5	04/15/24 09:27	04/17/24 23:26	7440-70-2	
Chromium	24.2	mg/kg	6.12	0.362	5	04/15/24 09:27	04/17/24 23:26	7440-47-3	
Cobalt	12.1	mg/kg	1.22	0.0566	5	04/15/24 09:27	04/17/24 23:26	7440-48-4	
Copper	17.9	mg/kg	6.12	0.162	5	04/15/24 09:27	04/17/24 23:26	7440-50-8	
Iron	23700	mg/kg	61.2	11.0	5	04/15/24 09:27	04/17/24 23:26	7439-89-6	
Lead	16.9	mg/kg	2.45	0.121	5	04/15/24 09:27	04/17/24 23:26	7439-92-1	
Magnesium	4680	mg/kg	612	56.2	5	04/15/24 09:27	04/17/24 23:26	7439-95-4	
Manganese	1220	mg/kg	3.06	0.328	5	04/15/24 09:27	04/17/24 23:26	7439-96-5	
Molybdenum	1.15J	mg/kg	3.06	0.124	5	04/15/24 09:27	04/17/24 23:26	7439-98-7	J
Nickel	25.5	mg/kg	3.06	0.241	5	04/15/24 09:27	04/17/24 23:26	7440-02-0	
Potassium	2230	mg/kg	612	83.2	5	04/15/24 09:27	04/17/24 23:26	7440-09-7	
Selenium	0.345J	mg/kg	3.06	0.220	5	04/15/24 09:27	04/17/24 23:26	7782-49-2	J
Silver	<0.106	mg/kg	0.612	0.106	5	04/15/24 09:27	04/17/24 23:26	7440-22-4	
Sodium	147J	mg/kg	612	93.6	5	04/15/24 09:27	04/17/24 23:26	7440-23-5	J
Thallium	0.267J	mg/kg	2.45	0.0796	5	04/15/24 09:27	04/17/24 23:26	7440-28-0	J
Vanadium	50.2	mg/kg	3.06	0.229	5	04/15/24 09:27	04/17/24 23:26	7440-62-2	
Zinc	61.9	mg/kg	30.6	0.906	5	04/15/24 09:27	04/17/24 23:26	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0220	mg/kg	0.0490	0.0220	1	04/12/24 15:37	04/13/24 10:05	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<86.4	ug/kg	402	86.4	1	04/10/24 14:25	04/12/24 16:50	83-32-9	
Acenaphthylene	<65.8	ug/kg	402	65.8	1	04/10/24 14:25	04/12/24 16:50	208-96-8	
Anthracene	<84.1	ug/kg	402	84.1	1	04/10/24 14:25	04/12/24 16:50	120-12-7	
Benzo(a)anthracene	<85.0	ug/kg	402	85.0	1	04/10/24 14:25	04/12/24 16:50	56-55-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS07/SS-2 Lab ID: 60450516013 Collected: 04/08/24 15:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<86.5	ug/kg	402	86.5	1	04/10/24 14:25	04/12/24 16:50	50-32-8	
Benzo(b)fluoranthene	<98.1	ug/kg	402	98.1	1	04/10/24 14:25	04/12/24 16:50	205-99-2	
Benzo(g,h,i)perylene	<69.8	ug/kg	402	69.8	1	04/10/24 14:25	04/12/24 16:50	191-24-2	
Benzo(k)fluoranthene	<86.5	ug/kg	402	86.5	1	04/10/24 14:25	04/12/24 16:50	207-08-9	
Benzoic Acid	<219	ug/kg	2030	219	1	04/10/24 14:25	04/12/24 16:50	65-85-0	
Benzyl alcohol	<73.8	ug/kg	804	73.8	1	04/10/24 14:25	04/12/24 16:50	100-51-6	
4-Bromophenylphenyl ether	<86.7	ug/kg	402	86.7	1	04/10/24 14:25	04/12/24 16:50	101-55-3	
Butylbenzylphthalate	<81.9	ug/kg	402	81.9	1	04/10/24 14:25	04/12/24 16:50	85-68-7	
Carbazole	<82.7	ug/kg	402	82.7	1	04/10/24 14:25	04/12/24 16:50	86-74-8	
4-Chloro-3-methylphenol	<84.3	ug/kg	804	84.3	1	04/10/24 14:25	04/12/24 16:50	59-50-7	
4-Chloroaniline	<63.0	ug/kg	804	63.0	1	04/10/24 14:25	04/12/24 16:50	106-47-8	
bis(2-Chloroethoxy)methane	<79.9	ug/kg	402	79.9	1	04/10/24 14:25	04/12/24 16:50	111-91-1	
bis(2-Chloroethyl) ether	<81.1	ug/kg	402	81.1	1	04/10/24 14:25	04/12/24 16:50	111-44-4	
bis(2-Chloroisopropyl) ether	<87.1	ug/kg	402	87.1	1	04/10/24 14:25	04/12/24 16:50	108-60-1	
2-Chloronaphthalene	<84.7	ug/kg	402	84.7	1	04/10/24 14:25	04/12/24 16:50	91-58-7	
2-Chlorophenol	<82.1	ug/kg	402	82.1	1	04/10/24 14:25	04/12/24 16:50	95-57-8	
4-Chlorophenylphenyl ether	<86.3	ug/kg	402	86.3	1	04/10/24 14:25	04/12/24 16:50	7005-72-3	
Chrysene	<89.5	ug/kg	402	89.5	1	04/10/24 14:25	04/12/24 16:50	218-01-9	
Dibenz(a,h)anthracene	<72.2	ug/kg	402	72.2	1	04/10/24 14:25	04/12/24 16:50	53-70-3	
Dibenzofuran	<85.9	ug/kg	402	85.9	1	04/10/24 14:25	04/12/24 16:50	132-64-9	
1,2-Dichlorobenzene	<80.0	ug/kg	402	80.0	1	04/10/24 14:25	04/12/24 16:50	95-50-1	
1,3-Dichlorobenzene	<78.6	ug/kg	402	78.6	1	04/10/24 14:25	04/12/24 16:50	541-73-1	
1,4-Dichlorobenzene	<77.5	ug/kg	402	77.5	1	04/10/24 14:25	04/12/24 16:50	106-46-7	
3,3'-Dichlorobenzidine	<39.5	ug/kg	804	39.5	1	04/10/24 14:25	04/12/24 16:50	91-94-1	
2,4-Dichlorophenol	<80.5	ug/kg	402	80.5	1	04/10/24 14:25	04/12/24 16:50	120-83-2	
Diethylphthalate	<91.9	ug/kg	402	91.9	1	04/10/24 14:25	04/12/24 16:50	84-66-2	
2,4-Dimethylphenol	<58.5	ug/kg	402	58.5	1	04/10/24 14:25	04/12/24 16:50	105-67-9	
Dimethylphthalate	<83.5	ug/kg	402	83.5	1	04/10/24 14:25	04/12/24 16:50	131-11-3	
Di-n-butylphthalate	<95.2	ug/kg	402	95.2	1	04/10/24 14:25	04/12/24 16:50	84-74-2	
4,6-Dinitro-2-methylphenol	<69.6	ug/kg	2030	69.6	1	04/10/24 14:25	04/12/24 16:50	534-52-1	
2,4-Dinitrophenol	<121	ug/kg	2030	121	1	04/10/24 14:25	04/12/24 16:50	51-28-5	
2,4-Dinitrotoluene	<90.5	ug/kg	402	90.5	1	04/10/24 14:25	04/12/24 16:50	121-14-2	
2,6-Dinitrotoluene	<78.3	ug/kg	402	78.3	1	04/10/24 14:25	04/12/24 16:50	606-20-2	
Di-n-octylphthalate	<97.8	ug/kg	402	97.8	1	04/10/24 14:25	04/12/24 16:50	117-84-0	
bis(2-Ethylhexyl)phthalate	<90.3	ug/kg	402	90.3	1	04/10/24 14:25	04/12/24 16:50	117-81-7	
Fluoranthene	<88.6	ug/kg	402	88.6	1	04/10/24 14:25	04/12/24 16:50	206-44-0	
Fluorene	<85.5	ug/kg	402	85.5	1	04/10/24 14:25	04/12/24 16:50	86-73-7	
Hexachloro-1,3-butadiene	<86.1	ug/kg	402	86.1	1	04/10/24 14:25	04/12/24 16:50	87-68-3	
Hexachlorobenzene	<84.1	ug/kg	402	84.1	1	04/10/24 14:25	04/12/24 16:50	118-74-1	
Hexachlorocyclopentadiene	<247	ug/kg	402	247	1	04/10/24 14:25	04/12/24 16:50	77-47-4	
Hexachloroethane	<73.7	ug/kg	402	73.7	1	04/10/24 14:25	04/12/24 16:50	67-72-1	
Indeno(1,2,3-cd)pyrene	<82.2	ug/kg	402	82.2	1	04/10/24 14:25	04/12/24 16:50	193-39-5	
Isophorone	<77.7	ug/kg	402	77.7	1	04/10/24 14:25	04/12/24 16:50	78-59-1	
2-Methylnaphthalene	<81.5	ug/kg	402	81.5	1	04/10/24 14:25	04/12/24 16:50	91-57-6	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS07/SS-2 Lab ID: 60450516013 Collected: 04/08/24 15:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<73.2	ug/kg	402	73.2	1	04/10/24 14:25	04/12/24 16:50	95-48-7	
3&4-Methylphenol(m&p Cresol)	<74.7	ug/kg	402	74.7	1	04/10/24 14:25	04/12/24 16:50	15831-10-4	
Naphthalene	<86.5	ug/kg	402	86.5	1	04/10/24 14:25	04/12/24 16:50	91-20-3	
2-Nitroaniline	<66.6	ug/kg	804	66.6	1	04/10/24 14:25	04/12/24 16:50	88-74-4	
3-Nitroaniline	<62.6	ug/kg	804	62.6	1	04/10/24 14:25	04/12/24 16:50	99-09-2	
4-Nitroaniline	<68.8	ug/kg	804	68.8	1	04/10/24 14:25	04/12/24 16:50	100-01-6	
Nitrobenzene	<85.2	ug/kg	402	85.2	1	04/10/24 14:25	04/12/24 16:50	98-95-3	
2-Nitrophenol	<62.9	ug/kg	402	62.9	1	04/10/24 14:25	04/12/24 16:50	88-75-5	
4-Nitrophenol	<59.2	ug/kg	2030	59.2	1	04/10/24 14:25	04/12/24 16:50	100-02-7	
N-Nitroso-di-n-propylamine	<76.6	ug/kg	402	76.6	1	04/10/24 14:25	04/12/24 16:50	621-64-7	
N-Nitrosodiphenylamine	<79.9	ug/kg	402	79.9	1	04/10/24 14:25	04/12/24 16:50	86-30-6	
Pentachlorophenol	<133	ug/kg	2030	133	1	04/10/24 14:25	04/12/24 16:50	87-86-5	
Phenanthrene	<85.9	ug/kg	402	85.9	1	04/10/24 14:25	04/12/24 16:50	85-01-8	
Phenol	<75.7	ug/kg	402	75.7	1	04/10/24 14:25	04/12/24 16:50	108-95-2	
Pyrene	<85.8	ug/kg	402	85.8	1	04/10/24 14:25	04/12/24 16:50	129-00-0	
Pyridine	<59.6	ug/kg	402	59.6	1	04/10/24 14:25	04/12/24 16:50	110-86-1	
1,2,4-Trichlorobenzene	<84.2	ug/kg	402	84.2	1	04/10/24 14:25	04/12/24 16:50	120-82-1	
2,4,5-Trichlorophenol	<82.4	ug/kg	402	82.4	1	04/10/24 14:25	04/12/24 16:50	95-95-4	
2,4,6-Trichlorophenol	<74.3	ug/kg	402	74.3	1	04/10/24 14:25	04/12/24 16:50	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	78	%	30-120		1	04/10/24 14:25	04/12/24 16:50	4165-60-0	
2-Fluorobiphenyl (S)	68	%	40-120		1	04/10/24 14:25	04/12/24 16:50	321-60-8	
Terphenyl-d14 (S)	73	%	45-120		1	04/10/24 14:25	04/12/24 16:50	1718-51-0	
Phenol-d6 (S)	78	%	40-120		1	04/10/24 14:25	04/12/24 16:50	13127-88-3	
2-Fluorophenol (S)	76	%	40-120		1	04/10/24 14:25	04/12/24 16:50	367-12-4	
2,4,6-Tribromophenol (S)	82	%	35-120		1	04/10/24 14:25	04/12/24 16:50	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	18.5	mg/kg	18.1	6.2	1	04/11/24 13:51	04/12/24 15:36		
TPH-DRO	<6.2	mg/kg	18.1	6.2	1	04/11/24 13:51	04/12/24 15:36		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	82	%	35-120		1	04/11/24 13:51	04/12/24 15:36	4165-60-0	
2-Fluorobiphenyl (S)	86	%	50-120		1	04/11/24 13:51	04/12/24 15:36	321-60-8	
Terphenyl-d14 (S)	86	%	45-120		1	04/11/24 13:51	04/12/24 15:36	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<73.3	ug/kg	76.8	73.3	1	04/10/24 09:05	04/10/24 16:24	67-64-1	
Benzene	<0.56	ug/kg	6.1	0.56	1	04/10/24 09:05	04/10/24 16:24	71-43-2	
Bromobenzene	<0.76	ug/kg	6.1	0.76	1	04/10/24 09:05	04/10/24 16:24	108-86-1	
Bromochloromethane	<0.91	ug/kg	6.1	0.91	1	04/10/24 09:05	04/10/24 16:24	74-97-5	
Bromodichloromethane	<1.0	ug/kg	15.8	1.0	1	04/10/24 09:05	04/10/24 16:24	75-27-4	
Bromoform	<0.47	ug/kg	15.8	0.47	1	04/10/24 09:05	04/10/24 16:24	75-25-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS07/SS-2 Lab ID: 60450516013 Collected: 04/08/24 15:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Bromomethane	<7.5	ug/kg	15.8	7.5	1	04/10/24 09:05	04/10/24 16:24	74-83-9	
2-Butanone (MEK)	<38.9	ug/kg	76.8	38.9	1	04/10/24 09:05	04/10/24 16:24	78-93-3	
n-Butylbenzene	<0.59	ug/kg	6.1	0.59	1	04/10/24 09:05	04/10/24 16:24	104-51-8	
sec-Butylbenzene	<0.60	ug/kg	6.1	0.60	1	04/10/24 09:05	04/10/24 16:24	135-98-8	
tert-Butylbenzene	<0.39	ug/kg	6.1	0.39	1	04/10/24 09:05	04/10/24 16:24	98-06-6	
Carbon disulfide	<2.8	ug/kg	6.1	2.8	1	04/10/24 09:05	04/10/24 16:24	75-15-0	
Carbon tetrachloride	<2.0	ug/kg	6.1	2.0	1	04/10/24 09:05	04/10/24 16:24	56-23-5	
Chlorobenzene	<0.36	ug/kg	6.1	0.36	1	04/10/24 09:05	04/10/24 16:24	108-90-7	
Chloroethane	<10.1	ug/kg	30.5	10.1	1	04/10/24 09:05	04/10/24 16:24	75-00-3	
Chloroform	<2.2	ug/kg	6.1	2.2	1	04/10/24 09:05	04/10/24 16:24	67-66-3	
Chloromethane	<1.5	ug/kg	15.8	1.5	1	04/10/24 09:05	04/10/24 16:24	74-87-3	
2-Chlorotoluene	<0.85	ug/kg	6.1	0.85	1	04/10/24 09:05	04/10/24 16:24	95-49-8	
4-Chlorotoluene	<0.48	ug/kg	6.1	0.48	1	04/10/24 09:05	04/10/24 16:24	106-43-4	
1,2-Dibromo-3-chloropropane	<4.1	ug/kg	15.8	4.1	1	04/10/24 09:05	04/10/24 16:24	96-12-8	
Dibromochloromethane	<0.37	ug/kg	6.1	0.37	1	04/10/24 09:05	04/10/24 16:24	124-48-1	
1,2-Dibromoethane (EDB)	<0.64	ug/kg	6.1	0.64	1	04/10/24 09:05	04/10/24 16:24	106-93-4	
Dibromomethane	<1.8	ug/kg	6.1	1.8	1	04/10/24 09:05	04/10/24 16:24	74-95-3	
1,2-Dichlorobenzene	<1.0	ug/kg	6.1	1.0	1	04/10/24 09:05	04/10/24 16:24	95-50-1	
1,3-Dichlorobenzene	<0.77	ug/kg	6.1	0.77	1	04/10/24 09:05	04/10/24 16:24	541-73-1	
1,4-Dichlorobenzene	<1.1	ug/kg	6.1	1.1	1	04/10/24 09:05	04/10/24 16:24	106-46-7	
Dichlorodifluoromethane	<1.2	ug/kg	15.8	1.2	1	04/10/24 09:05	04/10/24 16:24	75-71-8	
1,1-Dichloroethane	<1.4	ug/kg	6.1	1.4	1	04/10/24 09:05	04/10/24 16:24	75-34-3	
1,2-Dichloroethane	<1.2	ug/kg	6.1	1.2	1	04/10/24 09:05	04/10/24 16:24	107-06-2	
1,2-Dichloroethene (Total)	<2.3	ug/kg	12.2	2.3	1	04/10/24 09:05	04/10/24 16:24	540-59-0	
1,1-Dichloroethene	<2.5	ug/kg	6.1	2.5	1	04/10/24 09:05	04/10/24 16:24	75-35-4	
cis-1,2-Dichloroethene	<1.1	ug/kg	6.1	1.1	1	04/10/24 09:05	04/10/24 16:24	156-59-2	
trans-1,2-Dichloroethene	<1.4	ug/kg	6.1	1.4	1	04/10/24 09:05	04/10/24 16:24	156-60-5	
1,2-Dichloropropane	<1.3	ug/kg	6.1	1.3	1	04/10/24 09:05	04/10/24 16:24	78-87-5	
1,3-Dichloropropane	<0.24	ug/kg	6.1	0.24	1	04/10/24 09:05	04/10/24 16:24	142-28-9	
2,2-Dichloropropane	<1.8	ug/kg	6.1	1.8	1	04/10/24 09:05	04/10/24 16:24	594-20-7	
1,1-Dichloropropene	<1.3	ug/kg	6.1	1.3	1	04/10/24 09:05	04/10/24 16:24	563-58-6	
cis-1,3-Dichloropropene	<0.91	ug/kg	6.1	0.91	1	04/10/24 09:05	04/10/24 16:24	10061-01-5	
trans-1,3-Dichloropropene	<0.73	ug/kg	6.1	0.73	1	04/10/24 09:05	04/10/24 16:24	10061-02-6	
Ethylbenzene	<1.1	ug/kg	6.1	1.1	1	04/10/24 09:05	04/10/24 16:24	100-41-4	
Hexachloro-1,3-butadiene	<1.1	ug/kg	6.1	1.1	1	04/10/24 09:05	04/10/24 16:24	87-68-3	
2-Hexanone	<12.7	ug/kg	76.8	12.7	1	04/10/24 09:05	04/10/24 16:24	591-78-6	
Isopropylbenzene (Cumene)	<0.38	ug/kg	6.1	0.38	1	04/10/24 09:05	04/10/24 16:24	98-82-8	
p-Isopropyltoluene	<0.53	ug/kg	6.1	0.53	1	04/10/24 09:05	04/10/24 16:24	99-87-6	
Methylene Chloride	<23.7	ug/kg	30.5	23.7	1	04/10/24 09:05	04/10/24 16:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	<8.5	ug/kg	76.8	8.5	1	04/10/24 09:05	04/10/24 16:24	108-10-1	
Methyl-tert-butyl ether	<1.2	ug/kg	6.1	1.2	1	04/10/24 09:05	04/10/24 16:24	1634-04-4	
Naphthalene	<0.89	ug/kg	12.2	0.89	1	04/10/24 09:05	04/10/24 16:24	91-20-3	
n-Propylbenzene	<0.74	ug/kg	6.1	0.74	1	04/10/24 09:05	04/10/24 16:24	103-65-1	
Styrene	<0.49	ug/kg	6.1	0.49	1	04/10/24 09:05	04/10/24 16:24	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: SS07/SS-2 Lab ID: 60450516013 Collected: 04/08/24 15:40 Received: 04/08/24 17:34 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<0.87	ug/kg	6.1	0.87	1	04/10/24 09:05	04/10/24 16:24	630-20-6	
1,1,2,2-Tetrachloroethane	<0.86	ug/kg	6.1	0.86	1	04/10/24 09:05	04/10/24 16:24	79-34-5	
Tetrachloroethene	<0.65	ug/kg	6.1	0.65	1	04/10/24 09:05	04/10/24 16:24	127-18-4	
Toluene	<5.4	ug/kg	24.4	5.4	1	04/10/24 09:05	04/10/24 16:24	108-88-3	
1,2,3-Trichlorobenzene	<0.71	ug/kg	6.1	0.71	1	04/10/24 09:05	04/10/24 16:24	87-61-6	
1,2,4-Trichlorobenzene	<0.60	ug/kg	6.1	0.60	1	04/10/24 09:05	04/10/24 16:24	120-82-1	
1,1,1-Trichloroethane	<1.2	ug/kg	6.1	1.2	1	04/10/24 09:05	04/10/24 16:24	71-55-6	
1,1,2-Trichloroethane	<0.87	ug/kg	6.1	0.87	1	04/10/24 09:05	04/10/24 16:24	79-00-5	
Trichloroethene	<2.3	ug/kg	6.1	2.3	1	04/10/24 09:05	04/10/24 16:24	79-01-6	
Trichlorofluoromethane	<11.7	ug/kg	15.8	11.7	1	04/10/24 09:05	04/10/24 16:24	75-69-4	
1,2,3-Trichloropropane	<1.9	ug/kg	6.1	1.9	1	04/10/24 09:05	04/10/24 16:24	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/kg	6.1	0.84	1	04/10/24 09:05	04/10/24 16:24	95-63-6	
1,3,5-Trimethylbenzene	<0.53	ug/kg	6.1	0.53	1	04/10/24 09:05	04/10/24 16:24	108-67-8	
Vinyl chloride	<1.1	ug/kg	15.8	1.1	1	04/10/24 09:05	04/10/24 16:24	75-01-4	
Xylene (Total)	<4.5	ug/kg	18.3	4.5	1	04/10/24 09:05	04/10/24 16:24	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	108	%	80-120		1	04/10/24 09:05	04/10/24 16:24	2037-26-5	
4-Bromofluorobenzene (S)	100	%	83-119		1	04/10/24 09:05	04/10/24 16:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1	04/10/24 09:05	04/10/24 16:24	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.071	mg/kg	0.52	0.071	1	04/11/24 07:56	04/11/24 13:53		
<b>Surrogates</b>									
Toluene-d8 (S)	100	%	78-122		1	04/11/24 07:56	04/11/24 13:53	2037-26-5	
4-Bromofluorobenzene (S)	106	%	69-133		1	04/11/24 07:56	04/11/24 13:53	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/11/24 07:56	04/11/24 13:53	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	18.7	%	0.50	0.50	1		04/10/24 15:44		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	81.7	%			1	04/12/24 08:46	04/12/24 08:57		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<0.94	mg/kg	1.2	0.94	1	04/15/24 09:34	04/16/24 15:38	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.14	mg/kg	0.17	0.14	1	04/18/24 08:30	04/18/24 11:56	57-12-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Sample: **SS07/SS-2** Lab ID: **60450516013** Collected: 04/08/24 15:40 Received: 04/08/24 17:34 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<6.7	mg/kg	11.9	6.7	10	04/10/24 08:00	04/11/24 20:40	14797-55-8	
Nitrite as N	<6.2	mg/kg	11.9	6.2	10	04/10/24 08:00	04/11/24 20:40	14797-65-0	

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	2268118	Analysis Method:	EPA 8081B
QC Batch Method:	3546/3665A	Analysis Description:	Pesticides (GC) 8081B
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010

METHOD BLANK: R4058815-1 Matrix: Solid  
 Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aldrin	mg/kg	<0.00376	0.0200	0.00376	04/16/24 22:57	
alpha-BHC	mg/kg	<0.00368	0.0200	0.00368	04/16/24 22:57	
beta-BHC	mg/kg	<0.00379	0.0200	0.00379	04/16/24 22:57	
delta-BHC	mg/kg	<0.00346	0.0200	0.00346	04/16/24 22:57	
gamma-BHC (Lindane)	mg/kg	<0.00344	0.0200	0.00344	04/16/24 22:57	
Chlordane (Technical)	mg/kg	<0.103	0.300	0.103	04/16/24 22:57	
4,4'-DDD	mg/kg	<0.00370	0.0200	0.00370	04/16/24 22:57	
4,4'-DDE	mg/kg	<0.00366	0.0200	0.00366	04/16/24 22:57	
4,4'-DDT	mg/kg	<0.00627	0.0200	0.00627	04/16/24 22:57	
Dieldrin	mg/kg	<0.00344	0.0200	0.00344	04/16/24 22:57	
Endosulfan I	mg/kg	<0.00363	0.0200	0.00363	04/16/24 22:57	
Endosulfan II	mg/kg	<0.00335	0.0200	0.00335	04/16/24 22:57	
Endosulfan sulfate	mg/kg	<0.00364	0.0200	0.00364	04/16/24 22:57	
Endrin	mg/kg	<0.00350	0.0200	0.00350	04/16/24 22:57	
Endrin aldehyde	mg/kg	<0.00339	0.0200	0.00339	04/16/24 22:57	
Endrin ketone	mg/kg	<0.00711	0.0200	0.00711	04/16/24 22:57	
Hexachlorobenzene	mg/kg	<0.00346	0.0200	0.00346	04/16/24 22:57	
Heptachlor	mg/kg	<0.00428	0.0200	0.00428	04/16/24 22:57	
Heptachlor epoxide	mg/kg	<0.00339	0.0200	0.00339	04/16/24 22:57	
Methoxychlor	mg/kg	<0.00484	0.0200	0.00484	04/16/24 22:57	
Toxaphene	mg/kg	<0.124	0.400	0.124	04/16/24 22:57	
Decachlorobiphenyl (S)	%	56	10.0-135		04/16/24 22:57	
Tetrachloro-m-xylene (S)	%	61.3	10.0-139		04/16/24 22:57	

LABORATORY CONTROL SAMPLE: R4058815-5

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aldrin	mg/kg	0.0666	0.0331	49.7	34.0-136	
alpha-BHC	mg/kg	0.0666	0.0327	49.1	34.0-139	
beta-BHC	mg/kg	0.0666	0.0288	43.2	34.0-133	
delta-BHC	mg/kg	0.0666	0.0286	42.9	34.0-135	
gamma-BHC (Lindane)	mg/kg	0.0666	0.0336	50.5	34.0-136	
4,4'-DDD	mg/kg	0.0666	0.0335	50.3	33.0-141	
4,4'-DDE	mg/kg	0.0666	0.0330	49.5	34.0-134	
4,4'-DDT	mg/kg	0.0666	0.0313	47.0	30.0-143	
Dieldrin	mg/kg	0.0666	0.0335	50.3	35.0-137	
Endosulfan I	mg/kg	0.0666	0.0317	47.6	34.0-134	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

LABORATORY CONTROL SAMPLE: R4058815-5

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endosulfan II	mg/kg	0.0666	0.0323	48.5	35.0-132	
Endosulfan sulfate	mg/kg	0.0666	0.0317	47.6	35.0-132	
Endrin	mg/kg	0.0666	0.0162	24.3	34.0-137	L0
Endrin aldehyde	mg/kg	0.0666	0.0169	25.4	23.0-121	
Endrin ketone	mg/kg	0.0666	0.0437	65.6	35.0-144	
Hexachlorobenzene	mg/kg	0.0666	0.0294	44.1	33.0-129	
Heptachlor	mg/kg	0.0666	0.0331	49.7	36.0-141	
Heptachlor epoxide	mg/kg	0.0666	0.0327	49.1	36.0-134	
Methoxychlor	mg/kg	0.0666	0.0329	49.4	28.0-150	
Decachlorobiphenyl (S)	%			57.4	10.0-135	
Tetrachloro-m-xylene (S)	%			61.9	10.0-139	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058815-6 R4058815-7

Parameter	Units	R4058815-6		R4058815-7		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		60450516008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Aldrin	mg/kg	ND	0.0804	0.0804	0.0542	0.0565	67.4	70.3	20.0-135	4.14	37	
alpha-BHC	mg/kg	ND	0.0804	0.0804	0.0554	0.0622	68.9	77.3	27.0-140	11.5	35	
beta-BHC	mg/kg	ND	0.0804	0.0804	0.0493	0.0563	61.3	70.0	23.0-141	13.3	37	
delta-BHC	mg/kg	ND	0.0804	0.0804	0.0470	0.0541	58.4	67.3	21.0-138	14.1	35	
gamma-BHC (Lindane)	mg/kg	ND	0.0804	0.0804	0.0570	0.0641	70.9	79.7	27.0-137	11.8	36	
4,4'-DDD	mg/kg	ND	0.0804	0.0804	0.0543	0.0569	67.6	70.7	15.0-152	4.56	39	
4,4'-DDE	mg/kg	ND	0.0804	0.0804	0.0537	0.0559	66.8	69.5	10.0-152	3.96	40	
4,4'-DDT	mg/kg	ND	0.0804	0.0804	0.0507	0.0515	63.1	64.1	10.0-151	1.65	40	
Dieldrin	mg/kg	ND	0.0804	0.0804	0.0555	0.0601	69.1	74.8	17.0-145	7.93	37	
Endosulfan I	mg/kg	ND	0.0804	0.0804	0.0521	0.0565	64.9	70.3	20.0-137	8.00	36	
Endosulfan II	mg/kg	ND	0.0804	0.0804	0.0514	0.0575	64.0	71.5	15.0-141	11.1	37	
Endosulfan sulfate	mg/kg	ND	0.0804	0.0804	0.0514	0.0573	64.0	71.3	15.0-143	10.9	38	
Endrin	mg/kg	ND	0.0804	0.0804	0.0582	0.0629	72.4	78.2	19.0-143	7.78	37	
Endrin aldehyde	mg/kg	ND	0.0804	0.0804	0.0468	0.0525	58.3	65.3	10.0-139	11.4	40	
Endrin ketone	mg/kg	ND	0.0804	0.0804	0.0525	0.0587	65.3	73.0	17.0-149	11.1	38	
Hexachlorobenzene	mg/kg	ND	0.0804	0.0804	0.0499	0.0525	62.0	65.3	25.0-126	5.19	35	
Heptachlor	mg/kg	ND	0.0804	0.0804	0.0549	0.0576	68.3	71.6	22.0-138	4.72	37	
Heptachlor epoxide	mg/kg	ND	0.0804	0.0804	0.0537	0.0583	66.8	72.5	22.0-138	8.19	36	
Methoxychlor	mg/kg	ND	0.0804	0.0804	0.0521	0.0520	64.9	64.7	10.0-159	0.232	40	
Decachlorobiphenyl (S)	%						58.0	57.8	10.0-135			
Tetrachloro-m-xylene (S)	%						67.0	70.0	10.0-139			

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch: 2268142 Analysis Method: EPA 8081B  
 QC Batch Method: 3546/3665A Analysis Description: Pesticides (GC) 8081B  
 Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450516011, 60450516012, 60450516013

METHOD BLANK: R4058896-1 Matrix: Solid

Associated Lab Samples: 60450516011, 60450516012, 60450516013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aldrin	mg/kg	<0.00376	0.0200	0.00376	04/17/24 04:27	
alpha-BHC	mg/kg	<0.00368	0.0200	0.00368	04/17/24 04:27	
beta-BHC	mg/kg	<0.00379	0.0200	0.00379	04/17/24 04:27	
delta-BHC	mg/kg	<0.00346	0.0200	0.00346	04/17/24 04:27	
gamma-BHC (Lindane)	mg/kg	<0.00344	0.0200	0.00344	04/17/24 04:27	
Chlordane (Technical)	mg/kg	<0.103	0.300	0.103	04/17/24 04:27	
4,4'-DDD	mg/kg	<0.00370	0.0200	0.00370	04/17/24 04:27	
4,4'-DDE	mg/kg	<0.00366	0.0200	0.00366	04/17/24 04:27	
4,4'-DDT	mg/kg	<0.00627	0.0200	0.00627	04/17/24 04:27	
Dieldrin	mg/kg	<0.00344	0.0200	0.00344	04/17/24 04:27	
Endosulfan I	mg/kg	<0.00363	0.0200	0.00363	04/17/24 04:27	
Endosulfan II	mg/kg	<0.00335	0.0200	0.00335	04/17/24 04:27	
Endosulfan sulfate	mg/kg	<0.00364	0.0200	0.00364	04/17/24 04:27	
Endrin	mg/kg	<0.00350	0.0200	0.00350	04/17/24 04:27	
Endrin aldehyde	mg/kg	<0.00339	0.0200	0.00339	04/17/24 04:27	
Endrin ketone	mg/kg	<0.00711	0.0200	0.00711	04/17/24 04:27	
Hexachlorobenzene	mg/kg	<0.00346	0.0200	0.00346	04/17/24 04:27	
Heptachlor	mg/kg	<0.00428	0.0200	0.00428	04/17/24 04:27	
Heptachlor epoxide	mg/kg	<0.00339	0.0200	0.00339	04/17/24 04:27	
Methoxychlor	mg/kg	<0.00484	0.0200	0.00484	04/17/24 04:27	
Toxaphene	mg/kg	<0.124	0.400	0.124	04/17/24 04:27	
Decachlorobiphenyl (S)	%	66.8	10.0-135		04/17/24 04:27	
Tetrachloro-m-xylene (S)	%	64.3	10.0-139		04/17/24 04:27	

LABORATORY CONTROL SAMPLE: R4058896-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aldrin	mg/kg	0.0666	0.0507	76.1	34.0-136	
alpha-BHC	mg/kg	0.0666	0.0505	75.8	34.0-139	
beta-BHC	mg/kg	0.0666	0.0589	88.4	34.0-133	
delta-BHC	mg/kg	0.0666	0.0490	73.6	34.0-135	
gamma-BHC (Lindane)	mg/kg	0.0666	0.0519	77.9	34.0-136	
4,4'-DDD	mg/kg	0.0666	0.0512	76.9	33.0-141	
4,4'-DDE	mg/kg	0.0666	0.0523	78.5	34.0-134	
4,4'-DDT	mg/kg	0.0666	0.0522	78.4	30.0-143	
Dieldrin	mg/kg	0.0666	0.0515	77.3	35.0-137	
Endosulfan I	mg/kg	0.0666	0.0516	77.5	34.0-134	
Endosulfan II	mg/kg	0.0666	0.0511	76.7	35.0-132	
Endosulfan sulfate	mg/kg	0.0666	0.0521	78.2	35.0-132	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

LABORATORY CONTROL SAMPLE: R4058896-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	mg/kg	0.0666	0.0514	77.2	34.0-137	
Endrin aldehyde	mg/kg	0.0666	0.0500	75.1	23.0-121	
Endrin ketone	mg/kg	0.0666	0.0512	76.9	35.0-144	
Hexachlorobenzene	mg/kg	0.0666	0.0501	75.2	33.0-129	
Heptachlor	mg/kg	0.0666	0.0541	81.2	36.0-141	
Heptachlor epoxide	mg/kg	0.0666	0.0508	76.3	36.0-134	
Methoxychlor	mg/kg	0.0666	0.0527	79.1	28.0-150	
Decachlorobiphenyl (S)	%			68.5	10.0-135	
Tetrachloro-m-xylene (S)	%			67.4	10.0-139	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058896-3 R4058896-4

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1724657-01 Result	Spike Conc.	Spike Conc.	Result						
Aldrin	mg/kg	ND	0.0789	0.0793	0.0618	0.0689	78.3	86.9	20.0-135	10.9	37
alpha-BHC	mg/kg	ND	0.0789	0.0793	0.0698	0.0714	88.4	90.1	27.0-140	2.36	35
beta-BHC	mg/kg	ND	0.0789	0.0793	0.0811	0.0824	103	104	23.0-141	1.60	37
delta-BHC	mg/kg	ND	0.0789	0.0793	0.0680	0.0697	86.1	87.8	21.0-138	2.42	35
gamma-BHC (Lindane)	mg/kg	ND	0.0789	0.0793	0.0718	0.0729	91.0	91.9	27.0-137	1.48	36
4,4'-DDD	mg/kg	ND	0.0789	0.0793	0.0675	0.0736	85.5	92.8	15.0-152	8.61	39
4,4'-DDE	mg/kg	ND	0.0789	0.0793	0.0639	0.0711	81.0	89.6	10.0-152	10.6	40
4,4'-DDT	mg/kg	ND	0.0789	0.0793	0.0636	0.0714	80.5	90.1	10.0-151	11.6	40
Dieldrin	mg/kg	ND	0.0789	0.0793	0.0695	0.0723	88.1	91.1	17.0-145	3.86	37
Endosulfan I	mg/kg	ND	0.0789	0.0793	0.0697	0.0719	88.2	90.7	20.0-137	3.20	36
Endosulfan II	mg/kg	ND	0.0789	0.0793	0.0704	0.0722	89.1	91.0	15.0-141	2.51	37
Endosulfan sulfate	mg/kg	ND	0.0789	0.0793	0.0724	0.0748	91.7	94.3	15.0-143	3.24	38
Endrin	mg/kg	ND	0.0789	0.0793	0.0660	0.0706	83.6	89.0	19.0-143	6.80	37
Endrin aldehyde	mg/kg	ND	0.0789	0.0793	0.0625	0.0758	79.2	95.6	10.0-139	19.3	40
Endrin ketone	mg/kg	ND	0.0789	0.0793	0.0725	0.0744	91.9	93.8	17.0-149	2.59	38
Hexachlorobenzene	mg/kg	ND	0.0789	0.0793	0.0642	0.0701	81.3	88.4	25.0-126	8.87	35
Heptachlor	mg/kg	ND	0.0789	0.0793	0.0670	0.0737	84.9	92.9	22.0-138	9.48	37
Heptachlor epoxide	mg/kg	ND	0.0789	0.0793	0.0679	0.0701	86.0	88.4	22.0-138	3.28	36
Methoxychlor	mg/kg	ND	0.0789	0.0793	0.0664	0.0743	84.2	93.7	10.0-159	11.2	40
Decachlorobiphenyl (S)	%						61.1	83.5	10.0-135		
Tetrachloro-m-xylene (S)	%						69.4	78.1	10.0-139		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	2265407	Analysis Method:	EPA 8151A
QC Batch Method:	8151A	Analysis Description:	Chlorinated Herb. (GC) 8151A
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

METHOD BLANK: R4058398-1 Matrix: Solid  
 Associated Lab Samples: 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4-D	mg/kg	<0.00702	0.0700	0.00702	04/16/24 12:59	
Dalapon	mg/kg	<0.0113	0.0700	0.0113	04/16/24 12:59	
2,4-DB	mg/kg	<0.0297	0.0700	0.0297	04/16/24 12:59	
Dicamba	mg/kg	<0.0157	0.0700	0.0157	04/16/24 12:59	
Dichlorprop	mg/kg	<0.0245	0.0700	0.0245	04/16/24 12:59	
Dinoseb	mg/kg	<0.00697	0.0700	0.00697	04/16/24 12:59	
MCPA	mg/kg	<0.443	6.50	0.443	04/16/24 12:59	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	<0.367	6.50	0.367	04/16/24 12:59	
2,4,5-T	mg/kg	<0.00852	0.0700	0.00852	04/16/24 12:59	
2,4,5-TP (Silvex)	mg/kg	<0.0107	0.0700	0.0107	04/16/24 12:59	
2,4-DCAA (S)	%	71.9	22.0-132		04/16/24 12:59	

LABORATORY CONTROL SAMPLE: R4058398-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-D	mg/kg	0.0835	0.0713	85.4	40.0-120	
Dalapon	mg/kg	0.0835	0.0537	64.3	15.0-120	
2,4-DB	mg/kg	0.0835	0.0694	83.1	25.0-143	
Dicamba	mg/kg	0.0835	0.0627	75.1	43.0-120	
Dichlorprop	mg/kg	0.0835	0.0641	76.8	32.0-129	
Dinoseb	mg/kg	0.0835	0.0333	39.9	10.0-120	
MCPA	mg/kg	8.35	7.76	92.9	31.0-121	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	8.35	5.99	71.7	28.0-133	
2,4,5-T	mg/kg	0.0835	0.0644	77.1	41.0-120	
2,4,5-TP (Silvex)	mg/kg	0.0835	0.0736	88.1	42.0-120	
2,4-DCAA (S)	%			73.1	22.0-132	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058398-3 R4058398-4

Parameter	Units	R4058398-3		R4058398-4		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		60450516008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
2,4-D	mg/kg	ND	0.0990	0.0996	0.124	0.110	126	110	10.0-160	12.3	24	P9
Dalapon	mg/kg	ND	0.0990	0.0996	0.0676	0.0729	68.3	73.2	10.0-121	7.56	27	
2,4-DB	mg/kg	ND	0.0990	0.0996	0.0838	0.0873	84.6	87.6	10.0-160	4.09	22	P9
Dicamba	mg/kg	ND	0.0990	0.0996	0.0738	0.0690	74.5	69.3	10.0-154	6.59	21	
Dichlorprop	mg/kg	ND	0.0990	0.0996	0.0829	0.0765	83.8	76.8	10.0-158	8.02	20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058398-3												R4058398-4	
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450516008 Result	Spike Conc.	Spike Conc.	MS Result								
Dinoseb	mg/kg	ND	0.0990	0.0996	0.0396	0.0269	40.0	27.0	10.0-120	38.1	40		
MCPA	mg/kg	ND	9.90	9.96	16.1	25.5	162	256	10.0-160	45.3	40	E, MH, P9, R1	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	ND	9.90	9.96	9.25	8.46	93.4	85.0	10.0-160	8.86	40		
2,4,5-T	mg/kg	ND	0.0990	0.0996	0.0706	0.0643	71.3	64.6	10.0-157	9.30	20		
2,4,5-TP (Silvex)	mg/kg	ND	0.0990	0.0996	0.0786	0.0689	79.4	69.2	10.0-156	13.1	20		
2,4-DCAA (S)	%						70.7	68.5	22.0-132				

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch: 2266254

Analysis Method: EPA 8151A

QC Batch Method: 8151A

Analysis Description: Chlorinated Herb. (GC) 8151A

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450516001

METHOD BLANK: R4059902-1

Matrix: Solid

Associated Lab Samples: 60450516001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4-D	mg/kg	<0.00702	0.0700	0.00702	04/18/24 18:17	
Dalapon	mg/kg	<0.0113	0.0700	0.0113	04/18/24 18:17	
2,4-DB	mg/kg	<0.0297	0.0700	0.0297	04/18/24 18:17	
Dicamba	mg/kg	<0.0157	0.0700	0.0157	04/18/24 18:17	
Dichlorprop	mg/kg	<0.0245	0.0700	0.0245	04/18/24 18:17	
Dinoseb	mg/kg	<0.00697	0.0700	0.00697	04/18/24 18:17	
MCPA	mg/kg	<0.443	6.50	0.443	04/18/24 18:17	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	<0.367	6.50	0.367	04/18/24 18:17	
2,4,5-T	mg/kg	<0.00852	0.0700	0.00852	04/18/24 18:17	
2,4,5-TP (Silvex)	mg/kg	<0.0107	0.0700	0.0107	04/18/24 18:17	
2,4-DCAA (S)	%	69.5	22.0-132		04/18/24 18:17	

LABORATORY CONTROL SAMPLE: R4059902-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-D	mg/kg	0.0835	0.0711	85.1	40.0-120	
Dalapon	mg/kg	0.0835	0.0282	33.8	15.0-120	
2,4-DB	mg/kg	0.0835	0.0832	99.6	25.0-143	
Dicamba	mg/kg	0.0835	0.0652	78.1	43.0-120	
Dichlorprop	mg/kg	0.0835	0.0648	77.6	32.0-129	
Dinoseb	mg/kg	0.0835	0.0448	53.7	10.0-120	
MCPA	mg/kg	8.35	5.87	70.3	31.0-121	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	8.35	6.65	79.6	28.0-133	
2,4,5-T	mg/kg	0.0835	0.0693	83.0	41.0-120	
2,4,5-TP (Silvex)	mg/kg	0.0835	0.0694	83.1	42.0-120	
2,4-DCAA (S)	%			71.3	22.0-132	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059902-3

R4059902-4

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1725517-09 Result	Spike Conc.	Spike Conc.	Result						
2,4-D	mg/kg	ND	0.0850	0.0850	0.0714	0.0730	84.0	85.8	10.0-160	2.14	24
Dalapon	mg/kg	ND	0.0850	0.0850	0.0494	0.0446	58.1	52.5	10.0-121	10.1	27
2,4-DB	mg/kg	ND	0.0850	0.0850	0.0612	0.0585	72.0	68.8	10.0-160	4.48	22
Dicamba	mg/kg	ND	0.0850	0.0850	0.0652	0.0651	76.7	76.6	10.0-154	0.158	21
Dichlorprop	mg/kg	ND	0.0850	0.0850	0.0629	0.0666	73.9	78.3	10.0-158	5.73	20
Dinoseb	mg/kg	ND	0.0850	0.0850	0.0370	0.0281	43.5	33.1	10.0-120	27.2	40

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Parameter	Units	R4059902-3			R4059902-4			% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		L1725517-09	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
MCPA	mg/kg	ND	8.50	8.50	6.47	6.93	76.1	81.6	10.0-160	6.92	40			
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	ND	8.50	8.50	10.2	10.5	120	124	10.0-160	3.09	40	P9		
2,4,5-T	mg/kg	ND	0.0850	0.0850	0.0641	0.0637	75.4	74.9	10.0-157	0.645	20			
2,4,5-TP (Silvex)	mg/kg	ND	0.0850	0.0850	0.0637	0.0611	74.9	71.9	10.0-156	4.13	20			
2,4-DCAA (S)	%						73.3	72.7	22.0-132					

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch: 2265034 Analysis Method: EPA 6020B  
 QC Batch Method: 3050B Analysis Description: Metals (ICPMS) 6020B  
 Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516007

METHOD BLANK: R4060688-1 Matrix: Solid  
 Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	mg/kg	<6.90	50.0	6.90	04/22/24 17:05	
Antimony	mg/kg	0.429J	3.00	0.166	04/22/24 17:05	J
Arsenic	mg/kg	<0.100	1.00	0.100	04/22/24 17:05	
Barium	mg/kg	<0.152	2.50	0.152	04/22/24 17:05	
Beryllium	mg/kg	<0.138	2.50	0.138	04/22/24 17:05	
Cadmium	mg/kg	<0.0855	1.00	0.0855	04/22/24 17:05	
Calcium	mg/kg	<75.5	500	75.5	04/22/24 17:05	
Chromium	mg/kg	<0.297	5.00	0.297	04/22/24 17:05	
Cobalt	mg/kg	<0.0463	1.00	0.0463	04/22/24 17:05	
Copper	mg/kg	<0.133	5.00	0.133	04/22/24 17:05	
Iron	mg/kg	<8.95	50.0	8.95	04/22/24 17:05	
Lead	mg/kg	<0.0990	2.00	0.0990	04/22/24 17:05	
Magnesium	mg/kg	<45.9	500	45.9	04/22/24 17:05	
Manganese	mg/kg	<0.269	2.50	0.269	04/22/24 17:05	
Molybdenum	mg/kg	<0.101	2.50	0.101	04/22/24 17:05	
Nickel	mg/kg	<0.197	2.50	0.197	04/22/24 17:05	
Potassium	mg/kg	<68.0	500	68.0	04/22/24 17:05	
Selenium	mg/kg	<0.180	2.50	0.180	04/22/24 17:05	
Silver	mg/kg	<0.0865	0.500	0.0865	04/22/24 17:05	
Sodium	mg/kg	<76.5	500	76.5	04/22/24 17:05	
Thallium	mg/kg	<0.0650	2.00	0.0650	04/22/24 17:05	
Vanadium	mg/kg	<0.187	2.50	0.187	04/22/24 17:05	
Zinc	mg/kg	<0.740	25.0	0.740	04/22/24 17:05	

LABORATORY CONTROL SAMPLE: R4060688-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/kg	1000	1030	103	80.0-120	
Antimony	mg/kg	100	98.8	98.8	80.0-120	
Arsenic	mg/kg	100	103	103	80.0-120	
Barium	mg/kg	100	96.4	96.4	80.0-120	
Beryllium	mg/kg	100	102	102	80.0-120	
Cadmium	mg/kg	100	106	106	80.0-120	
Calcium	mg/kg	1000	1090	109	80.0-120	
Chromium	mg/kg	100	103	103	80.0-120	
Cobalt	mg/kg	100	104	104	80.0-120	
Copper	mg/kg	100	100	100	80.0-120	
Iron	mg/kg	1000	1050	105	80.0-120	
Lead	mg/kg	100	110	110	80.0-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

LABORATORY CONTROL SAMPLE: R4060688-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	mg/kg	1000	1090	109	80.0-120	
Manganese	mg/kg	100	101	101	80.0-120	
Molybdenum	mg/kg	100	99.2	99.2	80.0-120	
Nickel	mg/kg	100	106	106	80.0-120	
Potassium	mg/kg	1000	999	99.9	80.0-120	
Selenium	mg/kg	100	101	101	80.0-120	
Silver	mg/kg	20.0	20.3	101	80.0-120	
Sodium	mg/kg	1000	1090	109	80.0-120	
Thallium	mg/kg	100	107	107	80.0-120	
Vanadium	mg/kg	100	103	103	80.0-120	
Zinc	mg/kg	100	100	100	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4060688-5 R4060688-6

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1724657-04 Result	Spike Conc.	Spike Conc.	MS Conc.								
Aluminum	mg/kg	9110	1440	1440	12300	9370	315	25.9	75.0-125	26.7	20	P6,R1	
Antimony	mg/kg	0.396	144	144	64.2	77.1	63.8	76.7	75.0-125	18.3	20	ML	
Arsenic	mg/kg	4.43	144	144	111	114	106	109	75.0-125	2.65	20		
Barium	mg/kg	117	144	144	308	203	190	85.7	75.0-125	41.0	20	MH,R1	
Beryllium	mg/kg	0.544	144	144	96.7	108	96.1	108	75.0-125	11.5	20	E	
Cadmium	mg/kg	0.343	144	144	113	117	113	117	75.0-125	3.54	20		
Calcium	mg/kg	58900	1440	1440	62100	72900	322	1400	75.0-125	16.0	20	P6	
Chromium	mg/kg	16.8	144	144	137	125	120	108	75.0-125	9.14	20		
Cobalt	mg/kg	7.83	144	144	119	119	111	111	75.0-125	0.242	20		
Copper	mg/kg	11.2	144	144	119	117	108	106	75.0-125	1.58	20		
Iron	mg/kg	12300	1440	1440	15800	12800	355	50.5	75.0-125	21.2	20	P6,R1	
Lead	mg/kg	12.1	144	144	127	126	115	113	75.0-125	1.04	20		
Magnesium	mg/kg	4550	1440	1440	6360	5170	180	62.1	75.0-125	20.5	20	P6,R1	
Manganese	mg/kg	772	144	144	1490	1100	722	324	75.0-125	30.8	20	P6,R1	
Molybdenum	mg/kg	1.20	144	144	106	112	105	111	75.0-125	4.91	20		
Nickel	mg/kg	20.4	144	144	143	130	122	109	75.0-125	9.42	20		
Potassium	mg/kg	2100	1440	1440	3660	2990	157	89.8	75.0-125	20.2	20	MH,R1	
Selenium	mg/kg	1.20	144	144	112	115	111	114	75.0-125	2.27	20		
Silver	mg/kg	ND	28.7	28.7	22.2	22.9	111	115	75.0-125	3.32	20		
Sodium	mg/kg	219	1440	1440	1370	1360	115	114	75.0-125	0.465	20		
Thallium	mg/kg	0.223	144	144	106	112	106	112	75.0-125	5.28	20		
Vanadium	mg/kg	20.0	144	144	140	129	120	109	75.0-125	8.50	20		
Zinc	mg/kg	52.1	144	144	160	157	108	105	75.0-125	1.68	20		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	2266071	Analysis Method:	EPA 6020B
QC Batch Method:	3050B	Analysis Description:	Metals (ICPMS) 6020B
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 60450516004, 60450516005, 60450516006, 60450516008, 60450516009, 60450516011, 60450516012, 60450516013

METHOD BLANK:	R4058979-1	Matrix:	Solid
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Associated Lab Samples: 60450516004, 60450516005, 60450516006, 60450516008, 60450516009, 60450516011, 60450516012, 60450516013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	mg/kg	<6.90	50.0	6.90	04/17/24 21:47	
Antimony	mg/kg	0.250J	3.00	0.166	04/17/24 21:47	J
Arsenic	mg/kg	<0.100	1.00	0.100	04/17/24 21:47	
Barium	mg/kg	<0.152	2.50	0.152	04/17/24 21:47	
Beryllium	mg/kg	<0.138	2.50	0.138	04/17/24 21:47	
Cadmium	mg/kg	<0.0855	1.00	0.0855	04/17/24 21:47	
Calcium	mg/kg	<75.5	500	75.5	04/17/24 21:47	
Chromium	mg/kg	<0.297	5.00	0.297	04/17/24 21:47	
Cobalt	mg/kg	<0.0463	1.00	0.0463	04/17/24 21:47	
Copper	mg/kg	<0.133	5.00	0.133	04/17/24 21:47	
Iron	mg/kg	<8.95	50.0	8.95	04/17/24 21:47	
Lead	mg/kg	<0.0990	2.00	0.0990	04/17/24 21:47	
Magnesium	mg/kg	<45.9	500	45.9	04/17/24 21:47	
Manganese	mg/kg	<0.269	2.50	0.269	04/17/24 21:47	
Molybdenum	mg/kg	<0.101	2.50	0.101	04/17/24 21:47	
Nickel	mg/kg	<0.197	2.50	0.197	04/17/24 21:47	
Potassium	mg/kg	<68.0	500	68.0	04/17/24 21:47	
Selenium	mg/kg	<0.180	2.50	0.180	04/17/24 21:47	
Silver	mg/kg	<0.0865	0.500	0.0865	04/17/24 21:47	
Sodium	mg/kg	<76.5	500	76.5	04/17/24 21:47	
Thallium	mg/kg	<0.0650	2.00	0.0650	04/17/24 21:47	
Vanadium	mg/kg	<0.187	2.50	0.187	04/17/24 21:47	
Zinc	mg/kg	<0.740	25.0	0.740	04/17/24 21:47	

LABORATORY CONTROL SAMPLE: R4058979-2						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/kg	1000	1070	107	80.0-120	
Antimony	mg/kg	100	119	119	80.0-120	
Arsenic	mg/kg	100	106	106	80.0-120	
Barium	mg/kg	100	114	114	80.0-120	
Beryllium	mg/kg	100	105	105	80.0-120	
Cadmium	mg/kg	100	103	103	80.0-120	
Calcium	mg/kg	1000	1160	116	80.0-120	
Chromium	mg/kg	100	106	106	80.0-120	
Cobalt	mg/kg	100	107	107	80.0-120	
Copper	mg/kg	100	107	107	80.0-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

LABORATORY CONTROL SAMPLE: R4058979-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	mg/kg	1000	1110	111	80.0-120	
Lead	mg/kg	100	112	112	80.0-120	
Magnesium	mg/kg	1000	1090	109	80.0-120	
Manganese	mg/kg	100	105	105	80.0-120	
Molybdenum	mg/kg	100	109	109	80.0-120	
Nickel	mg/kg	100	108	108	80.0-120	
Potassium	mg/kg	1000	1040	104	80.0-120	
Selenium	mg/kg	100	102	102	80.0-120	
Silver	mg/kg	20.0	21.5	107	80.0-120	
Sodium	mg/kg	1000	1110	111	80.0-120	
Thallium	mg/kg	100	106	106	80.0-120	
Vanadium	mg/kg	100	106	106	80.0-120	
Zinc	mg/kg	100	103	103	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058979-5 R4058979-6

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450516008 Result	Spike Conc.	Spike Conc.	Conc.								
Aluminum	mg/kg	14800	1210	1210	1210	19900	19100	512	435	75.0-125	3.93	20	P6
Antimony	mg/kg	0.541	121	121	121	101	96.2	101	95.7	75.0-125	5.31	20	
Arsenic	mg/kg	5.16	121	121	121	102	99.4	97.0	94.2	75.0-125	2.80	20	
Barium	mg/kg	203	121	121	121	318	334	115	131	75.0-125	4.80	20	MH
Beryllium	mg/kg	0.725	121	121	121	103	99.4	102	98.6	75.0-125	3.56	20	E
Cadmium	mg/kg	0.208	121	121	121	102	97.3	102	97.1	75.0-125	4.39	20	
Calcium	mg/kg	2170	1210	1210	1210	3220	3230	105	106	75.0-125	0.303	20	
Chromium	mg/kg	16.2	121	121	121	115	113	98.8	97.1	75.0-125	1.46	20	
Cobalt	mg/kg	7.48	121	121	121	106	102	98.0	94.2	75.0-125	3.71	20	
Copper	mg/kg	10.2	121	121	121	108	107	97.5	97.1	75.0-125	0.327	20	
Iron	mg/kg	14800	1210	1210	1210	16400	16500	160	175	75.0-125	0.902	20	P6
Lead	mg/kg	11.5	121	121	121	113	111	102	99.0	75.0-125	2.36	20	
Magnesium	mg/kg	2170	1210	1210	1210	3720	3460	155	128	75.0-125	7.32	20	MH
Manganese	mg/kg	750	121	121	121	728	929	0.00	179	75.0-125	24.3	20	P6,R1
Molybdenum	mg/kg	0.741	121	121	121	101	97.7	101	97.0	75.0-125	3.66	20	
Nickel	mg/kg	15.6	121	121	121	115	113	99.3	97.6	75.0-125	1.49	20	
Potassium	mg/kg	2110	1210	1210	1210	3830	3570	172	146	75.0-125	6.97	20	MH
Selenium	mg/kg	0.345	121	121	121	101	94.6	101	94.2	75.0-125	6.54	20	
Silver	mg/kg	ND	24.1	24.1	24.1	20.4	20.0	102	99.8	75.0-125	2.38	20	
Sodium	mg/kg	ND	1210	1210	1210	1090	1030	109	103	75.0-125	5.76	20	
Thallium	mg/kg	0.240	121	121	121	99.1	95.7	98.9	95.5	75.0-125	3.51	20	
Vanadium	mg/kg	32.4	121	121	121	133	129	101	96.8	75.0-125	2.96	20	
Zinc	mg/kg	40.1	121	121	121	135	134	94.6	93.5	75.0-125	0.798	20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	2267954	Analysis Method:	EPA 6020B
QC Batch Method:	3051	Analysis Description:	Metals (ICPMS) 6020B
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 60450516010

METHOD BLANK: R4059987-2 Matrix: Solid

Associated Lab Samples: 60450516010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	mg/kg	17.0J	50.0	6.90	04/19/24 18:05	J
Arsenic	mg/kg	<0.100	1.00	0.100	04/19/24 18:05	
Barium	mg/kg	<0.152	2.50	0.152	04/19/24 18:05	
Beryllium	mg/kg	<0.138	2.50	0.138	04/19/24 18:05	
Cadmium	mg/kg	<0.0855	1.00	0.0855	04/19/24 18:05	
Calcium	mg/kg	<75.5	500	75.5	04/19/24 18:05	
Chromium	mg/kg	<0.297	5.00	0.297	04/19/24 18:05	
Cobalt	mg/kg	<0.0463	1.00	0.0463	04/19/24 18:05	
Copper	mg/kg	0.198J	5.00	0.133	04/19/24 18:05	J
Iron	mg/kg	23.3J	50.0	8.95	04/19/24 18:05	J
Lead	mg/kg	<0.0990	2.00	0.0990	04/19/24 18:05	
Magnesium	mg/kg	<45.9	500	45.9	04/19/24 18:05	
Manganese	mg/kg	<0.269	2.50	0.269	04/19/24 18:05	
Molybdenum	mg/kg	<0.101	2.50	0.101	04/19/24 18:05	
Nickel	mg/kg	<0.197	2.50	0.197	04/19/24 18:05	
Potassium	mg/kg	<68.0	500	68.0	04/19/24 18:05	
Selenium	mg/kg	<0.180	2.50	0.180	04/19/24 18:05	
Silver	mg/kg	<0.0865	0.500	0.0865	04/19/24 18:05	
Sodium	mg/kg	<76.5	500	76.5	04/19/24 18:05	
Thallium	mg/kg	<0.0650	2.00	0.0650	04/19/24 18:05	
Vanadium	mg/kg	0.316J	2.50	0.187	04/19/24 18:05	J
Zinc	mg/kg	<0.740	25.0	0.740	04/19/24 18:05	

METHOD BLANK: R4060105-1 Matrix: Solid

Associated Lab Samples: 60450516010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/kg	0.225J	3.00	0.166	04/20/24 12:22	J

LABORATORY CONTROL SAMPLE: R4059987-3

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/kg	1000	1060	106	80.0-120	
Arsenic	mg/kg	100	104	104	80.0-120	
Barium	mg/kg	100	107	107	80.0-120	
Beryllium	mg/kg	100	103	103	80.0-120	
Cadmium	mg/kg	100	107	107	80.0-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

LABORATORY CONTROL SAMPLE: R4059987-3

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/kg	1000	1040	104	80.0-120	
Chromium	mg/kg	100	103	103	80.0-120	
Cobalt	mg/kg	100	105	105	80.0-120	
Copper	mg/kg	100	107	107	80.0-120	
Iron	mg/kg	1000	1040	104	80.0-120	
Lead	mg/kg	100	108	108	80.0-120	
Magnesium	mg/kg	1000	1080	108	80.0-120	
Manganese	mg/kg	100	103	103	80.0-120	
Molybdenum	mg/kg	100	104	104	80.0-120	
Nickel	mg/kg	100	106	106	80.0-120	
Potassium	mg/kg	1000	1030	103	80.0-120	
Selenium	mg/kg	100	104	104	80.0-120	
Silver	mg/kg	20.0	21.9	110	80.0-120	
Sodium	mg/kg	1000	1110	111	80.0-120	
Thallium	mg/kg	100	105	105	80.0-120	
Vanadium	mg/kg	100	101	101	80.0-120	
Zinc	mg/kg	100	102	102	80.0-120	

LABORATORY CONTROL SAMPLE: R4060105-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	90.1	90.1	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059987-6 R4059987-7

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1725631-16 Result	Spike Conc.	Spike Conc.	MS Result								
Aluminum	mg/kg	4040	1000	1000	8240	8330	420	429	75.0-125	1.12	20	P6	
Arsenic	mg/kg	3.09	100	100	91.2	89.2	88.1	86.2	75.0-125	2.16	20		
Barium	mg/kg	176	100	100	343	325	166	149	75.0-125	5.39	20	MH	
Beryllium	mg/kg	0.439	100	100	90.7	86.3	90.2	85.9	75.0-125	4.91	20		
Cadmium	mg/kg	0.331	100	100	95.5	91.8	95.2	91.4	75.0-125	4.03	20		
Calcium	mg/kg	19400	1000	1000	33400	31400	1400	1190	75.0-125	6.22	20	P6	
Chromium	mg/kg	6.25	100	100	98.6	95.6	92.4	89.4	75.0-125	3.08	20		
Cobalt	mg/kg	3.39	100	100	96.4	92.6	93.0	89.2	75.0-125	4.04	20		
Copper	mg/kg	7.47	100	100	99.2	98.4	91.7	90.9	75.0-125	0.777	20		
Iron	mg/kg	6420	1000	1000	11900	11900	548	545	75.0-125	0.258	20	P6	
Lead	mg/kg	6.10	100	100	101	97.4	94.7	91.3	75.0-125	3.44	20		
Magnesium	mg/kg	4520	1000	1000	8460	8700	394	418	75.0-125	2.82	20	P6	
Manganese	mg/kg	231	100	100	502	437	270	205	75.0-125	13.9	20	MH	
Molybdenum	mg/kg	0.639	100	100	88.3	84.7	87.7	84.1	75.0-125	4.12	20		
Nickel	mg/kg	7.66	100	100	104	102	96.3	94.6	75.0-125	1.61	20		
Potassium	mg/kg	1020	1000	1000	2550	2450	154	144	75.0-125	4.10	20	MH	
Selenium	mg/kg	0.673	100	100	80.5	80.1	79.9	79.4	75.0-125	0.586	20		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059987-6												R4059987-7	
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1725631-16 Result	Spike Conc.	Spike Conc.	Spike Conc.								
Silver	mg/kg	ND	20.0	20.0		19.3	18.9	96.5	94.3	75.0-125	2.34	20	
Sodium	mg/kg	868	1000	1000		2280	3220	141	235	75.0-125	34.2	20	MH,R1
Thallium	mg/kg	0.178	100	100		86.4	84.5	86.2	84.4	75.0-125	2.15	20	
Vanadium	mg/kg	12.9	100	100		107	105	93.8	92.0	75.0-125	1.66	20	
Zinc	mg/kg	25.2	100	100		129	126	104	101	75.0-125	2.39	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4060105-5												R4060105-6	
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1725631-16 Result	Spike Conc.	Spike Conc.	Spike Conc.								
Antimony	mg/kg	0.226	100	100		62.5	57.1	62.3	56.8	75.0-125	9.10	20	ML

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch: 2273362 Analysis Method: EPA 6020B  
 QC Batch Method: 3051 Analysis Description: Metals (ICPMS) 6020B  
 Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450516009, 60450516011, 60450516012, 60450516013

METHOD BLANK: R4062179-1 Matrix: Solid  
 Associated Lab Samples: 60450516009, 60450516011, 60450516012, 60450516013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	mg/kg	0.613J	2.50	0.152	04/25/24 15:09	J

LABORATORY CONTROL SAMPLE: R4062179-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	mg/kg	100	97.6	97.6	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4062179-9 R4062179-10

Parameter	Units	R4062179-9		R4062179-10		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450516009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Barium	mg/kg	169	124	124	247	266	78.0	97.7	75.0-125	7.68	20

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	2265217	Analysis Method:	EPA 7471B
QC Batch Method:	7471A	Analysis Description:	Mercury 7471B
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006

METHOD BLANK: R4056927-1 Matrix: Solid  
 Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	<0.0180	0.0400	0.0180	04/12/24 08:27	

LABORATORY CONTROL SAMPLE: R4056927-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.500	0.469	93.8	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4056927-4 R4056927-5

Parameter	Units	R4056927-4		R4056927-5		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1722904-02 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/kg	ND	0.547	0.547	0.471	0.477	86.1	87.2	75.0-125	1.26	20

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	2265409	Analysis Method:	EPA 7471B
QC Batch Method:	7471A	Analysis Description:	Mercury 7471B
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 60450516007

METHOD BLANK: R4057325-1 Matrix: Solid

Associated Lab Samples: 60450516007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	<0.0180	0.0400	0.0180	04/13/24 10:46	

LABORATORY CONTROL SAMPLE: R4057325-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.500	0.431	86.2	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4057325-4 R4057325-5

Parameter	Units	R4057325-4		R4057325-5		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		L1724647-04 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Mercury	mg/kg	ND	0.635	0.635	0.547	0.544	86.2	85.6	75.0-125	0.635	20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch: 2265617 Analysis Method: EPA 7471B  
 QC Batch Method: 7471A Analysis Description: Mercury 7471B  
 Laboratory: Pace National - Mt. Juliet  
 Associated Lab Samples: 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

METHOD BLANK: R4057311-1 Matrix: Solid  
 Associated Lab Samples: 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	<0.0180	0.0400	0.0180	04/13/24 09:37	

LABORATORY CONTROL SAMPLE: R4057311-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.500	0.449	89.8	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4057311-4 R4057311-5

Parameter	Units	R4057311-4		R4057311-5		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		60450516008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Mercury	mg/kg	ND	0.604	0.604	0.527	0.542	87.3	89.8	75.0-125	2.80	20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch: 890026 Analysis Method: EPA 8260C  
 QC Batch Method: EPA 5035A/5030B Analysis Description: 8260C MSV 5035A Low Level  
 Laboratory: Pace Analytical Services - Kansas City  
 Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

METHOD BLANK: 3522630 Matrix: Solid  
 Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<0.71	5.0	0.71	04/10/24 10:45	
1,1,1-Trichloroethane	ug/kg	<1.0	5.0	1.0	04/10/24 10:45	
1,1,2,2-Tetrachloroethane	ug/kg	<0.70	5.0	0.70	04/10/24 10:45	
1,1,2-Trichloroethane	ug/kg	<0.72	5.0	0.72	04/10/24 10:45	
1,1-Dichloroethane	ug/kg	<1.2	5.0	1.2	04/10/24 10:45	
1,1-Dichloroethene	ug/kg	<2.0	5.0	2.0	04/10/24 10:45	
1,1-Dichloropropene	ug/kg	<1.1	5.0	1.1	04/10/24 10:45	
1,2,3-Trichlorobenzene	ug/kg	<0.58	5.0	0.58	04/10/24 10:45	
1,2,3-Trichloropropane	ug/kg	<1.5	5.0	1.5	04/10/24 10:45	
1,2,4-Trichlorobenzene	ug/kg	<0.49	5.0	0.49	04/10/24 10:45	
1,2,4-Trimethylbenzene	ug/kg	<0.69	5.0	0.69	04/10/24 10:45	
1,2-Dibromo-3-chloropropane	ug/kg	<3.3	13.0	3.3	04/10/24 10:45	
1,2-Dibromoethane (EDB)	ug/kg	<0.53	5.0	0.53	04/10/24 10:45	
1,2-Dichlorobenzene	ug/kg	<0.84	5.0	0.84	04/10/24 10:45	
1,2-Dichloroethane	ug/kg	<0.96	5.0	0.96	04/10/24 10:45	
1,2-Dichloroethene (Total)	ug/kg	<1.9	10.0	1.9	04/10/24 10:45	
1,2-Dichloropropane	ug/kg	<1.0	5.0	1.0	04/10/24 10:45	
1,3,5-Trimethylbenzene	ug/kg	<0.43	5.0	0.43	04/10/24 10:45	
1,3-Dichlorobenzene	ug/kg	<0.63	5.0	0.63	04/10/24 10:45	
1,3-Dichloropropane	ug/kg	<0.19	5.0	0.19	04/10/24 10:45	
1,4-Dichlorobenzene	ug/kg	<0.88	5.0	0.88	04/10/24 10:45	
2,2-Dichloropropane	ug/kg	<1.5	5.0	1.5	04/10/24 10:45	
2-Butanone (MEK)	ug/kg	<31.9	63.0	31.9	04/10/24 10:45	
2-Chlorotoluene	ug/kg	<0.70	5.0	0.70	04/10/24 10:45	
2-Hexanone	ug/kg	<10.4	63.0	10.4	04/10/24 10:45	
4-Chlorotoluene	ug/kg	<0.39	5.0	0.39	04/10/24 10:45	
4-Methyl-2-pentanone (MIBK)	ug/kg	<7.0	63.0	7.0	04/10/24 10:45	
Acetone	ug/kg	<60.1	63.0	60.1	04/10/24 10:45	
Benzene	ug/kg	<0.46	5.0	0.46	04/10/24 10:45	
Bromobenzene	ug/kg	<0.62	5.0	0.62	04/10/24 10:45	
Bromochloromethane	ug/kg	<0.74	5.0	0.74	04/10/24 10:45	
Bromodichloromethane	ug/kg	<0.85	13.0	0.85	04/10/24 10:45	
Bromoform	ug/kg	<0.39	13.0	0.39	04/10/24 10:45	
Bromomethane	ug/kg	<6.2	13.0	6.2	04/10/24 10:45	
Carbon disulfide	ug/kg	<2.3	5.0	2.3	04/10/24 10:45	
Carbon tetrachloride	ug/kg	<1.7	5.0	1.7	04/10/24 10:45	
Chlorobenzene	ug/kg	<0.29	5.0	0.29	04/10/24 10:45	
Chloroethane	ug/kg	<8.3	25.0	8.3	04/10/24 10:45	
Chloroform	ug/kg	<1.8	5.0	1.8	04/10/24 10:45	

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## QUALITY CONTROL DATA

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

METHOD BLANK: 3522630

Matrix: Solid

Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloromethane	ug/kg	<1.2	13.0	1.2	04/10/24 10:45	
cis-1,2-Dichloroethene	ug/kg	<0.93	5.0	0.93	04/10/24 10:45	
cis-1,3-Dichloropropene	ug/kg	<0.75	5.0	0.75	04/10/24 10:45	
Dibromochloromethane	ug/kg	<0.30	5.0	0.30	04/10/24 10:45	
Dibromomethane	ug/kg	<1.5	5.0	1.5	04/10/24 10:45	
Dichlorodifluoromethane	ug/kg	<0.95	13.0	0.95	04/10/24 10:45	
Ethylbenzene	ug/kg	<0.87	5.0	0.87	04/10/24 10:45	
Hexachloro-1,3-butadiene	ug/kg	<0.89	5.0	0.89	04/10/24 10:45	
Isopropylbenzene (Cumene)	ug/kg	<0.32	5.0	0.32	04/10/24 10:45	
Methyl-tert-butyl ether	ug/kg	<0.96	5.0	0.96	04/10/24 10:45	
Methylene Chloride	ug/kg	<19.4	25.0	19.4	04/10/24 10:45	
n-Butylbenzene	ug/kg	<0.48	5.0	0.48	04/10/24 10:45	
n-Propylbenzene	ug/kg	<0.61	5.0	0.61	04/10/24 10:45	
Naphthalene	ug/kg	<0.73	10.0	0.73	04/10/24 10:45	
p-Isopropyltoluene	ug/kg	<0.44	5.0	0.44	04/10/24 10:45	
sec-Butylbenzene	ug/kg	<0.49	5.0	0.49	04/10/24 10:45	
Styrene	ug/kg	<0.40	5.0	0.40	04/10/24 10:45	
tert-Butylbenzene	ug/kg	<0.32	5.0	0.32	04/10/24 10:45	
Tetrachloroethene	ug/kg	<0.53	5.0	0.53	04/10/24 10:45	
Toluene	ug/kg	<4.4	20.0	4.4	04/10/24 10:45	
trans-1,2-Dichloroethene	ug/kg	<1.1	5.0	1.1	04/10/24 10:45	
trans-1,3-Dichloropropene	ug/kg	<0.60	5.0	0.60	04/10/24 10:45	
Trichloroethene	ug/kg	<1.9	5.0	1.9	04/10/24 10:45	
Trichlorofluoromethane	ug/kg	<9.6	13.0	9.6	04/10/24 10:45	
Vinyl chloride	ug/kg	<0.93	13.0	0.93	04/10/24 10:45	
Xylene (Total)	ug/kg	<3.7	15.0	3.7	04/10/24 10:45	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120		04/10/24 10:45	
4-Bromofluorobenzene (S)	%	103	83-119		04/10/24 10:45	
Toluene-d8 (S)	%	110	80-120		04/10/24 10:45	

LABORATORY CONTROL SAMPLE: 3522631

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	1250	1410	113	84-125	
1,1,1-Trichloroethane	ug/kg	1250	1300	104	81-121	
1,1,2,2-Tetrachloroethane	ug/kg	1250	1300	104	76-121	
1,1,2-Trichloroethane	ug/kg	1250	1300	104	83-118	
1,1-Dichloroethane	ug/kg	1250	1260	101	74-120	
1,1-Dichloroethene	ug/kg	1250	1280	102	71-124	
1,1-Dichloropropene	ug/kg	1250	1180	94	73-123	
1,2,3-Trichlorobenzene	ug/kg	1250	1270	102	81-123	
1,2,3-Trichloropropane	ug/kg	1250	1260	101	81-116	
1,2,4-Trichlorobenzene	ug/kg	1250	1270	102	79-126	

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## QUALITY CONTROL DATA

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

LABORATORY CONTROL SAMPLE: 3522631

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1250	1300	104	79-121	
1,2-Dibromo-3-chloropropane	ug/kg	1250	1280	102	74-125	
1,2-Dibromoethane (EDB)	ug/kg	1250	1310	105	64-137	
1,2-Dichlorobenzene	ug/kg	1250	1170	93	83-119	
1,2-Dichloroethane	ug/kg	1250	1290	103	58-128	
1,2-Dichloroethene (Total)	ug/kg	2500	2400	96	82-117	
1,2-Dichloropropane	ug/kg	1250	1320	106	77-122	
1,3,5-Trimethylbenzene	ug/kg	1250	1270	102	81-122	
1,3-Dichlorobenzene	ug/kg	1250	1240	99	83-119	
1,3-Dichloropropane	ug/kg	1250	1270	101	83-118	
1,4-Dichlorobenzene	ug/kg	1250	1140	91	83-116	
2,2-Dichloropropane	ug/kg	1250	1430	114	76-124	
2-Butanone (MEK)	ug/kg	6250	6070	97	63-122	
2-Chlorotoluene	ug/kg	1250	1250	100	79-119	
2-Hexanone	ug/kg	6250	6930	111	68-122	
4-Chlorotoluene	ug/kg	1250	1270	101	84-119	
4-Methyl-2-pentanone (MIBK)	ug/kg	6250	7030	112	63-128	
Acetone	ug/kg	6250	6730	108	55-124	
Benzene	ug/kg	1250	1190	95	67-126	
Bromobenzene	ug/kg	1250	1240	99	85-117	
Bromochloromethane	ug/kg	1250	1310	105	78-122	
Bromodichloromethane	ug/kg	1250	1290	103	82-120	
Bromoform	ug/kg	1250	1500	120	77-133	
Bromomethane	ug/kg	1250	1230	98	20-168	
Carbon disulfide	ug/kg	1250	1320	105	60-133	
Carbon tetrachloride	ug/kg	1250	1310	105	79-128	
Chlorobenzene	ug/kg	1250	1210	97	84-118	
Chloroethane	ug/kg	1250	1190	95	53-139	
Chloroform	ug/kg	1250	1260	101	82-120	
Chloromethane	ug/kg	1250	1130	90	33-143	
cis-1,2-Dichloroethene	ug/kg	1250	1140	91	83-117	
cis-1,3-Dichloropropene	ug/kg	1250	1400	112	80-122	
Dibromochloromethane	ug/kg	1250	1450	116	82-128	
Dibromomethane	ug/kg	1250	1300	104	82-119	
Dichlorodifluoromethane	ug/kg	1250	1270	101	12-159	
Ethylbenzene	ug/kg	1250	1230	98	69-127	
Hexachloro-1,3-butadiene	ug/kg	1250	1280	102	77-133	
Isopropylbenzene (Cumene)	ug/kg	1250	1290	103	83-122	
Methyl-tert-butyl ether	ug/kg	1250	1360	109	58-137	
Methylene Chloride	ug/kg	1250	1180	95	68-125	
n-Butylbenzene	ug/kg	1250	1350	108	73-131	
n-Propylbenzene	ug/kg	1250	1240	99	82-122	
Naphthalene	ug/kg	1250	1330	106	60-136	
p-Isopropyltoluene	ug/kg	1250	1290	103	74-129	
sec-Butylbenzene	ug/kg	1250	1240	99	71-133	
Styrene	ug/kg	1250	1340	107	84-121	
tert-Butylbenzene	ug/kg	1250	1250	100	81-122	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

LABORATORY CONTROL SAMPLE: 3522631

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/kg	1250	1270	102	78-130	
Toluene	ug/kg	1250	1150	92	80-118	
trans-1,2-Dichloroethene	ug/kg	1250	1260	101	78-118	
trans-1,3-Dichloropropene	ug/kg	1250	1420	114	81-123	
Trichloroethene	ug/kg	1250	1290	103	78-127	
Trichlorofluoromethane	ug/kg	1250	1340	107	64-133	
Vinyl chloride	ug/kg	1250	1260	101	45-139	
Xylene (Total)	ug/kg	3750	3740	100	69-130	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			100	83-119	
Toluene-d8 (S)	%			102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3522632 3522633

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450516008 Result	Spike Conc.	Spike Conc.	MS Result						
1,1,1,2-Tetrachloroethane	ug/kg	<0.91	1600	1600	1630	1730	102	108	12-128	6	59
1,1,1-Trichloroethane	ug/kg	<1.3	1600	1600	1550	1650	97	103	15-131	6	75
1,1,2,2-Tetrachloroethane	ug/kg	<0.90	1600	1600	1590	1620	100	101	10-132	1	65
1,1,2-Trichloroethane	ug/kg	<0.91	1600	1600	1530	1600	96	100	14-132	5	54
1,1-Dichloroethane	ug/kg	<1.5	1600	1600	1470	1550	92	97	23-126	5	64
1,1-Dichloroethene	ug/kg	<2.6	1600	1600	1440	1560	90	98	20-129	8	80
1,1-Dichloropropene	ug/kg	<1.4	1600	1600	1360	1430	85	90	15-127	5	78
1,2,3-Trichlorobenzene	ug/kg	<0.74	1600	1600	1540	1610	97	101	10-124	4	67
1,2,3-Trichloropropane	ug/kg	<2.0	1600	1600	1570	1610	98	101	19-125	3	51
1,2,4-Trichlorobenzene	ug/kg	<0.63	1600	1600	1520	1630	95	102	10-129	7	73
1,2,4-Trimethylbenzene	ug/kg	<0.88	1600	1600	1620	1660	102	104	10-124	2	68
1,2-Dibromo-3-chloropropane	ug/kg	<4.3	1600	1600	1550	1610	97	101	10-135	4	56
1,2-Dibromoethane (EDB)	ug/kg	<0.67	1600	1600	1530	1620	96	101	23-123	6	50
1,2-Dichlorobenzene	ug/kg	<1.1	1600	1600	1470	1510	92	94	10-126	3	60
1,2-Dichloroethane	ug/kg	<1.2	1600	1600	1530	1600	96	100	27-116	4	45
1,2-Dichloroethene (Total)	ug/kg	<2.4	3200	3200	2680	2890	84	91	20-127	8	64
1,2-Dichloropropane	ug/kg	<1.3	1600	1600	1540	1620	96	101	21-125	5	57
1,3,5-Trimethylbenzene	ug/kg	<0.55	1600	1600	1580	1640	99	103	10-125	4	65
1,3-Dichlorobenzene	ug/kg	<0.81	1600	1600	1530	1580	96	99	10-126	3	63
1,3-Dichloropropane	ug/kg	<0.25	1600	1600	1490	1580	93	99	24-114	6	51
1,4-Dichlorobenzene	ug/kg	<1.1	1600	1600	1440	1460	90	91	10-126	1	62
2,2-Dichloropropane	ug/kg	<1.9	1600	1600	1470	1500	92	94	17-124	2	70
2-Butanone (MEK)	ug/kg	<40.7	7980	7980	6920	7210	87	90	29-120	4	50
2-Chlorotoluene	ug/kg	<0.89	1600	1600	1520	1570	95	99	10-138	3	70
2-Hexanone	ug/kg	<13.3	7980	7980	8200	8410	103	105	25-121	3	51
4-Chlorotoluene	ug/kg	<0.50	1600	1600	1520	1590	95	100	10-112	4	62
4-Methyl-2-pentanone (MIBK)	ug/kg	<8.9	7980	7980	8420	8460	106	106	23-131	0	50
Acetone	ug/kg	<76.8	7980	7980	7590	8020	95	100	15-129	5	49

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3522632 3522633											
Parameter	Units	60450516008		MS	MSD	3522633		% Rec	% Rec	% Rec	Max
		Result	Conc.	Spike	Spike	Result	Result				
Benzene	ug/kg	<0.58	1600	1600	1370	1440	86	90	17-134	5	53
Bromobenzene	ug/kg	<0.79	1600	1600	1510	1580	95	99	10-129	4	63
Bromochloromethane	ug/kg	<0.95	1600	1600	1500	1640	94	102	28-118	9	53
Bromodichloromethane	ug/kg	<1.1	1600	1600	1580	1680	99	105	21-126	6	59
Bromoform	ug/kg	<0.50	1600	1600	1750	1820	110	114	14-127	4	60
Bromomethane	ug/kg	<7.9	1600	1600	1210	1390	76	87	10-121	14	67
Carbon disulfide	ug/kg	<3.0	1600	1600	1420	1520	89	95	10-122	7	78
Carbon tetrachloride	ug/kg	<2.1	1600	1600	1590	1690	99	106	10-134	7	82
Chlorobenzene	ug/kg	<0.37	1600	1600	1440	1510	90	95	10-126	5	60
Chloroethane	ug/kg	<10.6	1600	1600	1460	1510	91	95	10-133	4	79
Chloroform	ug/kg	<2.4	1600	1600	1470	1580	92	99	24-126	7	60
Chloromethane	ug/kg	<1.6	1600	1600	1100	1140	69	71	10-125	3	78
cis-1,2-Dichloroethene	ug/kg	<1.2	1600	1600	1270	1380	80	87	18-131	9	62
cis-1,3-Dichloropropene	ug/kg	<0.96	1600	1600	1600	1690	100	106	24-117	6	60
Dibromochloromethane	ug/kg	<0.39	1600	1600	1680	1780	105	112	22-117	6	59
Dibromomethane	ug/kg	<1.9	1600	1600	1540	1640	96	103	29-118	6	52
Dichlorodifluoromethane	ug/kg	<1.2	1600	1600	1030	1040	64	65	10-161	2	84
Ethylbenzene	ug/kg	<1.1	1600	1600	1450	1540	91	96	10-137	6	60
Hexachloro-1,3-butadiene	ug/kg	<1.1	1600	1600	1480	1540	93	96	10-124	4	76
Isopropylbenzene (Cumene)	ug/kg	<0.40	1600	1600	1590	1660	100	104	10-123	4	72
Methyl-tert-butyl ether	ug/kg	<1.2	1600	1600	1520	1640	95	103	31-126	8	42
Methylene Chloride	ug/kg	<24.8	1600	1600	1310	1420	81	88	23-117	8	59
n-Butylbenzene	ug/kg	<0.61	1600	1600	1600	1630	100	102	10-130	2	78
n-Propylbenzene	ug/kg	<0.78	1600	1600	1530	1590	96	99	10-121	3	70
Naphthalene	ug/kg	<0.93	1600	1600	1630	1710	102	107	10-131	5	63
p-Isopropyltoluene	ug/kg	1.2J	1600	1600	1610	1660	101	104	10-127	3	76
sec-Butylbenzene	ug/kg	<0.63	1600	1600	1570	1610	98	101	10-137	3	81
Styrene	ug/kg	<0.52	1600	1600	1620	1700	102	107	10-119	5	56
tert-Butylbenzene	ug/kg	<0.41	1600	1600	1540	1620	97	101	10-121	5	80
Tetrachloroethene	ug/kg	<0.68	1600	1600	1500	1570	94	98	10-131	5	78
Toluene	ug/kg	<5.7	1600	1600	1340	1420	84	88	13-131	5	60
trans-1,2-Dichloroethene	ug/kg	<1.4	1600	1600	1410	1510	89	95	22-125	7	70
trans-1,3-Dichloropropene	ug/kg	<0.77	1600	1600	1640	1740	103	109	20-122	6	54
Trichloroethene	ug/kg	<2.4	1600	1600	1480	1580	93	99	14-144	6	69
Trichlorofluoromethane	ug/kg	<12.3	1600	1600	1900	1760	119	110	10-134	7	86
Vinyl chloride	ug/kg	<1.2	1600	1600	1260	1340	79	84	10-141	6	81
Xylene (Total)	ug/kg	<4.7	4790	4790	4480	4740	94	99	10-137	6	58
1,2-Dichlorobenzene-d4 (S)	%						101	100	80-120		
4-Bromofluorobenzene (S)	%						100	100	83-119		
Toluene-d8 (S)	%						102	101	80-120		

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**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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QC Batch:	890105	Analysis Method:	EPA 8260
QC Batch Method:	EPA 5035	Analysis Description:	8260 MSV GRO and Oxygenates
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516005, 60450516006, 60450516007, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

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METHOD BLANK: 3522789 Matrix: Solid

Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516005, 60450516006, 60450516007, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.068	0.50	0.068	04/11/24 09:30	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		04/11/24 09:30	
4-Bromofluorobenzene (S)	%	108	69-133		04/11/24 09:30	
Toluene-d8 (S)	%	102	78-122		04/11/24 09:30	

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LABORATORY CONTROL SAMPLE: 3522790

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	2.8	71	61-140	
1,2-Dichlorobenzene-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			101	69-133	
Toluene-d8 (S)	%			106	78-122	

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### QUALITY CONTROL DATA

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	890601	Analysis Method:	EPA 8260
QC Batch Method:	EPA 5035	Analysis Description:	8260 MSV GRO and Oxygenates
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450516004

METHOD BLANK: 3524917 Matrix: Solid

Associated Lab Samples: 60450516004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.068	0.50	0.068	04/11/24 09:30	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		04/11/24 09:30	
4-Bromofluorobenzene (S)	%	108	69-133		04/11/24 09:30	
Toluene-d8 (S)	%	102	78-122		04/11/24 09:30	

LABORATORY CONTROL SAMPLE: 3524918

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	2.8	71	61-140	
1,2-Dichlorobenzene-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			101	69-133	
Toluene-d8 (S)	%			106	78-122	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	890682	Analysis Method:	EPA 8260
QC Batch Method:	EPA 5035	Analysis Description:	8260 MSV GRO and Oxygenates
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450516008

METHOD BLANK: 3525105 Matrix: Solid

Associated Lab Samples: 60450516008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.068	0.50	0.068	04/16/24 10:49	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		04/16/24 10:01	
4-Bromofluorobenzene (S)	%	99	69-133		04/16/24 10:01	
Toluene-d8 (S)	%	101	78-122		04/16/24 10:01	

LABORATORY CONTROL SAMPLE: 3525106

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	3.8	96	61-140	
1,2-Dichlorobenzene-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			97	69-133	
Toluene-d8 (S)	%			99	78-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525107 3525108

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450516008	Result	Conc.	Conc.						
TPH-GRO	mg/kg	<0.073	4.1	4.6	2.5	4.1	62	89	40-160	47	35 R1
1,2-Dichlorobenzene-d4 (S)	%						101	100	80-120		
4-Bromofluorobenzene (S)	%						102	105	69-133		
Toluene-d8 (S)	%						99	100	78-122		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	890259	Analysis Method:	EPA 8082
QC Batch Method:	EPA 3546	Analysis Description:	8082 GCS PCB
		Laboratory:	Pace Analytical Services - Kansas City
Associated Lab Samples:	60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012		

METHOD BLANK: 3523493 Matrix: Solid  
 Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<8.7	32.1	8.7	04/15/24 09:12	
PCB-1221 (Aroclor 1221)	ug/kg	<10.8	32.1	10.8	04/15/24 09:12	
PCB-1232 (Aroclor 1232)	ug/kg	<10.8	32.1	10.8	04/15/24 09:12	
PCB-1242 (Aroclor 1242)	ug/kg	<10.8	32.1	10.8	04/15/24 09:12	
PCB-1248 (Aroclor 1248)	ug/kg	<10.8	32.1	10.8	04/15/24 09:12	
PCB-1254 (Aroclor 1254)	ug/kg	<10.8	32.1	10.8	04/15/24 09:12	
PCB-1260 (Aroclor 1260)	ug/kg	<10.8	32.1	10.8	04/15/24 09:12	
Decachlorobiphenyl (S)	%	88	20-120		04/15/24 09:12	

LABORATORY CONTROL SAMPLE: 3523494

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	165	155	93	48-120	
PCB-1260 (Aroclor 1260)	ug/kg	165	149	90	55-120	
Decachlorobiphenyl (S)	%			92	20-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3523495 3523496

Parameter	Units	3523495		3523496		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.					
PCB-1016 (Aroclor 1016)	ug/kg	<10.2	192	153	158	80	83	48-120	3	40
PCB-1260 (Aroclor 1260)	ug/kg	<12.7	192	161	165	84	86	55-120	2	40
Decachlorobiphenyl (S)	%					81	84	20-120		40

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch: 890356

Analysis Method: EPA 8082

QC Batch Method: EPA 3546

Analysis Description: 8082 GCS PCB

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450516013

METHOD BLANK: 3523811

Matrix: Solid

Associated Lab Samples: 60450516013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<8.7	32.2	8.7	04/19/24 09:14	
PCB-1221 (Aroclor 1221)	ug/kg	<10.8	32.2	10.8	04/19/24 09:14	
PCB-1232 (Aroclor 1232)	ug/kg	<10.8	32.2	10.8	04/19/24 09:14	
PCB-1242 (Aroclor 1242)	ug/kg	<10.8	32.2	10.8	04/19/24 09:14	
PCB-1248 (Aroclor 1248)	ug/kg	<10.8	32.2	10.8	04/19/24 09:14	
PCB-1254 (Aroclor 1254)	ug/kg	<10.8	32.2	10.8	04/19/24 09:14	
PCB-1260 (Aroclor 1260)	ug/kg	<10.8	32.2	10.8	04/19/24 09:14	
Decachlorobiphenyl (S)	%	60	20-120		04/19/24 09:14	

LABORATORY CONTROL SAMPLE: 3523812

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	166	152	91	48-120	
PCB-1260 (Aroclor 1260)	ug/kg	166	172	104	55-120	
Decachlorobiphenyl (S)	%			110	20-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3523813 3523814

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450736004 Result	Spike Conc.	Spike Conc.	Result						
PCB-1016 (Aroclor 1016)	ug/kg	ND	198	199	163	184	82	92	48-120	12	40
PCB-1260 (Aroclor 1260)	ug/kg	ND	198	199	172	192	87	96	55-120	11	40
Decachlorobiphenyl (S)	%						87	91	20-120		40

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QUALITY CONTROL DATA

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch: 889927 Analysis Method: EPA 8270
QC Batch Method: EPA 3546 Analysis Description: 8270 Solid MSSV Microwave
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

METHOD BLANK: 3522267 Matrix: Solid
Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

Table with 7 columns: Parameter, Units, Blank Result, Reporting Limit, MDL, Analyzed, Qualifiers. Lists various chemical parameters and their corresponding values and analysis dates.

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REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

METHOD BLANK: 3522267

Matrix: Solid

Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Chloroisopropyl) ether	ug/kg	<71.0	327	71.0	04/12/24 11:03	
bis(2-Ethylhexyl)phthalate	ug/kg	<73.5	327	73.5	04/12/24 11:03	
Butylbenzylphthalate	ug/kg	<66.7	327	66.7	04/12/24 11:03	
Carbazole	ug/kg	<67.4	327	67.4	04/12/24 11:03	
Chrysene	ug/kg	<72.9	327	72.9	04/12/24 11:03	
Di-n-butylphthalate	ug/kg	<77.5	327	77.5	04/12/24 11:03	
Di-n-octylphthalate	ug/kg	<79.7	327	79.7	04/12/24 11:03	
Dibenz(a,h)anthracene	ug/kg	<58.8	327	58.8	04/12/24 11:03	
Dibenzofuran	ug/kg	<70.0	327	70.0	04/12/24 11:03	
Diethylphthalate	ug/kg	<74.8	327	74.8	04/12/24 11:03	
Dimethylphthalate	ug/kg	<68.0	327	68.0	04/12/24 11:03	
Fluoranthene	ug/kg	<72.1	327	72.1	04/12/24 11:03	
Fluorene	ug/kg	<69.7	327	69.7	04/12/24 11:03	
Hexachloro-1,3-butadiene	ug/kg	<70.2	327	70.2	04/12/24 11:03	
Hexachlorobenzene	ug/kg	<68.5	327	68.5	04/12/24 11:03	
Hexachlorocyclopentadiene	ug/kg	<201	327	201	04/12/24 11:03	
Hexachloroethane	ug/kg	<60.0	327	60.0	04/12/24 11:03	
Indeno(1,2,3-cd)pyrene	ug/kg	<67.0	327	67.0	04/12/24 11:03	
Isophorone	ug/kg	<63.3	327	63.3	04/12/24 11:03	
N-Nitroso-di-n-propylamine	ug/kg	<62.4	327	62.4	04/12/24 11:03	
N-Nitrosodiphenylamine	ug/kg	<65.1	327	65.1	04/12/24 11:03	
Naphthalene	ug/kg	<70.5	327	70.5	04/12/24 11:03	
Nitrobenzene	ug/kg	<69.4	327	69.4	04/12/24 11:03	
Pentachlorophenol	ug/kg	<108	1660	108	04/12/24 11:03	
Phenanthrene	ug/kg	<70.0	327	70.0	04/12/24 11:03	
Phenol	ug/kg	<61.6	327	61.6	04/12/24 11:03	
Pyrene	ug/kg	<69.9	327	69.9	04/12/24 11:03	
Pyridine	ug/kg	<48.5	327	48.5	04/12/24 11:03	
2,4,6-Tribromophenol (S)	%	77	35-120		04/12/24 11:03	
2-Fluorobiphenyl (S)	%	69	40-120		04/12/24 11:03	
2-Fluorophenol (S)	%	74	40-120		04/12/24 11:03	
Nitrobenzene-d5 (S)	%	75	30-120		04/12/24 11:03	
Phenol-d6 (S)	%	74	40-120		04/12/24 11:03	
Terphenyl-d14 (S)	%	79	45-120		04/12/24 11:03	

LABORATORY CONTROL SAMPLE: 3522268

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1660	1150	70	50-120	
1,2-Dichlorobenzene	ug/kg	1660	1120	68	45-120	
1,3-Dichlorobenzene	ug/kg	1660	1080	65	45-120	
1,4-Dichlorobenzene	ug/kg	1660	1110	67	45-120	
2,4,5-Trichlorophenol	ug/kg	1660	1190	72	50-120	

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## QUALITY CONTROL DATA

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

LABORATORY CONTROL SAMPLE: 3522268

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,6-Trichlorophenol	ug/kg	1660	1220	73	45-120	
2,4-Dichlorophenol	ug/kg	1660	1160	70	50-120	
2,4-Dimethylphenol	ug/kg	1660	1150	70	40-120	
2,4-Dinitrophenol	ug/kg	1660	1090J	66	10-145	
2,4-Dinitrotoluene	ug/kg	1660	1240	75	50-120	
2,6-Dinitrotoluene	ug/kg	1660	1220	74	50-120	
2-Chloronaphthalene	ug/kg	1660	1170	70	45-120	
2-Chlorophenol	ug/kg	1660	1200	72	45-120	
2-Methylnaphthalene	ug/kg	1660	1150	69	50-120	
2-Methylphenol(o-Cresol)	ug/kg	1660	1210	73	45-120	
2-Nitroaniline	ug/kg	1660	1310	79	45-120	
2-Nitrophenol	ug/kg	1660	1180	71	45-120	
3&4-Methylphenol(m&p Cresol)	ug/kg	1660	1210	73	45-120	
3,3'-Dichlorobenzidine	ug/kg	1660	709	43	10-120	
3-Nitroaniline	ug/kg	1660	692	42	15-120	
4,6-Dinitro-2-methylphenol	ug/kg	1660	1170J	71	20-135	
4-Bromophenylphenyl ether	ug/kg	1660	1210	73	50-120	
4-Chloro-3-methylphenol	ug/kg	1660	1240	75	50-120	
4-Chloroaniline	ug/kg	1660	436J	26	10-120	
4-Chlorophenylphenyl ether	ug/kg	1660	1180	71	50-120	
4-Nitroaniline	ug/kg	1660	1090	66	45-120	
4-Nitrophenol	ug/kg	1660	1290J	78	45-125	
Acenaphthene	ug/kg	1660	1160	70	50-120	
Acenaphthylene	ug/kg	1660	1160	70	50-120	
Anthracene	ug/kg	1660	1200	73	50-120	
Benzo(a)anthracene	ug/kg	1660	1240	75	50-120	
Benzo(a)pyrene	ug/kg	1660	1230	74	50-120	
Benzo(b)fluoranthene	ug/kg	1660	1240	75	50-120	
Benzo(g,h,i)perylene	ug/kg	1660	1250	75	45-120	
Benzo(k)fluoranthene	ug/kg	1660	1170	70	50-120	
Benzoic Acid	ug/kg	1660	1080J	65	10-155	
Benzyl alcohol	ug/kg	1660	1200	73	45-120	
bis(2-Chloroethoxy)methane	ug/kg	1660	1190	72	45-120	
bis(2-Chloroethyl) ether	ug/kg	1660	1200	72	45-120	
bis(2-Chloroisopropyl) ether	ug/kg	1660	1230	74	40-120	
bis(2-Ethylhexyl)phthalate	ug/kg	1660	1310	79	50-125	
Butylbenzylphthalate	ug/kg	1660	1340	81	55-120	
Carbazole	ug/kg	1660	1150	70	50-120	
Chrysene	ug/kg	1660	1210	73	50-120	
Di-n-butylphthalate	ug/kg	1660	1280	77	50-120	
Di-n-octylphthalate	ug/kg	1660	1330	81	55-125	
Dibenz(a,h)anthracene	ug/kg	1660	1230	74	45-120	
Dibenzofuran	ug/kg	1660	1160	70	50-120	
Diethylphthalate	ug/kg	1660	1210	73	50-120	
Dimethylphthalate	ug/kg	1660	1160	70	50-120	
Fluoranthene	ug/kg	1660	1220	74	50-120	
Fluorene	ug/kg	1660	1170	71	50-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

LABORATORY CONTROL SAMPLE: 3522268

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	1660	1130	68	50-120	
Hexachlorobenzene	ug/kg	1660	1240	75	50-120	
Hexachlorocyclopentadiene	ug/kg	1660	1060	64	20-120	
Hexachloroethane	ug/kg	1660	1150	69	45-120	
Indeno(1,2,3-cd)pyrene	ug/kg	1660	1250	75	45-120	
Isophorone	ug/kg	1660	1210	73	45-120	
N-Nitroso-di-n-propylamine	ug/kg	1660	1240	75	45-120	
N-Nitrosodiphenylamine	ug/kg	1660	1180	72	50-120	
Naphthalene	ug/kg	1660	1140	69	50-120	
Nitrobenzene	ug/kg	1660	1190	72	45-120	
Pentachlorophenol	ug/kg	1660	1250J	76	25-135	
Phenanthrene	ug/kg	1660	1170	71	50-120	
Phenol	ug/kg	1660	1220	74	45-120	
Pyrene	ug/kg	1660	1210	73	55-120	
Pyridine	ug/kg	1660	858	52	25-120	
2,4,6-Tribromophenol (S)	%			78	35-120	
2-Fluorobiphenyl (S)	%			67	40-120	
2-Fluorophenol (S)	%			72	40-120	
Nitrobenzene-d5 (S)	%			73	30-120	
Phenol-d6 (S)	%			74	40-120	
Terphenyl-d14 (S)	%			72	45-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3522269 3522270

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450516008 Result	Spike Conc.	Spike Conc.	Conc.								
1,2,4-Trichlorobenzene	ug/kg	<81.1	1950	1950	1240	1190	64	61	38-120	4	26		
1,2-Dichlorobenzene	ug/kg	<77.1	1950	1950	1230	1180	63	61	35-120	4	31		
1,3-Dichlorobenzene	ug/kg	<75.7	1950	1950	1210	1140	62	58	35-120	6	31		
1,4-Dichlorobenzene	ug/kg	<74.6	1950	1950	1250	1160	64	59	40-120	8	30		
2,4,5-Trichlorophenol	ug/kg	<79.3	1950	1950	1300	1160	67	59	40-125	11	31		
2,4,6-Trichlorophenol	ug/kg	<71.6	1950	1950	1230	1050	63	53	40-120	16	31		
2,4-Dichlorophenol	ug/kg	<77.5	1950	1950	1230	1050	63	54	35-120	16	29		
2,4-Dimethylphenol	ug/kg	<56.3	1950	1950	665	394	34	20	20-120	51	32	R1	
2,4-Dinitrophenol	ug/kg	<117	1950	1950	1040J	923J	54	47	10-125		35		
2,4-Dinitrotoluene	ug/kg	<87.2	1950	1950	1300	1240	67	63	25-135	5	32		
2,6-Dinitrotoluene	ug/kg	<75.4	1950	1950	1310	1220	67	62	20-140	7	25		
2-Chloronaphthalene	ug/kg	<81.5	1950	1950	1260	1200	65	61	35-120	6	28		
2-Chlorophenol	ug/kg	<79.1	1950	1950	1250	1050	64	54	30-120	18	31		
2-Methylnaphthalene	ug/kg	<78.5	1950	1950	1280	1200	65	61	35-120	6	28		
2-Methylphenol(o-Cresol)	ug/kg	<70.5	1950	1950	993	676	51	35	40-120	38	32	M1,R1	
2-Nitroaniline	ug/kg	<64.2	1950	1950	1460	1350	75	69	30-140	8	28		
2-Nitrophenol	ug/kg	<60.5	1950	1950	1330	1280	68	66	10-165	4	30		
3&4-Methylphenol(m&p Cresol)	ug/kg	<71.9	1950	1950	1070	767	55	39	40-120	33	30	M1,R1	

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3522269 3522270												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		60450516008 Result	Spike Conc.	Spike Conc.	MS Result							
3,3'-Dichlorobenzidine	ug/kg	<38.0	1950	1950	221J	79.5J	11	4	10-120		39	M1
3-Nitroaniline	ug/kg	<60.3	1950	1950	1100	990	56	51	10-130	11	27	
4,6-Dinitro-2-methylphenol	ug/kg	<67.0	1950	1950	1210J	1090J	62	56	10-130		30	
4-Bromophenylphenyl ether	ug/kg	<83.5	1950	1950	1270	1170	65	60	40-120	9	33	
4-Chloro-3-methylphenol	ug/kg	<81.2	1950	1950	1290	1080	66	55	35-125	18	30	
4-Chloroaniline	ug/kg	<60.6	1950	1950	708J	618J	36	32	10-120		33	
4-Chlorophenylphenyl ether	ug/kg	<83.1	1950	1950	1260	1190	64	61	40-120	6	33	
4-Nitroaniline	ug/kg	<66.3	1950	1950	1060	862	54	44	15-125	20	47	
4-Nitrophenol	ug/kg	<57.0	1950	1950	1400J	1300J	72	67	20-140		35	
Acenaphthene	ug/kg	<83.2	1950	1950	1260	1200	65	61	40-120	5	23	
Acenaphthylene	ug/kg	<63.3	1950	1950	1260	1170	65	60	40-120	7	29	
Anthracene	ug/kg	<80.9	1950	1950	1250	1140	64	58	40-120	9	30	
Benzo(a)anthracene	ug/kg	<81.9	1950	1950	1300	1160	67	59	35-130	11	32	
Benzo(a)pyrene	ug/kg	<83.3	1950	1950	1260	1110	65	57	25-135	13	33	
Benzo(b)fluoranthene	ug/kg	<94.4	1950	1950	1310	1180	67	60	15-145	11	37	
Benzo(g,h,i)perylene	ug/kg	<67.2	1950	1950	1300	1110	67	57	25-120	15	41	
Benzo(k)fluoranthene	ug/kg	<83.3	1950	1950	1200	1050	61	54	35-125	13	32	
Benzoic Acid	ug/kg	<211	1950	1950	1080J	970J	55	50	10-160		35	
Benzyl alcohol	ug/kg	<71.1	1950	1950	1350	1270	69	65	40-120	6	31	
bis(2-Chloroethoxy)methane	ug/kg	<77.0	1950	1950	1310	1240	67	63	35-120	5	29	
bis(2-Chloroethyl) ether	ug/kg	<78.1	1950	1950	1330	1270	68	65	35-120	5	32	
bis(2-Chloroisopropyl) ether	ug/kg	<83.9	1950	1950	1380	1310	71	67	30-150	5	29	
bis(2-Ethylhexyl)phthalate	ug/kg	<86.9	1950	1950	1400	1250	72	64	30-150	12	33	
Butylbenzylphthalate	ug/kg	<78.8	1950	1950	1470	1340	75	69	25-155	9	33	
Carbazole	ug/kg	<79.7	1950	1950	1200	1090	62	56	40-120	10	30	
Chrysene	ug/kg	<86.2	1950	1950	1280	1150	66	59	30-125	10	31	
Di-n-butylphthalate	ug/kg	<91.6	1950	1950	1340	1230	69	63	40-125	9	31	
Di-n-octylphthalate	ug/kg	<94.2	1950	1950	1420	1330	73	68	35-155	7	29	
Dibenz(a,h)anthracene	ug/kg	<69.6	1950	1950	1280	1150	65	59	30-125	10	35	
Dibenzofuran	ug/kg	<82.7	1950	1950	1240	1180	63	60	35-125	4	28	
Diethylphthalate	ug/kg	<88.4	1950	1950	1300	1230	67	63	40-120	6	31	
Dimethylphthalate	ug/kg	<80.4	1950	1950	1240	1170	64	60	40-120	6	30	
Fluoranthene	ug/kg	<85.3	1950	1950	1280	1140	66	58	30-130	11	32	
Fluorene	ug/kg	<82.3	1950	1950	1260	1190	65	61	40-120	6	32	
Hexachloro-1,3-butadiene	ug/kg	<82.9	1950	1950	1250	1230	64	63	40-120	2	27	
Hexachlorobenzene	ug/kg	<80.9	1950	1950	1300	1160	66	59	45-120	11	31	
Hexachlorocyclopentadiene	ug/kg	<238	1950	1950	1020	928	53	47	10-125	10	61	
Hexachloroethane	ug/kg	<71.0	1950	1950	1270	1200	65	61	30-120	5	34	
Indeno(1,2,3-cd)pyrene	ug/kg	<79.2	1950	1950	1290	1120	66	57	30-125	14	38	
Isophorone	ug/kg	<74.8	1950	1950	1330	1240	68	64	40-120	7	28	
N-Nitroso-di-n-propylamine	ug/kg	<73.8	1950	1950	1410	1340	72	68	35-120	5	30	
N-Nitrosodiphenylamine	ug/kg	<77.0	1950	1950	1130	870	58	45	35-125	26	36	
Naphthalene	ug/kg	<83.3	1950	1950	1270	1190	65	61	25-125	6	31	
Nitrobenzene	ug/kg	<82.0	1950	1950	1340	1270	69	65	40-120	5	29	
Pentachlorophenol	ug/kg	<128	1950	1950	1280J	1150J	66	59	15-150		35	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3522269 3522270											
Parameter	Units	60450516008		MS		MSD		MS		MSD	
		Result	Conc.	Spike	Conc.	Result	Result	% Rec	% Rec	Limits	RPD
Phenanthrene	ug/kg	<82.7	1950	1950	1230	1130	63	58	35-125	9	29
Phenol	ug/kg	<72.8	1950	1950	1230	1020	63	52	30-120	19	29
Pyrene	ug/kg	<82.6	1950	1950	1270	1150	65	59	35-135	10	38
Pyridine	ug/kg	<57.4	1950	1950	682	602	35	31	10-120	13	35
2,4,6-Tribromophenol (S)	%						52	49	35-120		
2-Fluorobiphenyl (S)	%						58	59	40-120		
2-Fluorophenol (S)	%						52	50	40-120		
Nitrobenzene-d5 (S)	%						65	66	30-120		
Phenol-d6 (S)	%						59	56	40-120		
Terphenyl-d14 (S)	%						62	62	45-120		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	890176	Analysis Method:	EPA 8270
QC Batch Method:	EPA 3546	Analysis Description:	8270 MSSV TPH ORO
		Laboratory:	Pace Analytical Services - Kansas City
Associated Lab Samples:	60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013		

METHOD BLANK:	3523067	Matrix:	Solid
Associated Lab Samples:	60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-DRO	mg/kg	<5.1	14.9	5.1	04/12/24 10:25	
TPH-ORO	mg/kg	<5.1	14.9	5.1	04/12/24 10:25	
2-Fluorobiphenyl (S)	%	104	50-120		04/12/24 10:25	
Nitrobenzene-d5 (S)	%	90	35-120		04/12/24 10:25	
Terphenyl-d14 (S)	%	99	45-120		04/12/24 10:25	

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/kg	333	295	89	40-125	
2-Fluorobiphenyl (S)	%			96	50-120	
Nitrobenzene-d5 (S)	%			92	35-120	
Terphenyl-d14 (S)	%			93	45-120	

Parameter	Units	3523069		3523070		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450516008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
TPH-DRO	mg/kg	<6.0	387	390	355	354	91	90	40-125	0	38
2-Fluorobiphenyl (S)	%						93	97	50-120		
Nitrobenzene-d5 (S)	%						88	92	35-120		
Terphenyl-d14 (S)	%						91	93	45-120		

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QUALITY CONTROL DATA

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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QC Batch: 890018 Analysis Method: ASTM D2974  
 QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture  
 Laboratory: Pace Analytical Services - Kansas City  
 Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

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METHOD BLANK: 3522601 Matrix: Solid  
 Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Percent Moisture	%	<0.50	0.50	0.50	04/10/24 15:42	

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SAMPLE DUPLICATE: 3522602

Parameter	Units	60450516008 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	14.9	14.7	1	20	

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QUALITY CONTROL DATA

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch: 2265535 Analysis Method: SM 2540G
QC Batch Method: SM 2540 G Analysis Description: Total Solids 2540 G-2011
Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005

METHOD BLANK: R4057244-1 Matrix: Solid

Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005

Table with 7 columns: Parameter, Units, Blank Result, Reporting Limit, MDL, Analyzed, Qualifiers. Row: Total Solids, %, ND, 04/12/24 11:20

LABORATORY CONTROL SAMPLE: R4057244-2

Table with 7 columns: Parameter, Units, Spike Conc., LCS Result, LCS % Rec, % Rec Limits, Qualifiers. Row: Total Solids, %, 50.0, 50.0, 100, 90.0-110

SAMPLE DUPLICATE: R4057244-3

Table with 7 columns: Parameter, Units, L1722264-03 Result, Dup Result, RPD, Max RPD, Qualifiers. Row: Total Solids, %, 92.6, 91.3, 1.36, 10

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	2265536	Analysis Method:	SM 2540G
QC Batch Method:	SM 2540 G	Analysis Description:	Total Solids 2540 G-2011
		Laboratory:	Pace National - Mt. Juliet
Associated Lab Samples:	60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013		

METHOD BLANK:	R4057599-1	Matrix:	Solid
Associated Lab Samples:	60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	0.00100			04/12/24 08:57	

LABORATORY CONTROL SAMPLE: R4057599-2						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	90.0-110	

SAMPLE DUPLICATE: R4057599-3						
Parameter	Units	60450516008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	82.8	82.0	1.07	10	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	890503	Analysis Method:	EPA 350.1
QC Batch Method:	EPA 350.1	Analysis Description:	350.1 Ammonia
		Laboratory:	Pace Analytical Services - Kansas City
Associated Lab Samples:	60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010		

METHOD BLANK:	3524507	Matrix:	Solid
Associated Lab Samples:	60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/kg	<0.78	0.99	0.78	04/16/24 14:48	

LABORATORY CONTROL SAMPLE: 3524508						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/kg	48.6	43.5	89	90-110	L2

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3524509												3524511	
Parameter	Units	60450516008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Nitrogen, Ammonia	mg/kg	<0.93	57.8	56.9	35.3	36.5	61	64	80-120	4	20	M0	

SAMPLE DUPLICATE: 3524510						
Parameter	Units	60450516008 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/kg	<0.93	<0.92		20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	890504	Analysis Method:	EPA 350.1
QC Batch Method:	EPA 350.1	Analysis Description:	350.1 Ammonia
		Laboratory:	Pace Analytical Services - Kansas City
Associated Lab Samples:	60450516011, 60450516012, 60450516013		

METHOD BLANK: 3524512 Matrix: Solid

Associated Lab Samples: 60450516011, 60450516012, 60450516013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/kg	<0.76	0.95	0.76	04/16/24 15:33	

LABORATORY CONTROL SAMPLE: 3524513

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/kg	46.1	48.8	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3524514 3524516

Parameter	Units	60450758001		3524516		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Nitrogen, Ammonia	mg/kg	<0.95	67.1	58.4	60.5	51.6	90	88	80-120	16	20

SAMPLE DUPLICATE: 3524515

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/kg	<0.95	2.4		20	

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### QUALITY CONTROL DATA

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	890715	Analysis Method:	SM 4500-CN-E
QC Batch Method:	SM 4500-CN-E	Analysis Description:	4500CNE Cyanide, Total
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

METHOD BLANK: 3525281 Matrix: Solid

Associated Lab Samples: 60450516001, 60450516002, 60450516003, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cyanide	mg/kg	<0.12	0.15	0.12	04/18/24 11:28	

LABORATORY CONTROL SAMPLE: 3525282

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	3	3.0	100	72-115	

MATRIX SPIKE SAMPLE: 3525283

Parameter	Units	60450516008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	<0.14	3.4	2.5	73	10-128	

SAMPLE DUPLICATE: 3525284

Parameter	Units	60450516008 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/kg	<0.14	<0.13		35	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch:	889833	Analysis Method:	EPA 9056
QC Batch Method:	EPA 9056	Analysis Description:	9056 IC Anions
		Laboratory:	Pace Analytical Services - Kansas City
Associated Lab Samples:	60450516001, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013		

METHOD BLANK:	3521996	Matrix:	Solid
Associated Lab Samples:	60450516001, 60450516004, 60450516005, 60450516006, 60450516007, 60450516008, 60450516009, 60450516010, 60450516011, 60450516012, 60450516013		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrate as N	mg/kg	8.2J	10.0	5.6	04/11/24 16:21	
Nitrite as N	mg/kg	7.6J	10.0	5.2	04/11/24 16:21	

LABORATORY CONTROL SAMPLE: 3521997

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/kg	200	188	94	80-120	
Nitrite as N	mg/kg	200	206	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3521998 3521999

Parameter	Units	60450516008		3521998		3521999		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS Result	MSD Result						
Nitrate as N	mg/kg	10.5J	230	239	23.7	25.8	6	6	80-120	8	15	M1	
Nitrite as N	mg/kg	9.3J	230	239	19.3	20.1	4	4	80-120	4	15	M1	

SAMPLE DUPLICATE: 3522000

Parameter	Units	60450516008 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrate as N	mg/kg	10.5J	10.6J		15	
Nitrite as N	mg/kg	9.3J	<6.1		15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

**REPORT OF LABORATORY ANALYSIS**

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QUALITY CONTROL DATA

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch: 893585

Analysis Method: EPA 9056

QC Batch Method: EPA 9056

Analysis Description: 9056 IC Anions

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450516003

METHOD BLANK: 3536318

Matrix: Solid

Associated Lab Samples: 60450516003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrate as N	mg/kg	<5.6	10	5.6	05/09/24 08:44	
Nitrite as N	mg/kg	<5.2	10	5.2	05/09/24 08:44	

LABORATORY CONTROL SAMPLE: 3536319

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/kg	200	181	90	80-120	
Nitrite as N	mg/kg	200	212	106	80-120	

SAMPLE DUPLICATE: 3536320

Parameter	Units	60450516003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrate as N	mg/kg	<6.2	<6.4		15	
Nitrite as N	mg/kg	<5.7	<5.9		15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

QC Batch: 894239

Analysis Method: EPA 9056

QC Batch Method: EPA 9056

Analysis Description: 9056 IC Anions

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450516002

METHOD BLANK: 3538957

Matrix: Solid

Associated Lab Samples: 60450516002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrate as N	mg/kg	<5.6	10.0	5.6	05/13/24 18:34	
Nitrite as N	mg/kg	<5.2	10.0	5.2	05/13/24 18:34	

LABORATORY CONTROL SAMPLE: 3538958

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/kg	200	186	93	80-120	
Nitrite as N	mg/kg	200	199	100	80-120	

SAMPLE DUPLICATE: 3538959

Parameter	Units	60450516002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrate as N	mg/kg	<6.6	<6.6		15	
Nitrite as N	mg/kg	<6.1	<6.1		15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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## QUALIFIERS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

H2 Extraction or preparation conducted outside EPA method holding time.

IO The internal standard response was outside the laboratory acceptance limits confirmed by reanalysis. The results reported are from the most QC compliant analysis.

J Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

P3 Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

P9 RPD between the primary and confirmatory analysis exceeded 40%.

## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

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### ANALYTE QUALIFIERS

- PH The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
- R1 RPD value was outside control limits.
- ST Surrogate recovery was above laboratory control limits. Results may be biased high.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450516001	SS03/SS-1	3546/3665A	2268118	EPA 8081B	2268118
60450516002	SS03/SS-2	3546/3665A	2268118	EPA 8081B	2268118
60450516003	SS02/SS-1	3546/3665A	2268118	EPA 8081B	2268118
60450516004	DUP-01	3546/3665A	2268118	EPA 8081B	2268118
60450516005	SS01/SS-1	3546/3665A	2268118	EPA 8081B	2268118
60450516006	SS05/SS-1	3546/3665A	2268118	EPA 8081B	2268118
60450516007	SS05/SS-2	3546/3665A	2268118	EPA 8081B	2268118
60450516008	SS04/SS-1	3546/3665A	2268118	EPA 8081B	2268118
60450516009	SS04/SS-2	3546/3665A	2268118	EPA 8081B	2268118
60450516010	SS08/SS-1	3546/3665A	2268118	EPA 8081B	2268118
60450516011	SS08/SS-2	3546/3665A	2268142	EPA 8081B	2268142
60450516012	SS07/SS-1	3546/3665A	2268142	EPA 8081B	2268142
60450516013	SS07/SS-2	3546/3665A	2268142	EPA 8081B	2268142
60450516001	SS03/SS-1	8151A	2266254	EPA 8151A	2266254
60450516002	SS03/SS-2	8151A	2265407	EPA 8151A	2265407
60450516003	SS02/SS-1	8151A	2265407	EPA 8151A	2265407
60450516004	DUP-01	8151A	2265407	EPA 8151A	2265407
60450516005	SS01/SS-1	8151A	2265407	EPA 8151A	2265407
60450516006	SS05/SS-1	8151A	2265407	EPA 8151A	2265407
60450516007	SS05/SS-2	8151A	2265407	EPA 8151A	2265407
60450516008	SS04/SS-1	8151A	2265407	EPA 8151A	2265407
60450516009	SS04/SS-2	8151A	2265407	EPA 8151A	2265407
60450516010	SS08/SS-1	8151A	2265407	EPA 8151A	2265407
60450516011	SS08/SS-2	8151A	2265407	EPA 8151A	2265407
60450516012	SS07/SS-1	8151A	2265407	EPA 8151A	2265407
60450516013	SS07/SS-2	8151A	2265407	EPA 8151A	2265407
60450516001	SS03/SS-1	EPA 3546	890259	EPA 8082	890466
60450516002	SS03/SS-2	EPA 3546	890259	EPA 8082	890466
60450516003	SS02/SS-1	EPA 3546	890259	EPA 8082	890466
60450516004	DUP-01	EPA 3546	890259	EPA 8082	890466
60450516005	SS01/SS-1	EPA 3546	890259	EPA 8082	890466
60450516006	SS05/SS-1	EPA 3546	890259	EPA 8082	890466
60450516007	SS05/SS-2	EPA 3546	890259	EPA 8082	890466
60450516008	SS04/SS-1	EPA 3546	890259	EPA 8082	890466
60450516009	SS04/SS-2	EPA 3546	890259	EPA 8082	890466
60450516010	SS08/SS-1	EPA 3546	890259	EPA 8082	890466
60450516011	SS08/SS-2	EPA 3546	890259	EPA 8082	890466
60450516012	SS07/SS-1	EPA 3546	890259	EPA 8082	890466
60450516013	SS07/SS-2	EPA 3546	890356	EPA 8082	890467
60450516001	SS03/SS-1	3050B	2265034	EPA 6020B	2265034
60450516002	SS03/SS-2	3050B	2265034	EPA 6020B	2265034
60450516003	SS02/SS-1	3050B	2265034	EPA 6020B	2265034
60450516004	DUP-01	3050B	2266071	EPA 6020B	2266071
60450516005	SS01/SS-1	3050B	2266071	EPA 6020B	2266071
60450516006	SS05/SS-1	3050B	2266071	EPA 6020B	2266071

**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KC Water Treatment Soils-Revised Report  
Pace Project No.: 60450516

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450516007	SS05/SS-2	3050B	2265034	EPA 6020B	2265034
60450516008	SS04/SS-1	3050B	2266071	EPA 6020B	2266071
60450516009	SS04/SS-2	3050B	2266071	EPA 6020B	2266071
60450516009	SS04/SS-2	3051	2273362	EPA 6020B	2273362
60450516010	SS08/SS-1	3051	2267954	EPA 6020B	2267954
60450516011	SS08/SS-2	3050B	2266071	EPA 6020B	2266071
60450516011	SS08/SS-2	3051	2273362	EPA 6020B	2273362
60450516012	SS07/SS-1	3050B	2266071	EPA 6020B	2266071
60450516012	SS07/SS-1	3051	2273362	EPA 6020B	2273362
60450516013	SS07/SS-2	3050B	2266071	EPA 6020B	2266071
60450516013	SS07/SS-2	3051	2273362	EPA 6020B	2273362
60450516001	SS03/SS-1	7471A	2265217	EPA 7471B	2265217
60450516002	SS03/SS-2	7471A	2265217	EPA 7471B	2265217
60450516003	SS02/SS-1	7471A	2265217	EPA 7471B	2265217
60450516004	DUP-01	7471A	2265217	EPA 7471B	2265217
60450516005	SS01/SS-1	7471A	2265217	EPA 7471B	2265217
60450516006	SS05/SS-1	7471A	2265217	EPA 7471B	2265217
60450516007	SS05/SS-2	7471A	2265409	EPA 7471B	2265409
60450516008	SS04/SS-1	7471A	2265617	EPA 7471B	2265617
60450516009	SS04/SS-2	7471A	2265617	EPA 7471B	2265617
60450516010	SS08/SS-1	7471A	2265617	EPA 7471B	2265617
60450516011	SS08/SS-2	7471A	2265617	EPA 7471B	2265617
60450516012	SS07/SS-1	7471A	2265617	EPA 7471B	2265617
60450516013	SS07/SS-2	7471A	2265617	EPA 7471B	2265617
60450516001	SS03/SS-1	EPA 3546	889927	EPA 8270	890326
60450516002	SS03/SS-2	EPA 3546	889927	EPA 8270	890326
60450516003	SS02/SS-1	EPA 3546	889927	EPA 8270	890326
60450516004	DUP-01	EPA 3546	889927	EPA 8270	890326
60450516005	SS01/SS-1	EPA 3546	889927	EPA 8270	890326
60450516006	SS05/SS-1	EPA 3546	889927	EPA 8270	890326
60450516007	SS05/SS-2	EPA 3546	889927	EPA 8270	890326
60450516008	SS04/SS-1	EPA 3546	889927	EPA 8270	890326
60450516009	SS04/SS-2	EPA 3546	889927	EPA 8270	890326
60450516010	SS08/SS-1	EPA 3546	889927	EPA 8270	890326
60450516011	SS08/SS-2	EPA 3546	889927	EPA 8270	890326
60450516012	SS07/SS-1	EPA 3546	889927	EPA 8270	890326
60450516013	SS07/SS-2	EPA 3546	889927	EPA 8270	890326
60450516001	SS03/SS-1	EPA 3546	890176	EPA 8270	890335
60450516002	SS03/SS-2	EPA 3546	890176	EPA 8270	890335
60450516003	SS02/SS-1	EPA 3546	890176	EPA 8270	890335
60450516004	DUP-01	EPA 3546	890176	EPA 8270	890335
60450516005	SS01/SS-1	EPA 3546	890176	EPA 8270	890335

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450516006	SS05/SS-1	EPA 3546	890176	EPA 8270	890335
60450516007	SS05/SS-2	EPA 3546	890176	EPA 8270	890335
60450516008	SS04/SS-1	EPA 3546	890176	EPA 8270	890335
60450516009	SS04/SS-2	EPA 3546	890176	EPA 8270	890335
60450516010	SS08/SS-1	EPA 3546	890176	EPA 8270	890335
60450516011	SS08/SS-2	EPA 3546	890176	EPA 8270	890335
60450516012	SS07/SS-1	EPA 3546	890176	EPA 8270	890335
60450516013	SS07/SS-2	EPA 3546	890176	EPA 8270	890335
60450516001	SS03/SS-1	EPA 5035A/5030B	890026	EPA 8260C	890038
60450516002	SS03/SS-2	EPA 5035A/5030B	890026	EPA 8260C	890038
60450516003	SS02/SS-1	EPA 5035A/5030B	890026	EPA 8260C	890038
60450516004	DUP-01	EPA 5035A/5030B	890026	EPA 8260C	890038
60450516005	SS01/SS-1	EPA 5035A/5030B	890026	EPA 8260C	890038
60450516006	SS05/SS-1	EPA 5035A/5030B	890026	EPA 8260C	890038
60450516007	SS05/SS-2	EPA 5035A/5030B	890026	EPA 8260C	890038
60450516008	SS04/SS-1	EPA 5035A/5030B	890026	EPA 8260C	890038
60450516009	SS04/SS-2	EPA 5035A/5030B	890026	EPA 8260C	890038
60450516010	SS08/SS-1	EPA 5035A/5030B	890026	EPA 8260C	890038
60450516011	SS08/SS-2	EPA 5035A/5030B	890026	EPA 8260C	890038
60450516012	SS07/SS-1	EPA 5035A/5030B	890026	EPA 8260C	890038
60450516013	SS07/SS-2	EPA 5035A/5030B	890026	EPA 8260C	890038
60450516001	SS03/SS-1	EPA 5035	890105	EPA 8260	890191
60450516002	SS03/SS-2	EPA 5035	890105	EPA 8260	890191
60450516003	SS02/SS-1	EPA 5035	890105	EPA 8260	890191
60450516004	DUP-01	EPA 5035	890601	EPA 8260	890689
60450516005	SS01/SS-1	EPA 5035	890105	EPA 8260	890191
60450516006	SS05/SS-1	EPA 5035	890105	EPA 8260	890191
60450516007	SS05/SS-2	EPA 5035	890105	EPA 8260	890191
60450516008	SS04/SS-1	EPA 5035	890682	EPA 8260	890730
60450516009	SS04/SS-2	EPA 5035	890105	EPA 8260	890191
60450516010	SS08/SS-1	EPA 5035	890105	EPA 8260	890191
60450516011	SS08/SS-2	EPA 5035	890105	EPA 8260	890191
60450516012	SS07/SS-1	EPA 5035	890105	EPA 8260	890191
60450516013	SS07/SS-2	EPA 5035	890105	EPA 8260	890191
60450516001	SS03/SS-1	ASTM D2974	890018		
60450516002	SS03/SS-2	ASTM D2974	890018		
60450516003	SS02/SS-1	ASTM D2974	890018		
60450516004	DUP-01	ASTM D2974	890018		
60450516005	SS01/SS-1	ASTM D2974	890018		
60450516006	SS05/SS-1	ASTM D2974	890018		
60450516007	SS05/SS-2	ASTM D2974	890018		
60450516008	SS04/SS-1	ASTM D2974	890018		
60450516009	SS04/SS-2	ASTM D2974	890018		
60450516010	SS08/SS-1	ASTM D2974	890018		
60450516011	SS08/SS-2	ASTM D2974	890018		

### REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Table with 6 columns: Lab ID, Sample ID, QC Batch Method, QC Batch, Analytical Method, Analytical Batch. It lists various sample IDs and their corresponding QC and analytical data.

REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KC Water Treatment Soils-Revised Report

Pace Project No.: 60450516

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450516004	DUP-01	EPA 9056	889833	EPA 9056	890445
60450516005	SS01/SS-1	EPA 9056	889833	EPA 9056	890445
60450516006	SS05/SS-1	EPA 9056	889833	EPA 9056	890445
60450516007	SS05/SS-2	EPA 9056	889833	EPA 9056	890445
60450516008	SS04/SS-1	EPA 9056	889833	EPA 9056	890445
60450516009	SS04/SS-2	EPA 9056	889833	EPA 9056	890445
60450516010	SS08/SS-1	EPA 9056	889833	EPA 9056	890445
60450516011	SS08/SS-2	EPA 9056	889833	EPA 9056	890445
60450516012	SS07/SS-1	EPA 9056	889833	EPA 9056	890445
60450516013	SS07/SS-2	EPA 9056	889833	EPA 9056	890445

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DC#\_Title: ENV-FRM-LENE-0009\_Samp

WO#: 60450516



Revision: 2

Effective Date: 01/12/2022

Client Name: Burns & McDonnell

Courier: FedEx  UPS  VIA  Clay  PEX  ECI  Pace  Xroads  Client  Other

Tracking #: \_\_\_\_\_ Pace Shipping Label Used? Yes  No

Custody Seal on Cooler/Box Present: Yes  No  Seals intact: Yes  No

Packing Material: Bubble Wrap  Bubble Bags  Foam  None  Other  *TPK*

Thermometer Used: *T298* Type of Ice: *We* Blue  None

Cooler Temperature (°C): As-read *6.5* Corr. Factor *-0.3* Corrected *6.2*

Date and initials of person examining contents: *04.09.2024* *KZ*

Temperature should be above freezing to 6°C *8.7, 9.4* *8.4, 9.1*

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <i>SL</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks:		
Lead acetate strip turns dark? (Record only)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area: State: <i>MO</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

604150516

Scan QR Code for instructions

**CHAIN-OF-CUSTODY Analytical Request Document**

Company Name: BURNS & MCDONNELL  
 Street Address: 9400 Ward Parkway, Kansas City, MO 64114  
 Contact/Report To: Justin Carter  
 Phone #: 816-333-9400  
 E-Mail: jcarter@burnsmcd.com  
 Cc E-Mail:

Project Name: KC Water Treatment Soils  
 Customer Project #: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET  
 Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Site Collection Info/Facility ID (as applicable):  
 Time Zone Collected: [ ] Level III [ ] Level IV  
 Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV  
 [ ] EQUIS  
 [ ] Other

Invoice To: Accounts Payable  
 Invoice E-Mail: accountspayable@burnsmcd.com  
 Purchase Order # (if applicable): TBD  
 Quote #:

County / State origin of sample(s): Missouri

Rush (Pre-approval required):  
 [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other  
 DW PWSID # or WW Permit # as applicable:

Date Results Requested:  
 [ ] Other  
 Analysis:

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Composite Start		Collected or Composite End		# Cont.	Res. Chlorine	
		Date	Time	Date	Time		Results	Units
SS03/SS-1	SS			4/8/24	0940			
SS03/SS-2					0950			
SS02/SS-1					1100			
DUP-01								
SS01/SS-1					1150			
SS05/SS-1					1240			
SS05/SS-2					1250			
SS04/SS-1					1400			
SS04/SS-1MS					1400			
SS04/SS-1MSD					1400			

Additional Instructions from Pace®:  
 6020/7471 Metals: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, V, Ag, Na, Ti, Zn

Collected By: *Eric Brown*  
 (Printed Name)  
 Signature: *[Signature]*

Received by Company: *[Signature]*  
 Date/Time: 4/8/24 1735

Received by Company: *[Signature]*  
 Date/Time: 4/8/24 1734

Received by Company: *[Signature]*  
 Date/Time:

Received by Company: *[Signature]*  
 Date/Time:

Received by Company: *[Signature]*  
 Date/Time:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers: Thermometer ID: 7298 Correction Factor (°C): -0.3 Obs. Temp (°C): 6.5 Corrected Temp (°C): 6.2 On Ice:

Tracking Number: 841911

Delivered by: [ ] In-Person [ ] Courier  
 [ ] FedEx [ ] UPS [ ] Other

Page: 2 of 6

**CHAIN-OF-CUSTODY Analytical Request Document**  
 Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company Name: **BURNS & MCDONNELL**  
 Street Address: **9400 Ward Parkway, Kansas City, MO 64114**

Contact/Report To: **Justin Carter**  
 Phone #: **816-333-9400**  
 E-Mail: **jcarter@burnsmcd.com**  
 Cx. E-Mail:

Customer Project #: **KC Water Treatment Soils**

Invoice To: **Accounts Payable**  
 Invoice E-Mail: **accountspayable@burnsmcd.com**  
 Purchase Order # (if applicable): **TBD**  
 Quote #:

County / State origin of sample(s): **Missouri**

**Rush (Pre-approval required):**  
 [ ] Same Day [ ] 2 Day [ ] 3 Day [ ] Other  
 DW PWSID # or WW Permit # as applicable:  
 Analysis:  
 Date Results Requested:

**Matrix \*** Matrix / Grab Date Time Composite Start Date Time # Cont. Results Units Res. Chlorine

Customer Sample ID	Matrix *	Comp / Grab	Date	Time	Collected or Composite End	Date	Time	# Cont.	Results	Units	Res. Chlorine
SS04/SS-2	SS					4/8/24	1430				
SS08/SS-1							1500				
SS08/SS-2							1510				
SS07/SS-1							1530				
SS07/SS-2							1540				

Additional Instructions from Pace\*:  
 6020/7471 Metals: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Hg, Ni, K, Se, Ag, Na, Ti, V, Zn

Collected By: **Eric Brown**  
 Signature: *[Signature]*

Relinquished by Company: Signature  
 Date/Time: **4/8/24 1735**

Relinquished by Company: Signature  
 Date/Time: **4/8/24 1735**

Relinquished by Company: Signature  
 Date/Time: **4/8/24 1735**

Relinquished by Company: Signature  
 Date/Time: **4/8/24 1735**

Relinquished by Company: Signature  
 Date/Time: **4/8/24 1735**

Relinquished by Company: Signature  
 Date/Time: **4/8/24 1735**

Relinquished by Company: Signature  
 Date/Time: **4/8/24 1735**


Relinquished by Company: Signature  
 Date/Time: **4/8/24 1735**

Relinquished by Company: Signature  
 Date/Time: **4/8/24 1735**

Relinquished by Company: Signature  
 Date/Time: **4/8/24 1735**

Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C):	Corrected Temp. (°C):	On Ice:
			<b>6.2</b>	
Tracking Number:	<b>6.4 9.1</b>			
Delivered by:	[ ] In-Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other			
Page:	<b>1</b>	of	<b>6</b>	

LAB USE ONLY - Affix Workorder/Login Label Here



60450516

Scan QR Code for instructions

Specify Container Size \*\*

Identify Container Preservative Type\*\*\*

Analysis Requested

Proj. Mgr: **Alice Spiller**  
 AcctNum / Client ID:  
 Table #:  
 Profile / Template: **10409**  
 Prelog / Bottle Ord. ID: **EZ 3093806**

Preservation non-conformance identified for sample:

Lab Use Only	Sample Comment
8270 MSSV Semivolatiles	
8270 MSSV DRO/ORO	
8260C MSV 5035A VOCs	
8260C MSV 5035A Low Level	
8260 MSV GRO and Oxygenates	
8082 GCS PCB SW	
8081 Pesticides	
6020/7471 Metals **see list	
4500CNE Cyanide, Total	
350.1 Ammonia; NO2/NO3; Percent Moisture	



# Internal Transfer Chain of Custody



Rush Multiplier \_\_\_\_\_ X  
 Samples Pre-Logged into eCOC

State Of Origin: MO  
 Cert. Needed:  Yes  No

Workorder: 60450516    Workorder Name: KC Water Treatment Soils    Owner Received Date: 4/8/2024    Results Requested By: 4/23/2024

Report To		Subcontract To					Requested Analysis													
Alice Spiller Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665		Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858					<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">6020/7471 TAL Metals + Mo *see list</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">8081 Pesticides</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">8321 or 8151 Herbicides</div> </div>													
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers														LAB USE ONLY
						Unpreserved														

L1724588

01  
02  
03  
04  
05  
06  
07  
08  
09  
10  
11  
12  
13

Sample Receipt Checklist

COC Seal Present/Intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	If Applicable	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
COC Signed/Accurate:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	VOL Zero Headspace:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Pres. Correct/Check	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
Sufficient volume sent	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
PA screen <0.5 mR/hr:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N		

4.2 + 0.1 = 4.3



					Comments
Transfers	Released By	Date/Time	Received By	Date/Time	KS sample location: 6091-18-S1A  L1724588
1				04/10/24 9:00	
2					
3					
<b>Cooler Temperature on Receipt</b>		°C	<b>Custody Seal Y or N</b>	<b>Received on Ice Y or N</b>	<b>Samples Intact Y or N</b>

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

L17244588



Ship To:  
Pace National  
12065 Lebanon Rd  
Mt. Juliet, TN 37122  
Phone (615) 758-5858

INTER LABORATORY WORK ORDER # 60450516

(To be completed by sending lab)

Sending Project No	60450516
Receiving Project No	
Check Box for Consolidated Invoice	<input type="checkbox"/>
Date Prepared	04/09/24
REQUESTED COMPLETION DATE	4/23/2024

Sending Region	IR60-Kansas	Sending Project Mgr.	Alice Spiller
Receiving Region	IR850-Pace National	External Client	BURNS & MCDONNELL
State of Sample Origin	MO	QC Deliverable	STD REPORT

All questions should be addressed to sending project manager.

Requested Reportable Units \_\_\_\_\_ Report Wet or Dry Weight?  Dry Weight  IRWO Lab Need to run? \_\_\_\_\_ Cert. Needed \_\_\_\_\_ NO

WORK REQUESTED						
Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples	Acode	Acode Desc
6020/7471 TAL Metals + Mo *see list	JGFLU		Unpreserved	13	SI-20MET	SUB PASI MET
8081 Pesticides	JGFLU	45	Unpreserved	13	SI-31GCSV	SUB PASI GCS
8321 or 8151 Herbicides	JGFLU		Unpreserved	13	SI-31GCSV	SUB PASI GCS

Special Requirements: Report D, QC Limits, MDLs (D), Burns & McDonnell Equis (456)

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region:  Yes  No

DISPOSITION of FORM

Original sent to the receiving lab - Copy kept at the sending lab.  
When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to incorporate as needed.

L1724588

**Table 2**  
**Reporting Limits**

Soil	EPA 6020B	ALUMINUM	7429-90-5	10	1.38	mg/kg	MTJL
Soil	EPA 6020B	ANTIMONY	7440-36-0	0.60	0.0332	mg/kg	MTJL
Soil	EPA 6020B	ARSENIC	7440-38-2	0.20	0.0200	mg/kg	MTJL
Soil	EPA 6020B	BARIIUM	7440-39-3	0.50	0.0304	mg/kg	MTJL
Soil	EPA 6020B	BERYLLIUM	7440-41-7	0.50	0.0276	mg/kg	MTJL
Soil	EPA 6020B	BORON	7440-42-8	10	1.38	mg/kg	MTJL
Soil	EPA 6020B	CADMIUM	7440-43-9	0.20	0.0171	mg/kg	MTJL
Soil	EPA 6020B	CALCIUM	7440-70-2	100	15.1	mg/kg	MTJL
Soil	EPA 6020B	CHROMIUM	7440-47-3	1.0	0.0593	mg/kg	MTJL
Soil	EPA 6020B	COBALT	7440-48-4	0.20	0.009250	mg/kg	MTJL
Soil	EPA 6020B	COPPER	7440-50-8	1.0	0.0265	mg/kg	MTJL
Soil	EPA 6020B	IRON	7439-89-6	10	1.79	mg/kg	MTJL
Soil	EPA 6020B	LEAD	7439-92-1	0.40	0.0198	mg/kg	MTJL
Soil	EPA 6020B	LITHIUM	7439-93-2	0.30	0.0409	mg/kg	MTJL
Soil	EPA 6020B	MAGNESIUM	7439-95-4	100	9.18	mg/kg	MTJL
Soil	EPA 6020B	MANGANESE	7439-96-5	0.50	0.0537	mg/kg	MTJL
Soil	EPA 6020B	MOLYBDENUM	7439-98-7	0.50	0.0202	mg/kg	MTJL
Soil	EPA 6020B	NICKEL	7440-02-0	0.50	0.0394	mg/kg	MTJL
Soil	EPA 6020B	POTASSIUM	7440-09-7	100	13.6	mg/kg	MTJL
Soil	EPA 6020B	SELENIUM	7782-49-2	0.50	0.0359	mg/kg	MTJL
Soil	EPA 6020B	SILVER	7440-22-4	0.10	0.0173	mg/kg	MTJL
Soil	EPA 6020B	SODIUM	7440-23-5	100	15.3	mg/kg	MTJL
Soil	EPA 6020B	STRONTIUM	7440-24-6	1.0	0.114	mg/kg	MTJL
Soil	EPA 6020B	THALLIUM	7440-28-0	0.40	0.0130	mg/kg	MTJL
Soil	EPA 6020B	THORIUM	7440-29-1	5.0	0.103	mg/kg	MTJL
Soil	EPA 6020B	TIN	7440-31-5	2.0	0.323	mg/kg	MTJL
Soil	EPA 6020B	TITANIUM	7440-32-6	1.0	0.147	mg/kg	MTJL
Soil	EPA 6020B	URANIUM	7440-61-1	3.0	0.0096	mg/kg	MTJL
Soil	EPA 6020B	VANADIUM	7440-62-2	0.50	0.0374	mg/kg	MTJL
Soil	EPA 6020B	ZINC	7440-66-6	5.0	0.148	mg/kg	MTJL

11424588

Table 2  
Reporting Limits

Soil	EPA 8081B	4,4-DDD	72-54-8	0.020	0.003697	mg/kg	MTL
Soil	EPA 8081B	4,4-DDE	72-55-9	0.020	0.003662	mg/kg	MTL
Soil	EPA 8081B	4,4-DDT	50-29-3	0.020	0.006267	mg/kg	MTL
Soil	EPA 8081B	ALDRIN	309-00-2	0.020	0.003760	mg/kg	MTL
Soil	EPA 8081B	ALPHA BHC	319-84-6	0.020	0.003684	mg/kg	MTL
Soil	EPA 8081B	BETA BHC	319-85-7	0.020	0.003788	mg/kg	MTL
Soil	EPA 8081B	CHLORDANE	12789-03-6	0.30	0.103	mg/kg	MTL
Soil	EPA 8081B	DELTA BHC	319-86-8	0.020	0.003458	mg/kg	MTL
Soil	EPA 8081B	DIELDRIN	60-57-1	0.020	0.003441	mg/kg	MTL
Soil	EPA 8081B	ENDOSULFAN I	959-98-8	0.020	0.003633	mg/kg	MTL
Soil	EPA 8081B	ENDOSULFAN II	33213-65-9	0.020	0.003347	mg/kg	MTL
Soil	EPA 8081B	ENDOSULFAN SULFATE	1031-07-8	0.020	0.003637	mg/kg	MTL
Soil	EPA 8081B	ENDRIN	72-20-8	0.020	0.003501	mg/kg	MTL
Soil	EPA 8081B	ENDRIN ALDEHYDE	7421-93-4	0.020	0.003392	mg/kg	MTL
Soil	EPA 8081B	ENDRIN KETONE	53494-70-5	0.020	0.007113	mg/kg	MTL
Soil	EPA 8081B	GAMMA BHC	58-89-9	0.020	0.003439	mg/kg	MTL
Soil	EPA 8081B	HEPTACHLOR	76-44-8	0.020	0.004278	mg/kg	MTL
Soil	EPA 8081B	HEPTACHLOR EPOXIDE	1024-57-3	0.020	0.003387	mg/kg	MTL
Soil	EPA 8081B	HEXACHLORO BENZENE	118-74-1	0.020	0.003464	mg/kg	MTL
Soil	EPA 8081B	METHOXYCHLOR	72-43-5	0.020	0.004838	mg/kg	MTL
Soil	EPA 8081B	TOXAPHENE	8001-35-2	0.40	0.124	mg/kg	MTL
Soil	EPA 8082A	PCB-1016	12674-11-2	0.034	0.0118	mg/kg	MTL
Soil	EPA 8082A	PCB-1221	11104-28-2	0.034	0.0118	mg/kg	MTL
Soil	EPA 8082A	PCB-1232	11141-16-5	0.034	0.0118	mg/kg	MTL
Soil	EPA 8082A	PCB-1242	53469-21-9	0.034	0.0118	mg/kg	MTL
Soil	EPA 8082A	PCB-1248	12672-29-6	0.017	0.007379	mg/kg	MTL
Soil	EPA 8082A	PCB-1254	11097-69-1	0.017	0.007379	mg/kg	MTL
Soil	EPA 8082A	PCB-1260	11096-82-5	0.017	0.007379	mg/kg	MTL
Soil	EPA 8151A	2,4,5-T	93-76-5	0.07	0.008520	mg/kg	MTL
Soil	EPA 8151A	2,4,5-TP (SILVEX)	93-72-1	0.07	0.0107	mg/kg	MTL
Soil	EPA 8151A	2,4-D	94-75-7	0.07	0.007020	mg/kg	MTL
Soil	EPA 8151A	2,4-DB	94-82-6	0.07	0.0297	mg/kg	MTL
Soil	EPA 8151A	DALAPON	75-99-0	0.07	0.0113	mg/kg	MTL
Soil	EPA 8151A	DICAMBA	1918-00-9	0.07	0.0157	mg/kg	MTL
Soil	EPA 8151A	DICHLOROPROP	120-36-5	0.07	0.0245	mg/kg	MTL
Soil	EPA 8151A	DINOSERB	88-85-7	0.07	0.006970	mg/kg	MTL
Soil	EPA 8151A	MCPA	94-74-6	6.5	0.443	mg/kg	MTL
Soil	EPA 8151A	MCPP	93-65-2	6.5	0.367	mg/kg	MTL



April 23, 2024

Justin Carter  
Burns & McDonnell  
9400 Ward Parkway  
Kansas City, MO 64114

RE: Project: KC Water Treatment Sediment  
Pace Project No.: 60450582

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on April 09, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller  
alice.spiller@pacelabs.com  
(913)599-5665  
PM Lab Management

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL  
Jacquelin Lee, Burns & McDonnell



## REPORT OF LABORATORY ANALYSIS

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### CERTIFICATIONS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

#### Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219  
 Arkansas Inorganic Drinking Water Certification  
 Arkansas Certification #: 88-00679  
 Colorado Division of Oil and Public Safety  
 Illinois Certification #: 2000302023-6  
 Iowa Certification #: 118  
 Kansas Field Laboratory Certification #: E-92587

Kansas/NELAP Certification #: E-10116  
 Louisiana Certification #: 03055  
 Missouri Inorganic Drinking Water Certification  
 Nevada Certification #: KS000212024-1  
 Oklahoma Certification #: 2023-073  
 Texas Certification #: T104704407-23-17  
 Utah Certification #: KS000212022-13

#### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122  
 Alabama Certification #: 40660  
 Alaska Certification 17-026  
 Arizona Certification #: AZ0612  
 Arkansas Certification #: 88-0469  
 California Certification #: 2932  
 Canada Certification #: 1461.01  
 Colorado Certification #: TN00003  
 Connecticut Certification #: PH-0197  
 DOD Certification: #1461.01  
 EPA# TN00003  
 Florida Certification #: E87487  
 Georgia DW Certification #: 923  
 Georgia Certification: NELAP  
 Idaho Certification #: TN00003  
 Illinois Certification #: 200008  
 Indiana Certification #: C-TN-01  
 Iowa Certification #: 364  
 Kansas Certification #: E-10277  
 Kentucky UST Certification #: 16  
 Kentucky Certification #: 90010  
 Louisiana Certification #: AI30792  
 Louisiana DW Certification #: LA180010  
 Maine Certification #: TN0002  
 Maryland Certification #: 324  
 Massachusetts Certification #: M-TN003  
 Michigan Certification #: 9958  
 Minnesota Certification #: 047-999-395  
 Mississippi Certification #: TN00003  
 Missouri Certification #: 340  
 Montana Certification #: CERT0086  
 Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34  
 New Hampshire Certification #: 2975  
 New Jersey Certification #: TN002  
 New Mexico DW Certification  
 New York Certification #: 11742  
 North Carolina Aquatic Toxicity Certification #: 41  
 North Carolina Drinking Water Certification #: 21704  
 North Carolina Environmental Certificate #: 375  
 North Dakota Certification #: R-140  
 Ohio VAP Certification #: CL0069  
 Oklahoma Certification #: 9915  
 Oregon Certification #: TN200002  
 Pennsylvania Certification #: 68-02979  
 Rhode Island Certification #: LAO00356  
 South Carolina Certification #: 84004  
 South Dakota Certification  
 Tennessee DW/Chem/Micro Certification #: 2006  
 Texas Mold Certification #: LAB0152  
 Texas Certification #: T 104704245-17-14  
 USDA Soil Permit #: P330-15-00234  
 Utah Certification #: TN00003  
 Virginia Certification #: VT2006  
 Vermont Dept. of Health: ID# VT-2006  
 Virginia Certification #: 460132  
 Washington Certification #: C847  
 West Virginia Certification #: 233  
 Wisconsin Certification #: 998093910  
 Wyoming UST Certification #: via A2LA 2926.01  
 A2LA-ISO 17025 Certification #: 1461.01  
 A2LA-ISO 17025 Certification #: 1461.02  
 AIHA-LAP/LLC EMLAP Certification #:100789

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: KC Water Treatment Sediment  
Pace Project No.: 60450582

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60450582001	SS06/SS-1	Solid	04/09/24 09:40	04/09/24 16:35
60450582002	SS06/SS-2	Solid	04/09/24 09:50	04/09/24 16:35
60450582003	SD10/SD-1	Solid	04/09/24 11:50	04/09/24 16:35
60450582004	SD09/SD-1	Solid	04/09/24 13:30	04/09/24 16:35
60450582005	SD08/SD-1	Solid	04/09/24 14:10	04/09/24 16:35

### REPORT OF LABORATORY ANALYSIS

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**SAMPLE ANALYTE COUNT**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60450582001	SS06/SS-1	EPA 8081B	MFM	23	PAN
		EPA 8151A	JMB	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	LD	23	PAN
		EPA 7471B	LAS	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K
		60450582002	SS06/SS-2	EPA 8081B	MFM
EPA 8151A	JMB			11	PAN
EPA 8082	JDS			8	PASI-K
EPA 6020B	LD			23	PAN
EPA 7471B	LAS			1	PAN
EPA 8270	WFG			73	PASI-K
EPA 8270	WDC			5	PASI-K
EPA 8260C	RAD			68	PASI-K
EPA 8260	RAD			4	PASI-K
ASTM D2974	DWC			1	PASI-K
SM 2540G	CMB			1	PAN
EPA 350.1	RKA			1	PASI-K
SM 4500-CN-E	ECF			1	PASI-K
EPA 9056	PL			2	PASI-K
60450582003	SD10/SD-1			EPA 8081B	HCS
		EPA 8151A	JMB	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	LD	23	PAN
		EPA 7471B	LAS	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K

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### SAMPLE ANALYTE COUNT

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60450582004	SD09/SD-1	ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K
		EPA 8081B	HCS	23	PAN
		EPA 8151A	JMB	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	LD	23	PAN
		EPA 7471B	LAS	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
		60450582005	SD08/SD-1	ASTM D2974	DWC
SM 2540G	CMB			1	PAN
EPA 350.1	RKA			1	PASI-K
SM 4500-CN-E	ECF			1	PASI-K
EPA 9056	PL			2	PASI-K
EPA 8081B	MFM			23	PAN
EPA 8151A	NWH			11	PAN
EPA 8082	JDS			8	PASI-K
EPA 6020B	LD			23	PAN
EPA 7471B	LAS			1	PAN
EPA 8270	WFG			73	PASI-K
EPA 8270	WDC			5	PASI-K
EPA 8260C	RAD			68	PASI-K
EPA 8260	RAD			4	PASI-K
				ASTM D2974	DWC
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K

PAN = Pace National - Mt. Juliet

PASI-K = Pace Analytical Services - Kansas City

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

---

**Method:** EPA 8081B

**Description:** Pesticides (GC) 8081B

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

**General Information:**

5 samples were analyzed for EPA 8081B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 2268525

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: R4059451-2)
- Endrin

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 2268525

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450582002

R1: RPD value was outside control limits.

- MSD (Lab ID: R4059451-4)
- Endrin

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

---

**Method:** EPA 8151A

**Description:** Chlorinated Herb. (GC) 8151A

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

**General Information:**

5 samples were analyzed for EPA 8151A by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 2265407

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): L1724588-08

R1: RPD value was outside control limits.

- MSD (Lab ID: R4058398-4)
- MCPA

**Additional Comments:**

Analyte Comments:

QC Batch: 2265407

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MSD (Lab ID: R4058398-4)
- MCPA

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

---

**Method:** EPA 8082

**Description:** 8082 GCS PCB SW

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

**General Information:**

5 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

QC Batch: 890356

S3: Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.

- SS06/SS-2 (Lab ID: 60450582002)
- Decachlorobiphenyl (S)

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

---

**Method:** EPA 6020B

**Description:** Metals (ICPMS) 6020B

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

### General Information:

5 samples were analyzed for EPA 6020B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 2265034

B: Analyte was detected in the associated method blank.

- R4060688-1 (Lab ID: R4060688-1)
- Antimony

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 2265034

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450582004

R1: RPD value was outside control limits.

- MSD (Lab ID: R4060688-6)
  - Aluminum
  - Barium
  - Iron
  - Magnesium
  - Manganese
  - Potassium

### Additional Comments:

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

---

**Method:** EPA 6020B

**Description:** Metals (ICPMS) 6020B

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

Analyte Comments:

QC Batch: 2265034

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: R4060688-5)
  - Beryllium
- MSD (Lab ID: R4060688-6)
  - Beryllium

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

---

**Method:** EPA 7471B

**Description:** Mercury 7471B

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

**General Information:**

5 samples were analyzed for EPA 7471B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

---

**Method:** EPA 8270

**Description:** 8270 MSSV Semivolatiles

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

### General Information:

5 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

QC Batch: 889927

P3: Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.

- SD10/SD-1 (Lab ID: 60450582003)

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 889927

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450516008

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 3522270)
  - 2-Methylphenol(o-Cresol)
  - 3&4-Methylphenol(m&p Cresol)
  - 3,3'-Dichlorobenzidine

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

---

**Method:** EPA 8270

**Description:** 8270 MSSV Semivolatiles

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

QC Batch: 889927

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450516008

R1: RPD value was outside control limits.

- MSD (Lab ID: 3522270)
  - 2,4-Dimethylphenol
  - 2-Methylphenol(o-Cresol)
  - 3&4-Methylphenol(m&p Cresol)

### Additional Comments:

Analyte Comments:

QC Batch: 889927

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- SD08/SD-1 (Lab ID: 60450582005)
  - Nitrobenzene-d5 (S)
- SD09/SD-1 (Lab ID: 60450582004)
  - Nitrobenzene-d5 (S)
- SD10/SD-1 (Lab ID: 60450582003)
  - Nitrobenzene-d5 (S)
- SS06/SS-1 (Lab ID: 60450582001)
  - Nitrobenzene-d5 (S)

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

---

**Method:** EPA 8270

**Description:** 8270 MSSV DRO/ORO

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

**General Information:**

5 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

Analyte Comments:

QC Batch: 890176

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- SD10/SD-1 (Lab ID: 60450582003)
  - TPH-ORO
- SS06/SS-1 (Lab ID: 60450582001)
  - TPH-ORO

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

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**Method:** EPA 8260C

**Description:** 8260C MSV 5035A Low Level

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

**General Information:**

5 samples were analyzed for EPA 8260C by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 5035A/5030B with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

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**Method:** EPA 8260

**Description:** 8260 MSV GRO and Oxygenates

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

**General Information:**

5 samples were analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 5035 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

QC Batch: 890387

IO: The internal standard response was outside the laboratory acceptance limits confirmed by reanalysis. The results reported are from the most QC compliant analysis.

- SD10/SD-1 (Lab ID: 60450582003)
- Toluene-d8 (S)

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

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**Method:** SM 2540G

**Description:** Total Solids 2540 G-2011

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

**General Information:**

5 samples were analyzed for SM 2540G by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

---

**Method:** EPA 350.1

**Description:** 350.1 Ammonia

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

**General Information:**

5 samples were analyzed for EPA 350.1 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

---

**Method:** SM 4500-CN-E

**Description:** 4500CNE Cyanide, Total

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

**General Information:**

5 samples were analyzed for SM 4500-CN-E by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with SM 4500-CN-E with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

---

**Method:** EPA 9056

**Description:** 9056 IC Anions

**Client:** BURNS & MCDONNELL

**Date:** April 23, 2024

### General Information:

5 samples were analyzed for EPA 9056 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 9056 with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890095

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450582001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3522764)
  - Nitrate as N
  - Nitrite as N
- MSD (Lab ID: 3522765)
  - Nitrate as N

R1: RPD value was outside control limits.

- MSD (Lab ID: 3522765)
  - Nitrate as N
  - Nitrite as N

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SS06/SS-1 Lab ID: 60450582001 Collected: 04/09/24 09:40 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00448	mg/kg	0.0238	0.00448	1	04/16/24 21:20	04/17/24 05:29	309-00-2	
alpha-BHC	<0.00438	mg/kg	0.0238	0.00438	1	04/16/24 21:20	04/17/24 05:29	319-84-6	
beta-BHC	<0.00451	mg/kg	0.0238	0.00451	1	04/16/24 21:20	04/17/24 05:29	319-85-7	
delta-BHC	<0.00412	mg/kg	0.0238	0.00412	1	04/16/24 21:20	04/17/24 05:29	319-86-8	
gamma-BHC (Lindane)	<0.00410	mg/kg	0.0238	0.00410	1	04/16/24 21:20	04/17/24 05:29	58-89-9	
Chlordane (Technical)	<0.123	mg/kg	0.357	0.123	1	04/16/24 21:20	04/17/24 05:29	57-74-9	
4,4'-DDD	<0.00441	mg/kg	0.0238	0.00441	1	04/16/24 21:20	04/17/24 05:29	72-54-8	
4,4'-DDE	<0.00436	mg/kg	0.0238	0.00436	1	04/16/24 21:20	04/17/24 05:29	72-55-9	
4,4'-DDT	<0.00747	mg/kg	0.0238	0.00747	1	04/16/24 21:20	04/17/24 05:29	50-29-3	
Dieldrin	<0.00410	mg/kg	0.0238	0.00410	1	04/16/24 21:20	04/17/24 05:29	60-57-1	
Endosulfan I	<0.00432	mg/kg	0.0238	0.00432	1	04/16/24 21:20	04/17/24 05:29	959-98-8	
Endosulfan II	<0.00399	mg/kg	0.0238	0.00399	1	04/16/24 21:20	04/17/24 05:29	33213-65-9	
Endosulfan sulfate	<0.00433	mg/kg	0.0238	0.00433	1	04/16/24 21:20	04/17/24 05:29	1031-07-8	
Endrin	<0.00417	mg/kg	0.0238	0.00417	1	04/16/24 21:20	04/17/24 05:29	72-20-8	
Endrin aldehyde	<0.00404	mg/kg	0.0238	0.00404	1	04/16/24 21:20	04/17/24 05:29	7421-93-4	
Endrin ketone	<0.00847	mg/kg	0.0238	0.00847	1	04/16/24 21:20	04/17/24 05:29	53494-70-5	
Hexachlorobenzene	<0.00412	mg/kg	0.0238	0.00412	1	04/16/24 21:20	04/17/24 05:29	118-74-1	
Heptachlor	<0.00510	mg/kg	0.0238	0.00510	1	04/16/24 21:20	04/17/24 05:29	76-44-8	
Heptachlor epoxide	<0.00404	mg/kg	0.0238	0.00404	1	04/16/24 21:20	04/17/24 05:29	1024-57-3	
Methoxychlor	<0.00576	mg/kg	0.0238	0.00576	1	04/16/24 21:20	04/17/24 05:29	72-43-5	
Toxaphene	<0.148	mg/kg	0.476	0.148	1	04/16/24 21:20	04/17/24 05:29	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	33.6	%	10.0-135		1	04/16/24 21:20	04/17/24 05:29	2051-24-3	
Tetrachloro-m-xylene (S)	47.0	%	10.0-139		1	04/16/24 21:20	04/17/24 05:29	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00836	mg/kg	0.0833	0.00836	1	04/15/24 13:10	04/16/24 20:26	94-75-7	
Dalapon	<0.0135	mg/kg	0.0833	0.0135	1	04/15/24 13:10	04/16/24 20:26	127-20-8	
2,4-DB	<0.0354	mg/kg	0.0833	0.0354	1	04/15/24 13:10	04/16/24 20:26	94-82-6	
Dicamba	<0.0187	mg/kg	0.0833	0.0187	1	04/15/24 13:10	04/16/24 20:26	1918-00-9	
Dichlorprop	<0.0292	mg/kg	0.0833	0.0292	1	04/15/24 13:10	04/16/24 20:26	120-36-5	
Dinoseb	<0.00830	mg/kg	0.0833	0.00830	1	04/15/24 13:10	04/16/24 20:26	88-85-7	
MCPA	<0.527	mg/kg	7.74	0.527	1	04/15/24 13:10	04/16/24 20:26	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.437	mg/kg	7.74	0.437	1	04/15/24 13:10	04/16/24 20:26	93-65-2	
2,4,5-T	<0.0101	mg/kg	0.0833	0.0101	1	04/15/24 13:10	04/16/24 20:26	93-76-5	
2,4,5-TP (Silvex)	<0.0127	mg/kg	0.0833	0.0127	1	04/15/24 13:10	04/16/24 20:26	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	60.0	%	22.0-132		1	04/15/24 13:10	04/16/24 20:26	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<11.2	ug/kg	41.6	11.2	1	04/12/24 10:44	04/19/24 04:39	12674-11-2	
PCB-1221 (Aroclor 1221)	<14.0	ug/kg	41.6	14.0	1	04/12/24 10:44	04/19/24 04:39	11104-28-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SS06/SS-1 Lab ID: 60450582001 Collected: 04/09/24 09:40 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<14.0	ug/kg	41.6	14.0	1	04/12/24 10:44	04/19/24 04:39	11141-16-5	
PCB-1242 (Aroclor 1242)	<14.0	ug/kg	41.6	14.0	1	04/12/24 10:44	04/19/24 04:39	53469-21-9	
PCB-1248 (Aroclor 1248)	<14.0	ug/kg	41.6	14.0	1	04/12/24 10:44	04/19/24 04:39	12672-29-6	
PCB-1254 (Aroclor 1254)	<14.0	ug/kg	41.6	14.0	1	04/12/24 10:44	04/19/24 04:39	11097-69-1	
PCB-1260 (Aroclor 1260)	<14.0	ug/kg	41.6	14.0	1	04/12/24 10:44	04/19/24 04:39	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	90	%	20-120		1	04/12/24 10:44	04/19/24 04:39	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	20600	mg/kg	59.5	8.22	5	04/14/24 22:12	04/22/24 17:55	7429-90-5	
Antimony	0.293J	mg/kg	3.57	0.198	5	04/14/24 22:12	04/22/24 17:55	7440-36-0	B,J
Arsenic	7.98	mg/kg	1.19	0.119	5	04/14/24 22:12	04/22/24 17:55	7440-38-2	
Barium	218	mg/kg	2.98	0.181	5	04/14/24 22:12	04/22/24 17:55	7440-39-3	
Beryllium	0.881J	mg/kg	2.98	0.164	5	04/14/24 22:12	04/22/24 17:55	7440-41-7	J
Cadmium	0.237J	mg/kg	1.19	0.102	5	04/14/24 22:12	04/22/24 17:55	7440-43-9	J
Calcium	5280	mg/kg	595	89.9	5	04/14/24 22:12	04/22/24 17:55	7440-70-2	
Chromium	20.5	mg/kg	5.95	0.352	5	04/14/24 22:12	04/22/24 17:55	7440-47-3	
Cobalt	9.56	mg/kg	1.19	0.0550	5	04/14/24 22:12	04/22/24 17:55	7440-48-4	
Copper	16.5	mg/kg	5.95	0.157	5	04/14/24 22:12	04/22/24 17:55	7440-50-8	
Iron	22100	mg/kg	59.5	10.7	5	04/14/24 22:12	04/22/24 17:55	7439-89-6	
Lead	14.5	mg/kg	2.38	0.118	5	04/14/24 22:12	04/22/24 17:55	7439-92-1	
Magnesium	3920	mg/kg	595	54.7	5	04/14/24 22:12	04/22/24 17:55	7439-95-4	
Manganese	929	mg/kg	2.98	0.319	5	04/14/24 22:12	04/22/24 17:55	7439-96-5	
Molybdenum	0.983J	mg/kg	2.98	0.120	5	04/14/24 22:12	04/22/24 17:55	7439-98-7	J
Nickel	24.0	mg/kg	2.98	0.235	5	04/14/24 22:12	04/22/24 17:55	7440-02-0	
Potassium	1700	mg/kg	595	81.0	5	04/14/24 22:12	04/22/24 17:55	7440-09-7	
Selenium	0.318J	mg/kg	2.98	0.214	5	04/14/24 22:12	04/22/24 17:55	7782-49-2	J
Silver	<0.103	mg/kg	0.595	0.103	5	04/14/24 22:12	04/22/24 17:55	7440-22-4	
Sodium	186J	mg/kg	595	91.1	5	04/14/24 22:12	04/22/24 17:55	7440-23-5	J
Thallium	0.241J	mg/kg	2.38	0.0774	5	04/14/24 22:12	04/22/24 17:55	7440-28-0	J
Vanadium	42.0	mg/kg	2.98	0.223	5	04/14/24 22:12	04/22/24 17:55	7440-62-2	
Zinc	55.0	mg/kg	29.8	0.881	5	04/14/24 22:12	04/22/24 17:55	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	0.0218J	mg/kg	0.0476	0.0214	1	04/12/24 15:37	04/13/24 10:20	7439-97-6	J
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<176	ug/kg	819	176	2	04/10/24 14:25	04/12/24 17:12	83-32-9	
Acenaphthylene	<134	ug/kg	819	134	2	04/10/24 14:25	04/12/24 17:12	208-96-8	
Anthracene	<171	ug/kg	819	171	2	04/10/24 14:25	04/12/24 17:12	120-12-7	
Benzo(a)anthracene	<173	ug/kg	819	173	2	04/10/24 14:25	04/12/24 17:12	56-55-3	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SS06/SS-1 Lab ID: 60450582001 Collected: 04/09/24 09:40 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<176	ug/kg	819	176	2	04/10/24 14:25	04/12/24 17:12	50-32-8	
Benzo(b)fluoranthene	<200	ug/kg	819	200	2	04/10/24 14:25	04/12/24 17:12	205-99-2	
Benzo(g,h,i)perylene	<142	ug/kg	819	142	2	04/10/24 14:25	04/12/24 17:12	191-24-2	
Benzo(k)fluoranthene	<176	ug/kg	819	176	2	04/10/24 14:25	04/12/24 17:12	207-08-9	
Benzoic Acid	<447	ug/kg	4140	447	2	04/10/24 14:25	04/12/24 17:12	65-85-0	
Benzyl alcohol	<150	ug/kg	1640	150	2	04/10/24 14:25	04/12/24 17:12	100-51-6	
4-Bromophenylphenyl ether	<177	ug/kg	819	177	2	04/10/24 14:25	04/12/24 17:12	101-55-3	
Butylbenzylphthalate	<167	ug/kg	819	167	2	04/10/24 14:25	04/12/24 17:12	85-68-7	
Carbazole	<169	ug/kg	819	169	2	04/10/24 14:25	04/12/24 17:12	86-74-8	
4-Chloro-3-methylphenol	<172	ug/kg	1640	172	2	04/10/24 14:25	04/12/24 17:12	59-50-7	
4-Chloroaniline	<128	ug/kg	1640	128	2	04/10/24 14:25	04/12/24 17:12	106-47-8	
bis(2-Chloroethoxy)methane	<163	ug/kg	819	163	2	04/10/24 14:25	04/12/24 17:12	111-91-1	
bis(2-Chloroethyl) ether	<165	ug/kg	819	165	2	04/10/24 14:25	04/12/24 17:12	111-44-4	
bis(2-Chloroisopropyl) ether	<177	ug/kg	819	177	2	04/10/24 14:25	04/12/24 17:12	108-60-1	
2-Chloronaphthalene	<172	ug/kg	819	172	2	04/10/24 14:25	04/12/24 17:12	91-58-7	
2-Chlorophenol	<167	ug/kg	819	167	2	04/10/24 14:25	04/12/24 17:12	95-57-8	
4-Chlorophenylphenyl ether	<176	ug/kg	819	176	2	04/10/24 14:25	04/12/24 17:12	7005-72-3	
Chrysene	<182	ug/kg	819	182	2	04/10/24 14:25	04/12/24 17:12	218-01-9	
Dibenz(a,h)anthracene	<147	ug/kg	819	147	2	04/10/24 14:25	04/12/24 17:12	53-70-3	
Dibenzofuran	<175	ug/kg	819	175	2	04/10/24 14:25	04/12/24 17:12	132-64-9	
1,2-Dichlorobenzene	<163	ug/kg	819	163	2	04/10/24 14:25	04/12/24 17:12	95-50-1	
1,3-Dichlorobenzene	<160	ug/kg	819	160	2	04/10/24 14:25	04/12/24 17:12	541-73-1	
1,4-Dichlorobenzene	<158	ug/kg	819	158	2	04/10/24 14:25	04/12/24 17:12	106-46-7	
3,3'-Dichlorobenzidine	<80.4	ug/kg	1640	80.4	2	04/10/24 14:25	04/12/24 17:12	91-94-1	
2,4-Dichlorophenol	<164	ug/kg	819	164	2	04/10/24 14:25	04/12/24 17:12	120-83-2	
Diethylphthalate	<187	ug/kg	819	187	2	04/10/24 14:25	04/12/24 17:12	84-66-2	
2,4-Dimethylphenol	<119	ug/kg	819	119	2	04/10/24 14:25	04/12/24 17:12	105-67-9	
Dimethylphthalate	<170	ug/kg	819	170	2	04/10/24 14:25	04/12/24 17:12	131-11-3	
Di-n-butylphthalate	<194	ug/kg	819	194	2	04/10/24 14:25	04/12/24 17:12	84-74-2	
4,6-Dinitro-2-methylphenol	<142	ug/kg	4140	142	2	04/10/24 14:25	04/12/24 17:12	534-52-1	
2,4-Dinitrophenol	<247	ug/kg	4140	247	2	04/10/24 14:25	04/12/24 17:12	51-28-5	
2,4-Dinitrotoluene	<184	ug/kg	819	184	2	04/10/24 14:25	04/12/24 17:12	121-14-2	
2,6-Dinitrotoluene	<160	ug/kg	819	160	2	04/10/24 14:25	04/12/24 17:12	606-20-2	
Di-n-octylphthalate	<199	ug/kg	819	199	2	04/10/24 14:25	04/12/24 17:12	117-84-0	
bis(2-Ethylhexyl)phthalate	<184	ug/kg	819	184	2	04/10/24 14:25	04/12/24 17:12	117-81-7	
Fluoranthene	<180	ug/kg	819	180	2	04/10/24 14:25	04/12/24 17:12	206-44-0	
Fluorene	<174	ug/kg	819	174	2	04/10/24 14:25	04/12/24 17:12	86-73-7	
Hexachloro-1,3-butadiene	<175	ug/kg	819	175	2	04/10/24 14:25	04/12/24 17:12	87-68-3	
Hexachlorobenzene	<171	ug/kg	819	171	2	04/10/24 14:25	04/12/24 17:12	118-74-1	
Hexachlorocyclopentadiene	<504	ug/kg	819	504	2	04/10/24 14:25	04/12/24 17:12	77-47-4	
Hexachloroethane	<150	ug/kg	819	150	2	04/10/24 14:25	04/12/24 17:12	67-72-1	
Indeno(1,2,3-cd)pyrene	<168	ug/kg	819	168	2	04/10/24 14:25	04/12/24 17:12	193-39-5	
Isophorone	<158	ug/kg	819	158	2	04/10/24 14:25	04/12/24 17:12	78-59-1	
2-Methylnaphthalene	<166	ug/kg	819	166	2	04/10/24 14:25	04/12/24 17:12	91-57-6	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SS06/SS-1 Lab ID: 60450582001 Collected: 04/09/24 09:40 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<149	ug/kg	819	149	2	04/10/24 14:25	04/12/24 17:12	95-48-7	
3&4-Methylphenol(m&p Cresol)	<152	ug/kg	819	152	2	04/10/24 14:25	04/12/24 17:12	15831-10-4	
Naphthalene	<176	ug/kg	819	176	2	04/10/24 14:25	04/12/24 17:12	91-20-3	
2-Nitroaniline	<136	ug/kg	1640	136	2	04/10/24 14:25	04/12/24 17:12	88-74-4	
3-Nitroaniline	<128	ug/kg	1640	128	2	04/10/24 14:25	04/12/24 17:12	99-09-2	
4-Nitroaniline	<140	ug/kg	1640	140	2	04/10/24 14:25	04/12/24 17:12	100-01-6	
Nitrobenzene	<173	ug/kg	819	173	2	04/10/24 14:25	04/12/24 17:12	98-95-3	
2-Nitrophenol	<128	ug/kg	819	128	2	04/10/24 14:25	04/12/24 17:12	88-75-5	
4-Nitrophenol	<121	ug/kg	4140	121	2	04/10/24 14:25	04/12/24 17:12	100-02-7	
N-Nitroso-di-n-propylamine	<156	ug/kg	819	156	2	04/10/24 14:25	04/12/24 17:12	621-64-7	
N-Nitrosodiphenylamine	<163	ug/kg	819	163	2	04/10/24 14:25	04/12/24 17:12	86-30-6	
Pentachlorophenol	<270	ug/kg	4140	270	2	04/10/24 14:25	04/12/24 17:12	87-86-5	
Phenanthrene	<175	ug/kg	819	175	2	04/10/24 14:25	04/12/24 17:12	85-01-8	
Phenol	<154	ug/kg	819	154	2	04/10/24 14:25	04/12/24 17:12	108-95-2	
Pyrene	<175	ug/kg	819	175	2	04/10/24 14:25	04/12/24 17:12	129-00-0	
Pyridine	<121	ug/kg	819	121	2	04/10/24 14:25	04/12/24 17:12	110-86-1	
1,2,4-Trichlorobenzene	<171	ug/kg	819	171	2	04/10/24 14:25	04/12/24 17:12	120-82-1	
2,4,5-Trichlorophenol	<168	ug/kg	819	168	2	04/10/24 14:25	04/12/24 17:12	95-95-4	
2,4,6-Trichlorophenol	<151	ug/kg	819	151	2	04/10/24 14:25	04/12/24 17:12	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	74	%	30-120		2	04/10/24 14:25	04/12/24 17:12	4165-60-0	D3
2-Fluorobiphenyl (S)	66	%	40-120		2	04/10/24 14:25	04/12/24 17:12	321-60-8	
Terphenyl-d14 (S)	74	%	45-120		2	04/10/24 14:25	04/12/24 17:12	1718-51-0	
Phenol-d6 (S)	77	%	40-120		2	04/10/24 14:25	04/12/24 17:12	13127-88-3	
2-Fluorophenol (S)	74	%	40-120		2	04/10/24 14:25	04/12/24 17:12	367-12-4	
2,4,6-Tribromophenol (S)	80	%	35-120		2	04/10/24 14:25	04/12/24 17:12	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	397	mg/kg	94.0	32.0	5	04/11/24 13:51	04/12/24 15:56		D3
TPH-DRO	49.1J	mg/kg	94.0	32.0	5	04/11/24 13:51	04/12/24 15:56		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	88	%	35-120		5	04/11/24 13:51	04/12/24 15:56	4165-60-0	
2-Fluorobiphenyl (S)	97	%	50-120		5	04/11/24 13:51	04/12/24 15:56	321-60-8	
Terphenyl-d14 (S)	94	%	45-120		5	04/11/24 13:51	04/12/24 15:56	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<89.1	ug/kg	93.4	89.1	1	04/10/24 09:05	04/10/24 16:43	67-64-1	
Benzene	<0.68	ug/kg	7.4	0.68	1	04/10/24 09:05	04/10/24 16:43	71-43-2	
Bromobenzene	<0.92	ug/kg	7.4	0.92	1	04/10/24 09:05	04/10/24 16:43	108-86-1	
Bromochloromethane	<1.1	ug/kg	7.4	1.1	1	04/10/24 09:05	04/10/24 16:43	74-97-5	
Bromodichloromethane	<1.3	ug/kg	19.3	1.3	1	04/10/24 09:05	04/10/24 16:43	75-27-4	
Bromoform	<0.58	ug/kg	19.3	0.58	1	04/10/24 09:05	04/10/24 16:43	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SS06/SS-1 Lab ID: 60450582001 Collected: 04/09/24 09:40 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<9.1	ug/kg	19.3	9.1	1	04/10/24 09:05	04/10/24 16:43	74-83-9	
2-Butanone (MEK)	<47.3	ug/kg	93.4	47.3	1	04/10/24 09:05	04/10/24 16:43	78-93-3	
n-Butylbenzene	<0.71	ug/kg	7.4	0.71	1	04/10/24 09:05	04/10/24 16:43	104-51-8	
sec-Butylbenzene	<0.73	ug/kg	7.4	0.73	1	04/10/24 09:05	04/10/24 16:43	135-98-8	
tert-Butylbenzene	<0.48	ug/kg	7.4	0.48	1	04/10/24 09:05	04/10/24 16:43	98-06-6	
Carbon disulfide	<3.4	ug/kg	7.4	3.4	1	04/10/24 09:05	04/10/24 16:43	75-15-0	
Carbon tetrachloride	<2.5	ug/kg	7.4	2.5	1	04/10/24 09:05	04/10/24 16:43	56-23-5	
Chlorobenzene	<0.43	ug/kg	7.4	0.43	1	04/10/24 09:05	04/10/24 16:43	108-90-7	
Chloroethane	<12.3	ug/kg	37.1	12.3	1	04/10/24 09:05	04/10/24 16:43	75-00-3	
Chloroform	<2.7	ug/kg	7.4	2.7	1	04/10/24 09:05	04/10/24 16:43	67-66-3	
Chloromethane	<1.8	ug/kg	19.3	1.8	1	04/10/24 09:05	04/10/24 16:43	74-87-3	
2-Chlorotoluene	<1.0	ug/kg	7.4	1.0	1	04/10/24 09:05	04/10/24 16:43	95-49-8	
4-Chlorotoluene	<0.58	ug/kg	7.4	0.58	1	04/10/24 09:05	04/10/24 16:43	106-43-4	
1,2-Dibromo-3-chloropropane	<4.9	ug/kg	19.3	4.9	1	04/10/24 09:05	04/10/24 16:43	96-12-8	
Dibromochloromethane	<0.45	ug/kg	7.4	0.45	1	04/10/24 09:05	04/10/24 16:43	124-48-1	
1,2-Dibromoethane (EDB)	<0.78	ug/kg	7.4	0.78	1	04/10/24 09:05	04/10/24 16:43	106-93-4	
Dibromomethane	<2.2	ug/kg	7.4	2.2	1	04/10/24 09:05	04/10/24 16:43	74-95-3	
1,2-Dichlorobenzene	<1.2	ug/kg	7.4	1.2	1	04/10/24 09:05	04/10/24 16:43	95-50-1	
1,3-Dichlorobenzene	<0.94	ug/kg	7.4	0.94	1	04/10/24 09:05	04/10/24 16:43	541-73-1	
1,4-Dichlorobenzene	<1.3	ug/kg	7.4	1.3	1	04/10/24 09:05	04/10/24 16:43	106-46-7	
Dichlorodifluoromethane	<1.4	ug/kg	19.3	1.4	1	04/10/24 09:05	04/10/24 16:43	75-71-8	
1,1-Dichloroethane	<1.7	ug/kg	7.4	1.7	1	04/10/24 09:05	04/10/24 16:43	75-34-3	
1,2-Dichloroethane	<1.4	ug/kg	7.4	1.4	1	04/10/24 09:05	04/10/24 16:43	107-06-2	
1,2-Dichloroethene (Total)	<2.8	ug/kg	14.8	2.8	1	04/10/24 09:05	04/10/24 16:43	540-59-0	
1,1-Dichloroethene	<3.0	ug/kg	7.4	3.0	1	04/10/24 09:05	04/10/24 16:43	75-35-4	
cis-1,2-Dichloroethene	<1.4	ug/kg	7.4	1.4	1	04/10/24 09:05	04/10/24 16:43	156-59-2	
trans-1,2-Dichloroethene	<1.6	ug/kg	7.4	1.6	1	04/10/24 09:05	04/10/24 16:43	156-60-5	
1,2-Dichloropropane	<1.5	ug/kg	7.4	1.5	1	04/10/24 09:05	04/10/24 16:43	78-87-5	
1,3-Dichloropropane	<0.29	ug/kg	7.4	0.29	1	04/10/24 09:05	04/10/24 16:43	142-28-9	
2,2-Dichloropropane	<2.2	ug/kg	7.4	2.2	1	04/10/24 09:05	04/10/24 16:43	594-20-7	
1,1-Dichloropropene	<1.6	ug/kg	7.4	1.6	1	04/10/24 09:05	04/10/24 16:43	563-58-6	
cis-1,3-Dichloropropene	<1.1	ug/kg	7.4	1.1	1	04/10/24 09:05	04/10/24 16:43	10061-01-5	
trans-1,3-Dichloropropene	<0.89	ug/kg	7.4	0.89	1	04/10/24 09:05	04/10/24 16:43	10061-02-6	
Ethylbenzene	<1.3	ug/kg	7.4	1.3	1	04/10/24 09:05	04/10/24 16:43	100-41-4	
Hexachloro-1,3-butadiene	<1.3	ug/kg	7.4	1.3	1	04/10/24 09:05	04/10/24 16:43	87-68-3	
2-Hexanone	<15.4	ug/kg	93.4	15.4	1	04/10/24 09:05	04/10/24 16:43	591-78-6	
Isopropylbenzene (Cumene)	<0.47	ug/kg	7.4	0.47	1	04/10/24 09:05	04/10/24 16:43	98-82-8	
p-Isopropyltoluene	<0.64	ug/kg	7.4	0.64	1	04/10/24 09:05	04/10/24 16:43	99-87-6	
Methylene Chloride	<28.8	ug/kg	37.1	28.8	1	04/10/24 09:05	04/10/24 16:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	<10.4	ug/kg	93.4	10.4	1	04/10/24 09:05	04/10/24 16:43	108-10-1	
Methyl-tert-butyl ether	<1.4	ug/kg	7.4	1.4	1	04/10/24 09:05	04/10/24 16:43	1634-04-4	
Naphthalene	<1.1	ug/kg	14.8	1.1	1	04/10/24 09:05	04/10/24 16:43	91-20-3	
n-Propylbenzene	<0.90	ug/kg	7.4	0.90	1	04/10/24 09:05	04/10/24 16:43	103-65-1	
Styrene	<0.60	ug/kg	7.4	0.60	1	04/10/24 09:05	04/10/24 16:43	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SS06/SS-1 Lab ID: 60450582001 Collected: 04/09/24 09:40 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<1.1	ug/kg	7.4	1.1	1	04/10/24 09:05	04/10/24 16:43	630-20-6	
1,1,2,2-Tetrachloroethane	<1.0	ug/kg	7.4	1.0	1	04/10/24 09:05	04/10/24 16:43	79-34-5	
Tetrachloroethene	<0.79	ug/kg	7.4	0.79	1	04/10/24 09:05	04/10/24 16:43	127-18-4	
Toluene	<6.6	ug/kg	29.6	6.6	1	04/10/24 09:05	04/10/24 16:43	108-88-3	
1,2,3-Trichlorobenzene	<0.86	ug/kg	7.4	0.86	1	04/10/24 09:05	04/10/24 16:43	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/kg	7.4	0.73	1	04/10/24 09:05	04/10/24 16:43	120-82-1	
1,1,1-Trichloroethane	<1.5	ug/kg	7.4	1.5	1	04/10/24 09:05	04/10/24 16:43	71-55-6	
1,1,2-Trichloroethane	<1.1	ug/kg	7.4	1.1	1	04/10/24 09:05	04/10/24 16:43	79-00-5	
Trichloroethene	<2.8	ug/kg	7.4	2.8	1	04/10/24 09:05	04/10/24 16:43	79-01-6	
Trichlorofluoromethane	<14.2	ug/kg	19.3	14.2	1	04/10/24 09:05	04/10/24 16:43	75-69-4	
1,2,3-Trichloropropane	<2.3	ug/kg	7.4	2.3	1	04/10/24 09:05	04/10/24 16:43	96-18-4	
1,2,4-Trimethylbenzene	<1.0	ug/kg	7.4	1.0	1	04/10/24 09:05	04/10/24 16:43	95-63-6	
1,3,5-Trimethylbenzene	<0.64	ug/kg	7.4	0.64	1	04/10/24 09:05	04/10/24 16:43	108-67-8	
Vinyl chloride	<1.4	ug/kg	19.3	1.4	1	04/10/24 09:05	04/10/24 16:43	75-01-4	
Xylene (Total)	<5.5	ug/kg	22.2	5.5	1	04/10/24 09:05	04/10/24 16:43	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	108	%	80-120		1	04/10/24 09:05	04/10/24 16:43	2037-26-5	
4-Bromofluorobenzene (S)	100	%	83-119		1	04/10/24 09:05	04/10/24 16:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/10/24 09:05	04/10/24 16:43	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.075	mg/kg	0.55	0.075	1	04/11/24 07:56	04/11/24 14:09		
<b>Surrogates</b>									
Toluene-d8 (S)	101	%	78-122		1	04/11/24 07:56	04/11/24 14:09	2037-26-5	
4-Bromofluorobenzene (S)	110	%	69-133		1	04/11/24 07:56	04/11/24 14:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/11/24 07:56	04/11/24 14:09	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	20.8	%	0.50	0.50	1		04/10/24 13:57		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	84.0	%			1	04/12/24 08:59	04/12/24 09:06		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	3.3	mg/kg	1.2	0.97	1	04/15/24 09:34	04/16/24 15:40	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	0.35	mg/kg	0.18	0.15	1	04/18/24 08:30	04/18/24 11:58	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: **SS06/SS-1** Lab ID: **60450582001** Collected: 04/09/24 09:40 Received: 04/09/24 16:35 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>		Analytical Method: EPA 9056 Preparation Method: EPA 9056 Pace Analytical Services - Kansas City							
Nitrate as N	<b>49.1</b>	mg/kg	11.8	6.6	10	04/12/24 08:00	04/12/24 18:18	14797-55-8	M1,R1
Nitrite as N	<b>&lt;6.1</b>	mg/kg	11.8	6.1	10	04/12/24 08:00	04/12/24 18:18	14797-65-0	M1,R1

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SS06/SS-2 Lab ID: 60450582002 Collected: 04/09/24 09:50 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00518	mg/kg	0.0275	0.00518	1	04/17/24 09:56	04/17/24 20:28	309-00-2	
alpha-BHC	<0.00507	mg/kg	0.0275	0.00507	1	04/17/24 09:56	04/17/24 20:28	319-84-6	
beta-BHC	<0.00522	mg/kg	0.0275	0.00522	1	04/17/24 09:56	04/17/24 20:28	319-85-7	
delta-BHC	<0.00477	mg/kg	0.0275	0.00477	1	04/17/24 09:56	04/17/24 20:28	319-86-8	
gamma-BHC (Lindane)	<0.00474	mg/kg	0.0275	0.00474	1	04/17/24 09:56	04/17/24 20:28	58-89-9	
Chlordane (Technical)	<0.142	mg/kg	0.413	0.142	1	04/17/24 09:56	04/17/24 20:28	57-74-9	
4,4'-DDD	<0.00510	mg/kg	0.0275	0.00510	1	04/17/24 09:56	04/17/24 20:28	72-54-8	
4,4'-DDE	<0.00504	mg/kg	0.0275	0.00504	1	04/17/24 09:56	04/17/24 20:28	72-55-9	
4,4'-DDT	<0.00864	mg/kg	0.0275	0.00864	1	04/17/24 09:56	04/17/24 20:28	50-29-3	
Dieldrin	<0.00474	mg/kg	0.0275	0.00474	1	04/17/24 09:56	04/17/24 20:28	60-57-1	
Endosulfan I	<0.00500	mg/kg	0.0275	0.00500	1	04/17/24 09:56	04/17/24 20:28	959-98-8	
Endosulfan II	<0.00461	mg/kg	0.0275	0.00461	1	04/17/24 09:56	04/17/24 20:28	33213-65-9	
Endosulfan sulfate	<0.00501	mg/kg	0.0275	0.00501	1	04/17/24 09:56	04/17/24 20:28	1031-07-8	
Endrin	<0.00482	mg/kg	0.0275	0.00482	1	04/17/24 09:56	04/17/24 20:28	72-20-8	L0,R1
Endrin aldehyde	<0.00467	mg/kg	0.0275	0.00467	1	04/17/24 09:56	04/17/24 20:28	7421-93-4	
Endrin ketone	<0.00979	mg/kg	0.0275	0.00979	1	04/17/24 09:56	04/17/24 20:28	53494-70-5	
Hexachlorobenzene	<0.00477	mg/kg	0.0275	0.00477	1	04/17/24 09:56	04/17/24 20:28	118-74-1	
Heptachlor	<0.00589	mg/kg	0.0275	0.00589	1	04/17/24 09:56	04/17/24 20:28	76-44-8	
Heptachlor epoxide	<0.00467	mg/kg	0.0275	0.00467	1	04/17/24 09:56	04/17/24 20:28	1024-57-3	
Methoxychlor	<0.00667	mg/kg	0.0275	0.00667	1	04/17/24 09:56	04/17/24 20:28	72-43-5	
Toxaphene	<0.171	mg/kg	0.551	0.171	1	04/17/24 09:56	04/17/24 20:28	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	76.9	%	10.0-135		1	04/17/24 09:56	04/17/24 20:28	2051-24-3	
Tetrachloro-m-xylene (S)	76.3	%	10.0-139		1	04/17/24 09:56	04/17/24 20:28	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00967	mg/kg	0.0964	0.00967	1	04/15/24 13:10	04/16/24 20:36	94-75-7	
Dalapon	<0.0156	mg/kg	0.0964	0.0156	1	04/15/24 13:10	04/16/24 20:36	127-20-8	
2,4-DB	<0.0409	mg/kg	0.0964	0.0409	1	04/15/24 13:10	04/16/24 20:36	94-82-6	
Dicamba	<0.0216	mg/kg	0.0964	0.0216	1	04/15/24 13:10	04/16/24 20:36	1918-00-9	
Dichlorprop	<0.0337	mg/kg	0.0964	0.0337	1	04/15/24 13:10	04/16/24 20:36	120-36-5	
Dinoseb	<0.00960	mg/kg	0.0964	0.00960	1	04/15/24 13:10	04/16/24 20:36	88-85-7	
MCPA	<0.610	mg/kg	8.95	0.610	1	04/15/24 13:10	04/16/24 20:36	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.505	mg/kg	8.95	0.505	1	04/15/24 13:10	04/16/24 20:36	93-65-2	
2,4,5-T	<0.0117	mg/kg	0.0964	0.0117	1	04/15/24 13:10	04/16/24 20:36	93-76-5	
2,4,5-TP (Silvex)	<0.0147	mg/kg	0.0964	0.0147	1	04/15/24 13:10	04/16/24 20:36	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	55.1	%	22.0-132		1	04/15/24 13:10	04/16/24 20:36	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.5	ug/kg	39.0	10.5	1	04/12/24 10:44	04/15/24 17:53	12674-11-2	
PCB-1221 (Aroclor 1221)	<13.1	ug/kg	39.0	13.1	1	04/12/24 10:44	04/15/24 17:53	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SS06/SS-2 Lab ID: 60450582002 Collected: 04/09/24 09:50 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<13.1	ug/kg	39.0	13.1	1	04/12/24 10:44	04/15/24 17:53	11141-16-5	
PCB-1242 (Aroclor 1242)	<13.1	ug/kg	39.0	13.1	1	04/12/24 10:44	04/15/24 17:53	53469-21-9	
PCB-1248 (Aroclor 1248)	<13.1	ug/kg	39.0	13.1	1	04/12/24 10:44	04/15/24 17:53	12672-29-6	
PCB-1254 (Aroclor 1254)	<13.1	ug/kg	39.0	13.1	1	04/12/24 10:44	04/15/24 17:53	11097-69-1	
PCB-1260 (Aroclor 1260)	<13.1	ug/kg	39.0	13.1	1	04/12/24 10:44	04/15/24 17:53	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	122	%	20-120		1	04/12/24 10:44	04/15/24 17:53	2051-24-3	S3
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	25000	mg/kg	68.9	9.50	5	04/14/24 22:12	04/22/24 17:58	7429-90-5	
Antimony	0.338J	mg/kg	4.13	0.229	5	04/14/24 22:12	04/22/24 17:58	7440-36-0	B,J
Arsenic	14.1	mg/kg	1.38	0.138	5	04/14/24 22:12	04/22/24 17:58	7440-38-2	
Barium	402	mg/kg	3.44	0.209	5	04/14/24 22:12	04/22/24 17:58	7440-39-3	
Beryllium	1.39J	mg/kg	3.44	0.190	5	04/14/24 22:12	04/22/24 17:58	7440-41-7	J
Cadmium	0.236J	mg/kg	1.38	0.118	5	04/14/24 22:12	04/22/24 17:58	7440-43-9	J
Calcium	14500	mg/kg	689	104	5	04/14/24 22:12	04/22/24 17:58	7440-70-2	
Chromium	29.9	mg/kg	6.89	0.408	5	04/14/24 22:12	04/22/24 17:58	7440-47-3	
Cobalt	12.6	mg/kg	1.38	0.0636	5	04/14/24 22:12	04/22/24 17:58	7440-48-4	
Copper	21.2	mg/kg	6.89	0.182	5	04/14/24 22:12	04/22/24 17:58	7440-50-8	
Iron	33500	mg/kg	68.9	12.3	5	04/14/24 22:12	04/22/24 17:58	7439-89-6	
Lead	16.4	mg/kg	2.75	0.136	5	04/14/24 22:12	04/22/24 17:58	7439-92-1	
Magnesium	5770	mg/kg	689	63.2	5	04/14/24 22:12	04/22/24 17:58	7439-95-4	
Manganese	1520	mg/kg	3.44	0.369	5	04/14/24 22:12	04/22/24 17:58	7439-96-5	
Molybdenum	1.70J	mg/kg	3.44	0.139	5	04/14/24 22:12	04/22/24 17:58	7439-98-7	J
Nickel	37.4	mg/kg	3.44	0.271	5	04/14/24 22:12	04/22/24 17:58	7440-02-0	
Potassium	2920	mg/kg	689	93.7	5	04/14/24 22:12	04/22/24 17:58	7440-09-7	
Selenium	0.403J	mg/kg	3.44	0.248	5	04/14/24 22:12	04/22/24 17:58	7782-49-2	J
Silver	<0.119	mg/kg	0.689	0.119	5	04/14/24 22:12	04/22/24 17:58	7440-22-4	
Sodium	511J	mg/kg	689	105	5	04/14/24 22:12	04/22/24 17:58	7440-23-5	J
Thallium	0.278J	mg/kg	2.75	0.0895	5	04/14/24 22:12	04/22/24 17:58	7440-28-0	J
Vanadium	53.1	mg/kg	3.44	0.258	5	04/14/24 22:12	04/22/24 17:58	7440-62-2	
Zinc	67.0	mg/kg	34.4	1.02	5	04/14/24 22:12	04/22/24 17:58	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0248	mg/kg	0.0551	0.0248	1	04/12/24 15:37	04/13/24 10:23	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<84.1	ug/kg	391	84.1	1	04/10/24 14:25	04/12/24 17:34	83-32-9	
Acenaphthylene	<64.1	ug/kg	391	64.1	1	04/10/24 14:25	04/12/24 17:34	208-96-8	
Anthracene	<81.9	ug/kg	391	81.9	1	04/10/24 14:25	04/12/24 17:34	120-12-7	
Benzo(a)anthracene	<82.8	ug/kg	391	82.8	1	04/10/24 14:25	04/12/24 17:34	56-55-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SS06/SS-2 Lab ID: 60450582002 Collected: 04/09/24 09:50 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<84.2	ug/kg	391	84.2	1	04/10/24 14:25	04/12/24 17:34	50-32-8	
Benzo(b)fluoranthene	<95.5	ug/kg	391	95.5	1	04/10/24 14:25	04/12/24 17:34	205-99-2	
Benzo(g,h,i)perylene	<68.0	ug/kg	391	68.0	1	04/10/24 14:25	04/12/24 17:34	191-24-2	
Benzo(k)fluoranthene	<84.2	ug/kg	391	84.2	1	04/10/24 14:25	04/12/24 17:34	207-08-9	
Benzoic Acid	<214	ug/kg	1980	214	1	04/10/24 14:25	04/12/24 17:34	65-85-0	
Benzyl alcohol	<71.9	ug/kg	783	71.9	1	04/10/24 14:25	04/12/24 17:34	100-51-6	
4-Bromophenylphenyl ether	<84.5	ug/kg	391	84.5	1	04/10/24 14:25	04/12/24 17:34	101-55-3	
Butylbenzylphthalate	<79.7	ug/kg	391	79.7	1	04/10/24 14:25	04/12/24 17:34	85-68-7	
Carbazole	<80.5	ug/kg	391	80.5	1	04/10/24 14:25	04/12/24 17:34	86-74-8	
4-Chloro-3-methylphenol	<82.1	ug/kg	783	82.1	1	04/10/24 14:25	04/12/24 17:34	59-50-7	
4-Chloroaniline	<61.3	ug/kg	783	61.3	1	04/10/24 14:25	04/12/24 17:34	106-47-8	
bis(2-Chloroethoxy)methane	<77.8	ug/kg	391	77.8	1	04/10/24 14:25	04/12/24 17:34	111-91-1	
bis(2-Chloroethyl) ether	<79.0	ug/kg	391	79.0	1	04/10/24 14:25	04/12/24 17:34	111-44-4	
bis(2-Chloroisopropyl) ether	<84.8	ug/kg	391	84.8	1	04/10/24 14:25	04/12/24 17:34	108-60-1	
2-Chloronaphthalene	<82.4	ug/kg	391	82.4	1	04/10/24 14:25	04/12/24 17:34	91-58-7	
2-Chlorophenol	<80.0	ug/kg	391	80.0	1	04/10/24 14:25	04/12/24 17:34	95-57-8	
4-Chlorophenylphenyl ether	<84.0	ug/kg	391	84.0	1	04/10/24 14:25	04/12/24 17:34	7005-72-3	
Chrysene	<87.2	ug/kg	391	87.2	1	04/10/24 14:25	04/12/24 17:34	218-01-9	
Dibenz(a,h)anthracene	<70.3	ug/kg	391	70.3	1	04/10/24 14:25	04/12/24 17:34	53-70-3	
Dibenzofuran	<83.6	ug/kg	391	83.6	1	04/10/24 14:25	04/12/24 17:34	132-64-9	
1,2-Dichlorobenzene	<77.9	ug/kg	391	77.9	1	04/10/24 14:25	04/12/24 17:34	95-50-1	
1,3-Dichlorobenzene	<76.5	ug/kg	391	76.5	1	04/10/24 14:25	04/12/24 17:34	541-73-1	
1,4-Dichlorobenzene	<75.4	ug/kg	391	75.4	1	04/10/24 14:25	04/12/24 17:34	106-46-7	
3,3'-Dichlorobenzidine	<38.4	ug/kg	783	38.4	1	04/10/24 14:25	04/12/24 17:34	91-94-1	
2,4-Dichlorophenol	<78.4	ug/kg	391	78.4	1	04/10/24 14:25	04/12/24 17:34	120-83-2	
Diethylphthalate	<89.4	ug/kg	391	89.4	1	04/10/24 14:25	04/12/24 17:34	84-66-2	
2,4-Dimethylphenol	<56.9	ug/kg	391	56.9	1	04/10/24 14:25	04/12/24 17:34	105-67-9	
Dimethylphthalate	<81.3	ug/kg	391	81.3	1	04/10/24 14:25	04/12/24 17:34	131-11-3	
Di-n-butylphthalate	<92.6	ug/kg	391	92.6	1	04/10/24 14:25	04/12/24 17:34	84-74-2	
4,6-Dinitro-2-methylphenol	<67.7	ug/kg	1980	67.7	1	04/10/24 14:25	04/12/24 17:34	534-52-1	
2,4-Dinitrophenol	<118	ug/kg	1980	118	1	04/10/24 14:25	04/12/24 17:34	51-28-5	
2,4-Dinitrotoluene	<88.1	ug/kg	391	88.1	1	04/10/24 14:25	04/12/24 17:34	121-14-2	
2,6-Dinitrotoluene	<76.3	ug/kg	391	76.3	1	04/10/24 14:25	04/12/24 17:34	606-20-2	
Di-n-octylphthalate	<95.3	ug/kg	391	95.3	1	04/10/24 14:25	04/12/24 17:34	117-84-0	
bis(2-Ethylhexyl)phthalate	<87.9	ug/kg	391	87.9	1	04/10/24 14:25	04/12/24 17:34	117-81-7	
Fluoranthene	<86.2	ug/kg	391	86.2	1	04/10/24 14:25	04/12/24 17:34	206-44-0	
Fluorene	<83.3	ug/kg	391	83.3	1	04/10/24 14:25	04/12/24 17:34	86-73-7	
Hexachloro-1,3-butadiene	<83.9	ug/kg	391	83.9	1	04/10/24 14:25	04/12/24 17:34	87-68-3	
Hexachlorobenzene	<81.9	ug/kg	391	81.9	1	04/10/24 14:25	04/12/24 17:34	118-74-1	
Hexachlorocyclopentadiene	<241	ug/kg	391	241	1	04/10/24 14:25	04/12/24 17:34	77-47-4	
Hexachloroethane	<71.8	ug/kg	391	71.8	1	04/10/24 14:25	04/12/24 17:34	67-72-1	
Indeno(1,2,3-cd)pyrene	<80.1	ug/kg	391	80.1	1	04/10/24 14:25	04/12/24 17:34	193-39-5	
Isophorone	<75.7	ug/kg	391	75.7	1	04/10/24 14:25	04/12/24 17:34	78-59-1	
2-Methylnaphthalene	<79.4	ug/kg	391	79.4	1	04/10/24 14:25	04/12/24 17:34	91-57-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SS06/SS-2 Lab ID: 60450582002 Collected: 04/09/24 09:50 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<71.3	ug/kg	391	71.3	1	04/10/24 14:25	04/12/24 17:34	95-48-7	
3&4-Methylphenol(m&p Cresol)	<72.7	ug/kg	391	72.7	1	04/10/24 14:25	04/12/24 17:34	15831-10-4	
Naphthalene	<84.2	ug/kg	391	84.2	1	04/10/24 14:25	04/12/24 17:34	91-20-3	
2-Nitroaniline	<64.9	ug/kg	783	64.9	1	04/10/24 14:25	04/12/24 17:34	88-74-4	
3-Nitroaniline	<61.0	ug/kg	783	61.0	1	04/10/24 14:25	04/12/24 17:34	99-09-2	
4-Nitroaniline	<67.0	ug/kg	783	67.0	1	04/10/24 14:25	04/12/24 17:34	100-01-6	
Nitrobenzene	<82.9	ug/kg	391	82.9	1	04/10/24 14:25	04/12/24 17:34	98-95-3	
2-Nitrophenol	<61.2	ug/kg	391	61.2	1	04/10/24 14:25	04/12/24 17:34	88-75-5	
4-Nitrophenol	<57.7	ug/kg	1980	57.7	1	04/10/24 14:25	04/12/24 17:34	100-02-7	
N-Nitroso-di-n-propylamine	<74.6	ug/kg	391	74.6	1	04/10/24 14:25	04/12/24 17:34	621-64-7	
N-Nitrosodiphenylamine	<77.8	ug/kg	391	77.8	1	04/10/24 14:25	04/12/24 17:34	86-30-6	
Pentachlorophenol	<129	ug/kg	1980	129	1	04/10/24 14:25	04/12/24 17:34	87-86-5	
Phenanthrene	<83.6	ug/kg	391	83.6	1	04/10/24 14:25	04/12/24 17:34	85-01-8	
Phenol	<73.7	ug/kg	391	73.7	1	04/10/24 14:25	04/12/24 17:34	108-95-2	
Pyrene	<83.5	ug/kg	391	83.5	1	04/10/24 14:25	04/12/24 17:34	129-00-0	
Pyridine	<58.0	ug/kg	391	58.0	1	04/10/24 14:25	04/12/24 17:34	110-86-1	
1,2,4-Trichlorobenzene	<82.0	ug/kg	391	82.0	1	04/10/24 14:25	04/12/24 17:34	120-82-1	
2,4,5-Trichlorophenol	<80.2	ug/kg	391	80.2	1	04/10/24 14:25	04/12/24 17:34	95-95-4	
2,4,6-Trichlorophenol	<72.4	ug/kg	391	72.4	1	04/10/24 14:25	04/12/24 17:34	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	73	%	30-120		1	04/10/24 14:25	04/12/24 17:34	4165-60-0	
2-Fluorobiphenyl (S)	65	%	40-120		1	04/10/24 14:25	04/12/24 17:34	321-60-8	
Terphenyl-d14 (S)	67	%	45-120		1	04/10/24 14:25	04/12/24 17:34	1718-51-0	
Phenol-d6 (S)	75	%	40-120		1	04/10/24 14:25	04/12/24 17:34	13127-88-3	
2-Fluorophenol (S)	74	%	40-120		1	04/10/24 14:25	04/12/24 17:34	367-12-4	
2,4,6-Tribromophenol (S)	77	%	35-120		1	04/10/24 14:25	04/12/24 17:34	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	36.0	mg/kg	17.5	6.0	1	04/11/24 13:51	04/12/24 16:15		
TPH-DRO	<6.0	mg/kg	17.5	6.0	1	04/11/24 13:51	04/12/24 16:15		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	82	%	35-120		1	04/11/24 13:51	04/12/24 16:15	4165-60-0	
2-Fluorobiphenyl (S)	88	%	50-120		1	04/11/24 13:51	04/12/24 16:15	321-60-8	
Terphenyl-d14 (S)	89	%	45-120		1	04/11/24 13:51	04/12/24 16:15	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<74.3	ug/kg	77.8	74.3	1	04/10/24 09:05	04/10/24 17:03	67-64-1	
Benzene	<0.56	ug/kg	6.2	0.56	1	04/10/24 09:05	04/10/24 17:03	71-43-2	
Bromobenzene	<0.77	ug/kg	6.2	0.77	1	04/10/24 09:05	04/10/24 17:03	108-86-1	
Bromochloromethane	<0.92	ug/kg	6.2	0.92	1	04/10/24 09:05	04/10/24 17:03	74-97-5	
Bromodichloromethane	<1.0	ug/kg	16.1	1.0	1	04/10/24 09:05	04/10/24 17:03	75-27-4	
Bromoform	<0.48	ug/kg	16.1	0.48	1	04/10/24 09:05	04/10/24 17:03	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SS06/SS-2 Lab ID: 60450582002 Collected: 04/09/24 09:50 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<7.6	ug/kg	16.1	7.6	1	04/10/24 09:05	04/10/24 17:03	74-83-9	
2-Butanone (MEK)	<39.4	ug/kg	77.8	39.4	1	04/10/24 09:05	04/10/24 17:03	78-93-3	
n-Butylbenzene	<0.59	ug/kg	6.2	0.59	1	04/10/24 09:05	04/10/24 17:03	104-51-8	
sec-Butylbenzene	<0.61	ug/kg	6.2	0.61	1	04/10/24 09:05	04/10/24 17:03	135-98-8	
tert-Butylbenzene	<0.40	ug/kg	6.2	0.40	1	04/10/24 09:05	04/10/24 17:03	98-06-6	
Carbon disulfide	<2.9	ug/kg	6.2	2.9	1	04/10/24 09:05	04/10/24 17:03	75-15-0	
Carbon tetrachloride	<2.1	ug/kg	6.2	2.1	1	04/10/24 09:05	04/10/24 17:03	56-23-5	
Chlorobenzene	<0.36	ug/kg	6.2	0.36	1	04/10/24 09:05	04/10/24 17:03	108-90-7	
Chloroethane	<10.2	ug/kg	30.9	10.2	1	04/10/24 09:05	04/10/24 17:03	75-00-3	
Chloroform	<2.3	ug/kg	6.2	2.3	1	04/10/24 09:05	04/10/24 17:03	67-66-3	
Chloromethane	<1.5	ug/kg	16.1	1.5	1	04/10/24 09:05	04/10/24 17:03	74-87-3	
2-Chlorotoluene	<0.86	ug/kg	6.2	0.86	1	04/10/24 09:05	04/10/24 17:03	95-49-8	
4-Chlorotoluene	<0.49	ug/kg	6.2	0.49	1	04/10/24 09:05	04/10/24 17:03	106-43-4	
1,2-Dibromo-3-chloropropane	<4.1	ug/kg	16.1	4.1	1	04/10/24 09:05	04/10/24 17:03	96-12-8	
Dibromochloromethane	<0.37	ug/kg	6.2	0.37	1	04/10/24 09:05	04/10/24 17:03	124-48-1	
1,2-Dibromoethane (EDB)	<0.65	ug/kg	6.2	0.65	1	04/10/24 09:05	04/10/24 17:03	106-93-4	
Dibromomethane	<1.8	ug/kg	6.2	1.8	1	04/10/24 09:05	04/10/24 17:03	74-95-3	
1,2-Dichlorobenzene	<1.0	ug/kg	6.2	1.0	1	04/10/24 09:05	04/10/24 17:03	95-50-1	
1,3-Dichlorobenzene	<0.78	ug/kg	6.2	0.78	1	04/10/24 09:05	04/10/24 17:03	541-73-1	
1,4-Dichlorobenzene	<1.1	ug/kg	6.2	1.1	1	04/10/24 09:05	04/10/24 17:03	106-46-7	
Dichlorodifluoromethane	<1.2	ug/kg	16.1	1.2	1	04/10/24 09:05	04/10/24 17:03	75-71-8	
1,1-Dichloroethane	<1.4	ug/kg	6.2	1.4	1	04/10/24 09:05	04/10/24 17:03	75-34-3	
1,2-Dichloroethane	<1.2	ug/kg	6.2	1.2	1	04/10/24 09:05	04/10/24 17:03	107-06-2	
1,2-Dichloroethene (Total)	<2.3	ug/kg	12.4	2.3	1	04/10/24 09:05	04/10/24 17:03	540-59-0	
1,1-Dichloroethene	<2.5	ug/kg	6.2	2.5	1	04/10/24 09:05	04/10/24 17:03	75-35-4	
cis-1,2-Dichloroethene	<1.1	ug/kg	6.2	1.1	1	04/10/24 09:05	04/10/24 17:03	156-59-2	
trans-1,2-Dichloroethene	<1.4	ug/kg	6.2	1.4	1	04/10/24 09:05	04/10/24 17:03	156-60-5	
1,2-Dichloropropane	<1.3	ug/kg	6.2	1.3	1	04/10/24 09:05	04/10/24 17:03	78-87-5	
1,3-Dichloropropane	<0.24	ug/kg	6.2	0.24	1	04/10/24 09:05	04/10/24 17:03	142-28-9	
2,2-Dichloropropane	<1.9	ug/kg	6.2	1.9	1	04/10/24 09:05	04/10/24 17:03	594-20-7	
1,1-Dichloropropene	<1.3	ug/kg	6.2	1.3	1	04/10/24 09:05	04/10/24 17:03	563-58-6	
cis-1,3-Dichloropropene	<0.93	ug/kg	6.2	0.93	1	04/10/24 09:05	04/10/24 17:03	10061-01-5	
trans-1,3-Dichloropropene	<0.74	ug/kg	6.2	0.74	1	04/10/24 09:05	04/10/24 17:03	10061-02-6	
Ethylbenzene	<1.1	ug/kg	6.2	1.1	1	04/10/24 09:05	04/10/24 17:03	100-41-4	
Hexachloro-1,3-butadiene	<1.1	ug/kg	6.2	1.1	1	04/10/24 09:05	04/10/24 17:03	87-68-3	
2-Hexanone	<12.9	ug/kg	77.8	12.9	1	04/10/24 09:05	04/10/24 17:03	591-78-6	
Isopropylbenzene (Cumene)	<0.39	ug/kg	6.2	0.39	1	04/10/24 09:05	04/10/24 17:03	98-82-8	
p-Isopropyltoluene	<0.54	ug/kg	6.2	0.54	1	04/10/24 09:05	04/10/24 17:03	99-87-6	
Methylene Chloride	<24.0	ug/kg	30.9	24.0	1	04/10/24 09:05	04/10/24 17:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	<8.6	ug/kg	77.8	8.6	1	04/10/24 09:05	04/10/24 17:03	108-10-1	
Methyl-tert-butyl ether	<1.2	ug/kg	6.2	1.2	1	04/10/24 09:05	04/10/24 17:03	1634-04-4	
Naphthalene	<0.90	ug/kg	12.4	0.90	1	04/10/24 09:05	04/10/24 17:03	91-20-3	
n-Propylbenzene	<0.75	ug/kg	6.2	0.75	1	04/10/24 09:05	04/10/24 17:03	103-65-1	
Styrene	<0.50	ug/kg	6.2	0.50	1	04/10/24 09:05	04/10/24 17:03	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SS06/SS-2 Lab ID: 60450582002 Collected: 04/09/24 09:50 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<0.88	ug/kg	6.2	0.88	1	04/10/24 09:05	04/10/24 17:03	630-20-6	
1,1,2,2-Tetrachloroethane	<0.87	ug/kg	6.2	0.87	1	04/10/24 09:05	04/10/24 17:03	79-34-5	
Tetrachloroethene	<0.66	ug/kg	6.2	0.66	1	04/10/24 09:05	04/10/24 17:03	127-18-4	
Toluene	<5.5	ug/kg	24.7	5.5	1	04/10/24 09:05	04/10/24 17:03	108-88-3	
1,2,3-Trichlorobenzene	<0.72	ug/kg	6.2	0.72	1	04/10/24 09:05	04/10/24 17:03	87-61-6	
1,2,4-Trichlorobenzene	<0.61	ug/kg	6.2	0.61	1	04/10/24 09:05	04/10/24 17:03	120-82-1	
1,1,1-Trichloroethane	<1.3	ug/kg	6.2	1.3	1	04/10/24 09:05	04/10/24 17:03	71-55-6	
1,1,2-Trichloroethane	<0.88	ug/kg	6.2	0.88	1	04/10/24 09:05	04/10/24 17:03	79-00-5	
Trichloroethene	<2.3	ug/kg	6.2	2.3	1	04/10/24 09:05	04/10/24 17:03	79-01-6	
Trichlorofluoromethane	<11.9	ug/kg	16.1	11.9	1	04/10/24 09:05	04/10/24 17:03	75-69-4	
1,2,3-Trichloropropane	<1.9	ug/kg	6.2	1.9	1	04/10/24 09:05	04/10/24 17:03	96-18-4	
1,2,4-Trimethylbenzene	<0.85	ug/kg	6.2	0.85	1	04/10/24 09:05	04/10/24 17:03	95-63-6	
1,3,5-Trimethylbenzene	<0.54	ug/kg	6.2	0.54	1	04/10/24 09:05	04/10/24 17:03	108-67-8	
Vinyl chloride	<1.1	ug/kg	16.1	1.1	1	04/10/24 09:05	04/10/24 17:03	75-01-4	
Xylene (Total)	<4.5	ug/kg	18.5	4.5	1	04/10/24 09:05	04/10/24 17:03	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	109	%	80-120		1	04/10/24 09:05	04/10/24 17:03	2037-26-5	
4-Bromofluorobenzene (S)	101	%	83-119		1	04/10/24 09:05	04/10/24 17:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1	04/10/24 09:05	04/10/24 17:03	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.067	mg/kg	0.49	0.067	1	04/11/24 07:56	04/11/24 14:25		
<b>Surrogates</b>									
Toluene-d8 (S)	102	%	78-122		1	04/11/24 07:56	04/11/24 14:25	2037-26-5	
4-Bromofluorobenzene (S)	112	%	69-133		1	04/11/24 07:56	04/11/24 14:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/11/24 07:56	04/11/24 14:25	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	15.8	%	0.50	0.50	1		04/10/24 13:57		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	72.6	%			1	04/12/24 08:59	04/12/24 09:06		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<0.88	mg/kg	1.1	0.88	1	04/15/24 09:34	04/16/24 15:41	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.14	mg/kg	0.18	0.14	1	04/18/24 08:30	04/18/24 12:00	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: **SS06/SS-2** Lab ID: **60450582002** Collected: 04/09/24 09:50 Received: 04/09/24 16:35 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<b>37.4</b>	mg/kg	12.0	6.8	10	04/12/24 08:00	04/12/24 19:02	14797-55-8	
Nitrite as N	<b>&lt;6.3</b>	mg/kg	12.0	6.3	10	04/12/24 08:00	04/12/24 19:02	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD10/SD-1 Lab ID: 60450582003 Collected: 04/09/24 11:50 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00445	mg/kg	0.0237	0.00445	1	04/17/24 09:56	04/19/24 00:40	309-00-2	
alpha-BHC	<0.00436	mg/kg	0.0237	0.00436	1	04/17/24 09:56	04/19/24 00:40	319-84-6	
beta-BHC	<0.00449	mg/kg	0.0237	0.00449	1	04/17/24 09:56	04/19/24 00:40	319-85-7	
delta-BHC	<0.00410	mg/kg	0.0237	0.00410	1	04/17/24 09:56	04/19/24 00:40	319-86-8	
gamma-BHC (Lindane)	<0.00407	mg/kg	0.0237	0.00407	1	04/17/24 09:56	04/19/24 00:40	58-89-9	
Chlordane (Technical)	<0.122	mg/kg	0.355	0.122	1	04/17/24 09:56	04/19/24 00:40	57-74-9	
4,4'-DDD	<0.00438	mg/kg	0.0237	0.00438	1	04/17/24 09:56	04/19/24 00:40	72-54-8	
4,4'-DDE	<0.00433	mg/kg	0.0237	0.00433	1	04/17/24 09:56	04/19/24 00:40	72-55-9	
4,4'-DDT	<0.00742	mg/kg	0.0237	0.00742	1	04/17/24 09:56	04/19/24 00:40	50-29-3	
Dieldrin	<0.00407	mg/kg	0.0237	0.00407	1	04/17/24 09:56	04/19/24 00:40	60-57-1	
Endosulfan I	<0.00430	mg/kg	0.0237	0.00430	1	04/17/24 09:56	04/19/24 00:40	959-98-8	
Endosulfan II	<0.00397	mg/kg	0.0237	0.00397	1	04/17/24 09:56	04/19/24 00:40	33213-65-9	
Endosulfan sulfate	<0.00431	mg/kg	0.0237	0.00431	1	04/17/24 09:56	04/19/24 00:40	1031-07-8	
Endrin	<0.00414	mg/kg	0.0237	0.00414	1	04/17/24 09:56	04/19/24 00:40	72-20-8	LO
Endrin aldehyde	<0.00401	mg/kg	0.0237	0.00401	1	04/17/24 09:56	04/19/24 00:40	7421-93-4	
Endrin ketone	<0.00842	mg/kg	0.0237	0.00842	1	04/17/24 09:56	04/19/24 00:40	53494-70-5	
Hexachlorobenzene	<0.00410	mg/kg	0.0237	0.00410	1	04/17/24 09:56	04/19/24 00:40	118-74-1	
Heptachlor	<0.00507	mg/kg	0.0237	0.00507	1	04/17/24 09:56	04/19/24 00:40	76-44-8	
Heptachlor epoxide	<0.00401	mg/kg	0.0237	0.00401	1	04/17/24 09:56	04/19/24 00:40	1024-57-3	
Methoxychlor	<0.00573	mg/kg	0.0237	0.00573	1	04/17/24 09:56	04/19/24 00:40	72-43-5	
Toxaphene	<0.147	mg/kg	0.473	0.147	1	04/17/24 09:56	04/19/24 00:40	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	81.8	%	10.0-135		1	04/17/24 09:56	04/19/24 00:40	2051-24-3	
Tetrachloro-m-xylene (S)	78.8	%	10.0-139		1	04/17/24 09:56	04/19/24 00:40	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00831	mg/kg	0.0829	0.00831	1	04/15/24 13:10	04/16/24 20:46	94-75-7	
Dalapon	<0.0134	mg/kg	0.0829	0.0134	1	04/15/24 13:10	04/16/24 20:46	127-20-8	
2,4-DB	<0.0352	mg/kg	0.0829	0.0352	1	04/15/24 13:10	04/16/24 20:46	94-82-6	
Dicamba	<0.0186	mg/kg	0.0829	0.0186	1	04/15/24 13:10	04/16/24 20:46	1918-00-9	
Dichlorprop	<0.0290	mg/kg	0.0829	0.0290	1	04/15/24 13:10	04/16/24 20:46	120-36-5	
Dinoseb	<0.00825	mg/kg	0.0829	0.00825	1	04/15/24 13:10	04/16/24 20:46	88-85-7	
MCPA	<0.524	mg/kg	7.69	0.524	1	04/15/24 13:10	04/16/24 20:46	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.434	mg/kg	7.69	0.434	1	04/15/24 13:10	04/16/24 20:46	93-65-2	
2,4,5-T	<0.0101	mg/kg	0.0829	0.0101	1	04/15/24 13:10	04/16/24 20:46	93-76-5	
2,4,5-TP (Silvex)	<0.0127	mg/kg	0.0829	0.0127	1	04/15/24 13:10	04/16/24 20:46	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	52.2	%	22.0-132		1	04/15/24 13:10	04/16/24 20:46	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<119	ug/kg	440	119	10	04/12/24 10:44	04/19/24 05:09	12674-11-2	
PCB-1221 (Aroclor 1221)	<148	ug/kg	440	148	10	04/12/24 10:44	04/19/24 05:09	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD10/SD-1 Lab ID: 60450582003 Collected: 04/09/24 11:50 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<148	ug/kg	440	148	10	04/12/24 10:44	04/19/24 05:09	11141-16-5	
PCB-1242 (Aroclor 1242)	<148	ug/kg	440	148	10	04/12/24 10:44	04/19/24 05:09	53469-21-9	
PCB-1248 (Aroclor 1248)	<148	ug/kg	440	148	10	04/12/24 10:44	04/19/24 05:09	12672-29-6	
PCB-1254 (Aroclor 1254)	<148	ug/kg	440	148	10	04/12/24 10:44	04/19/24 05:09	11097-69-1	
PCB-1260 (Aroclor 1260)	<148	ug/kg	440	148	10	04/12/24 10:44	04/19/24 05:09	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	99	%	20-120		10	04/12/24 10:44	04/19/24 05:09	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	3870	mg/kg	59.2	8.17	5	04/14/24 22:12	04/22/24 18:02	7429-90-5	
Antimony	0.217J	mg/kg	3.55	0.196	5	04/14/24 22:12	04/22/24 18:02	7440-36-0	B,J
Arsenic	5.76	mg/kg	1.18	0.118	5	04/14/24 22:12	04/22/24 18:02	7440-38-2	
Barium	91.6	mg/kg	2.96	0.180	5	04/14/24 22:12	04/22/24 18:02	7440-39-3	
Beryllium	0.306J	mg/kg	2.96	0.163	5	04/14/24 22:12	04/22/24 18:02	7440-41-7	J
Cadmium	0.353J	mg/kg	1.18	0.101	5	04/14/24 22:12	04/22/24 18:02	7440-43-9	J
Calcium	208000	mg/kg	592	89.4	5	04/14/24 22:12	04/22/24 18:02	7440-70-2	
Chromium	9.71	mg/kg	5.92	0.350	5	04/14/24 22:12	04/22/24 18:02	7440-47-3	
Cobalt	6.16	mg/kg	1.18	0.0547	5	04/14/24 22:12	04/22/24 18:02	7440-48-4	
Copper	5.86J	mg/kg	5.92	0.156	5	04/14/24 22:12	04/22/24 18:02	7440-50-8	J
Iron	11500	mg/kg	59.2	10.6	5	04/14/24 22:12	04/22/24 18:02	7439-89-6	
Lead	11.3	mg/kg	2.37	0.117	5	04/14/24 22:12	04/22/24 18:02	7439-92-1	
Magnesium	8630	mg/kg	592	54.3	5	04/14/24 22:12	04/22/24 18:02	7439-95-4	
Manganese	1460	mg/kg	2.96	0.317	5	04/14/24 22:12	04/22/24 18:02	7439-96-5	
Molybdenum	0.938J	mg/kg	2.96	0.120	5	04/14/24 22:12	04/22/24 18:02	7439-98-7	J
Nickel	13.2	mg/kg	2.96	0.233	5	04/14/24 22:12	04/22/24 18:02	7440-02-0	
Potassium	1190	mg/kg	592	80.5	5	04/14/24 22:12	04/22/24 18:02	7440-09-7	
Selenium	1.25J	mg/kg	2.96	0.213	5	04/14/24 22:12	04/22/24 18:02	7782-49-2	J
Silver	<0.102	mg/kg	0.592	0.102	5	04/14/24 22:12	04/22/24 18:02	7440-22-4	
Sodium	205J	mg/kg	592	90.5	5	04/14/24 22:12	04/22/24 18:02	7440-23-5	J
Thallium	0.0922J	mg/kg	2.37	0.0769	5	04/14/24 22:12	04/22/24 18:02	7440-28-0	J
Vanadium	12.7	mg/kg	2.96	0.221	5	04/14/24 22:12	04/22/24 18:02	7440-62-2	
Zinc	36.9	mg/kg	29.6	0.876	5	04/14/24 22:12	04/22/24 18:02	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0213	mg/kg	0.0473	0.0213	1	04/12/24 15:37	04/13/24 10:25	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<940	ug/kg	4380	940	5	04/10/24 14:25	04/12/24 17:55	83-32-9	
Acenaphthylene	<716	ug/kg	4380	716	5	04/10/24 14:25	04/12/24 17:55	208-96-8	
Anthracene	<915	ug/kg	4380	915	5	04/10/24 14:25	04/12/24 17:55	120-12-7	
Benzo(a)anthracene	<926	ug/kg	4380	926	5	04/10/24 14:25	04/12/24 17:55	56-55-3	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD10/SD-1 Lab ID: 60450582003 Collected: 04/09/24 11:50 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>		Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Benzo(a)pyrene	<942	ug/kg	4380	942	5	04/10/24 14:25	04/12/24 17:55	50-32-8	
Benzo(b)fluoranthene	<1070	ug/kg	4380	1070	5	04/10/24 14:25	04/12/24 17:55	205-99-2	
Benzo(g,h,i)perylene	<760	ug/kg	4380	760	5	04/10/24 14:25	04/12/24 17:55	191-24-2	
Benzo(k)fluoranthene	<942	ug/kg	4380	942	5	04/10/24 14:25	04/12/24 17:55	207-08-9	
Benzoic Acid	<2390	ug/kg	22100	2390	5	04/10/24 14:25	04/12/24 17:55	65-85-0	
Benzyl alcohol	<804	ug/kg	8750	804	5	04/10/24 14:25	04/12/24 17:55	100-51-6	
4-Bromophenylphenyl ether	<944	ug/kg	4380	944	5	04/10/24 14:25	04/12/24 17:55	101-55-3	
Butylbenzylphthalate	<891	ug/kg	4380	891	5	04/10/24 14:25	04/12/24 17:55	85-68-7	
Carbazole	<901	ug/kg	4380	901	5	04/10/24 14:25	04/12/24 17:55	86-74-8	
4-Chloro-3-methylphenol	<918	ug/kg	8750	918	5	04/10/24 14:25	04/12/24 17:55	59-50-7	
4-Chloroaniline	<686	ug/kg	8750	686	5	04/10/24 14:25	04/12/24 17:55	106-47-8	
bis(2-Chloroethoxy)methane	<870	ug/kg	4380	870	5	04/10/24 14:25	04/12/24 17:55	111-91-1	
bis(2-Chloroethyl) ether	<883	ug/kg	4380	883	5	04/10/24 14:25	04/12/24 17:55	111-44-4	
bis(2-Chloroisopropyl) ether	<948	ug/kg	4380	948	5	04/10/24 14:25	04/12/24 17:55	108-60-1	
2-Chloronaphthalene	<922	ug/kg	4380	922	5	04/10/24 14:25	04/12/24 17:55	91-58-7	
2-Chlorophenol	<894	ug/kg	4380	894	5	04/10/24 14:25	04/12/24 17:55	95-57-8	
4-Chlorophenylphenyl ether	<939	ug/kg	4380	939	5	04/10/24 14:25	04/12/24 17:55	7005-72-3	
Chrysene	<975	ug/kg	4380	975	5	04/10/24 14:25	04/12/24 17:55	218-01-9	
Dibenz(a,h)anthracene	<787	ug/kg	4380	787	5	04/10/24 14:25	04/12/24 17:55	53-70-3	
Dibenzofuran	<935	ug/kg	4380	935	5	04/10/24 14:25	04/12/24 17:55	132-64-9	
1,2-Dichlorobenzene	<871	ug/kg	4380	871	5	04/10/24 14:25	04/12/24 17:55	95-50-1	
1,3-Dichlorobenzene	<855	ug/kg	4380	855	5	04/10/24 14:25	04/12/24 17:55	541-73-1	
1,4-Dichlorobenzene	<844	ug/kg	4380	844	5	04/10/24 14:25	04/12/24 17:55	106-46-7	
3,3'-Dichlorobenzidine	<430	ug/kg	8750	430	5	04/10/24 14:25	04/12/24 17:55	91-94-1	
2,4-Dichlorophenol	<877	ug/kg	4380	877	5	04/10/24 14:25	04/12/24 17:55	120-83-2	
Diethylphthalate	<1000	ug/kg	4380	1000	5	04/10/24 14:25	04/12/24 17:55	84-66-2	
2,4-Dimethylphenol	<637	ug/kg	4380	637	5	04/10/24 14:25	04/12/24 17:55	105-67-9	
Dimethylphthalate	<909	ug/kg	4380	909	5	04/10/24 14:25	04/12/24 17:55	131-11-3	
Di-n-butylphthalate	<1040	ug/kg	4380	1040	5	04/10/24 14:25	04/12/24 17:55	84-74-2	
4,6-Dinitro-2-methylphenol	<757	ug/kg	22100	757	5	04/10/24 14:25	04/12/24 17:55	534-52-1	
2,4-Dinitrophenol	<1320	ug/kg	22100	1320	5	04/10/24 14:25	04/12/24 17:55	51-28-5	
2,4-Dinitrotoluene	<985	ug/kg	4380	985	5	04/10/24 14:25	04/12/24 17:55	121-14-2	
2,6-Dinitrotoluene	<853	ug/kg	4380	853	5	04/10/24 14:25	04/12/24 17:55	606-20-2	
Di-n-octylphthalate	<1070	ug/kg	4380	1070	5	04/10/24 14:25	04/12/24 17:55	117-84-0	
bis(2-Ethylhexyl)phthalate	<983	ug/kg	4380	983	5	04/10/24 14:25	04/12/24 17:55	117-81-7	
Fluoranthene	<964	ug/kg	4380	964	5	04/10/24 14:25	04/12/24 17:55	206-44-0	
Fluorene	<931	ug/kg	4380	931	5	04/10/24 14:25	04/12/24 17:55	86-73-7	
Hexachloro-1,3-butadiene	<938	ug/kg	4380	938	5	04/10/24 14:25	04/12/24 17:55	87-68-3	
Hexachlorobenzene	<915	ug/kg	4380	915	5	04/10/24 14:25	04/12/24 17:55	118-74-1	
Hexachlorocyclopentadiene	<2690	ug/kg	4380	2690	5	04/10/24 14:25	04/12/24 17:55	77-47-4	
Hexachloroethane	<802	ug/kg	4380	802	5	04/10/24 14:25	04/12/24 17:55	67-72-1	
Indeno(1,2,3-cd)pyrene	<895	ug/kg	4380	895	5	04/10/24 14:25	04/12/24 17:55	193-39-5	
Isophorone	<846	ug/kg	4380	846	5	04/10/24 14:25	04/12/24 17:55	78-59-1	
2-Methylnaphthalene	<887	ug/kg	4380	887	5	04/10/24 14:25	04/12/24 17:55	91-57-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD10/SD-1 Lab ID: 60450582003 Collected: 04/09/24 11:50 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<797	ug/kg	4380	797	5	04/10/24 14:25	04/12/24 17:55	95-48-7	
3&4-Methylphenol(m&p Cresol)	<813	ug/kg	4380	813	5	04/10/24 14:25	04/12/24 17:55	15831-10-4	
Naphthalene	<942	ug/kg	4380	942	5	04/10/24 14:25	04/12/24 17:55	91-20-3	
2-Nitroaniline	<725	ug/kg	8750	725	5	04/10/24 14:25	04/12/24 17:55	88-74-4	
3-Nitroaniline	<682	ug/kg	8750	682	5	04/10/24 14:25	04/12/24 17:55	99-09-2	
4-Nitroaniline	<749	ug/kg	8750	749	5	04/10/24 14:25	04/12/24 17:55	100-01-6	
Nitrobenzene	<927	ug/kg	4380	927	5	04/10/24 14:25	04/12/24 17:55	98-95-3	
2-Nitrophenol	<684	ug/kg	4380	684	5	04/10/24 14:25	04/12/24 17:55	88-75-5	
4-Nitrophenol	<645	ug/kg	22100	645	5	04/10/24 14:25	04/12/24 17:55	100-02-7	
N-Nitroso-di-n-propylamine	<834	ug/kg	4380	834	5	04/10/24 14:25	04/12/24 17:55	621-64-7	
N-Nitrosodiphenylamine	<870	ug/kg	4380	870	5	04/10/24 14:25	04/12/24 17:55	86-30-6	
Pentachlorophenol	<1450	ug/kg	22100	1450	5	04/10/24 14:25	04/12/24 17:55	87-86-5	
Phenanthrene	<935	ug/kg	4380	935	5	04/10/24 14:25	04/12/24 17:55	85-01-8	
Phenol	<824	ug/kg	4380	824	5	04/10/24 14:25	04/12/24 17:55	108-95-2	
Pyrene	<934	ug/kg	4380	934	5	04/10/24 14:25	04/12/24 17:55	129-00-0	
Pyridine	<649	ug/kg	4380	649	5	04/10/24 14:25	04/12/24 17:55	110-86-1	
1,2,4-Trichlorobenzene	<916	ug/kg	4380	916	5	04/10/24 14:25	04/12/24 17:55	120-82-1	
2,4,5-Trichlorophenol	<897	ug/kg	4380	897	5	04/10/24 14:25	04/12/24 17:55	95-95-4	
2,4,6-Trichlorophenol	<809	ug/kg	4380	809	5	04/10/24 14:25	04/12/24 17:55	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	94	%	30-120		5	04/10/24 14:25	04/12/24 17:55	4165-60-0	D3,P3
2-Fluorobiphenyl (S)	82	%	40-120		5	04/10/24 14:25	04/12/24 17:55	321-60-8	
Terphenyl-d14 (S)	88	%	45-120		5	04/10/24 14:25	04/12/24 17:55	1718-51-0	
Phenol-d6 (S)	97	%	40-120		5	04/10/24 14:25	04/12/24 17:55	13127-88-3	
2-Fluorophenol (S)	96	%	40-120		5	04/10/24 14:25	04/12/24 17:55	367-12-4	
2,4,6-Tribromophenol (S)	89	%	35-120		5	04/10/24 14:25	04/12/24 17:55	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	175J	mg/kg	201	68.2	10	04/11/24 13:51	04/12/24 16:34		D3
TPH-DRO	<68.2	mg/kg	201	68.2	10	04/11/24 13:51	04/12/24 16:34		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	93	%	35-120		10	04/11/24 13:51	04/12/24 16:34	4165-60-0	
2-Fluorobiphenyl (S)	101	%	50-120		10	04/11/24 13:51	04/12/24 16:34	321-60-8	
Terphenyl-d14 (S)	102	%	45-120		10	04/11/24 13:51	04/12/24 16:34	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<89.2	ug/kg	93.5	89.2	1	04/10/24 09:05	04/10/24 17:23	67-64-1	
Benzene	<0.68	ug/kg	7.4	0.68	1	04/10/24 09:05	04/10/24 17:23	71-43-2	
Bromobenzene	<0.92	ug/kg	7.4	0.92	1	04/10/24 09:05	04/10/24 17:23	108-86-1	
Bromochloromethane	<1.1	ug/kg	7.4	1.1	1	04/10/24 09:05	04/10/24 17:23	74-97-5	
Bromodichloromethane	<1.3	ug/kg	19.3	1.3	1	04/10/24 09:05	04/10/24 17:23	75-27-4	
Bromoform	<0.58	ug/kg	19.3	0.58	1	04/10/24 09:05	04/10/24 17:23	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD10/SD-1 Lab ID: 60450582003 Collected: 04/09/24 11:50 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<9.2	ug/kg	19.3	9.2	1	04/10/24 09:05	04/10/24 17:23	74-83-9	
2-Butanone (MEK)	<47.3	ug/kg	93.5	47.3	1	04/10/24 09:05	04/10/24 17:23	78-93-3	
n-Butylbenzene	<0.71	ug/kg	7.4	0.71	1	04/10/24 09:05	04/10/24 17:23	104-51-8	
sec-Butylbenzene	<0.73	ug/kg	7.4	0.73	1	04/10/24 09:05	04/10/24 17:23	135-98-8	
tert-Butylbenzene	<0.48	ug/kg	7.4	0.48	1	04/10/24 09:05	04/10/24 17:23	98-06-6	
Carbon disulfide	10.9	ug/kg	7.4	3.4	1	04/10/24 09:05	04/10/24 17:23	75-15-0	
Carbon tetrachloride	<2.5	ug/kg	7.4	2.5	1	04/10/24 09:05	04/10/24 17:23	56-23-5	
Chlorobenzene	<0.43	ug/kg	7.4	0.43	1	04/10/24 09:05	04/10/24 17:23	108-90-7	
Chloroethane	<12.3	ug/kg	37.1	12.3	1	04/10/24 09:05	04/10/24 17:23	75-00-3	
Chloroform	<2.7	ug/kg	7.4	2.7	1	04/10/24 09:05	04/10/24 17:23	67-66-3	
Chloromethane	<1.8	ug/kg	19.3	1.8	1	04/10/24 09:05	04/10/24 17:23	74-87-3	
2-Chlorotoluene	<1.0	ug/kg	7.4	1.0	1	04/10/24 09:05	04/10/24 17:23	95-49-8	
4-Chlorotoluene	<0.58	ug/kg	7.4	0.58	1	04/10/24 09:05	04/10/24 17:23	106-43-4	
1,2-Dibromo-3-chloropropane	<4.9	ug/kg	19.3	4.9	1	04/10/24 09:05	04/10/24 17:23	96-12-8	
Dibromochloromethane	<0.45	ug/kg	7.4	0.45	1	04/10/24 09:05	04/10/24 17:23	124-48-1	
1,2-Dibromoethane (EDB)	<0.78	ug/kg	7.4	0.78	1	04/10/24 09:05	04/10/24 17:23	106-93-4	
Dibromomethane	<2.2	ug/kg	7.4	2.2	1	04/10/24 09:05	04/10/24 17:23	74-95-3	
1,2-Dichlorobenzene	<1.2	ug/kg	7.4	1.2	1	04/10/24 09:05	04/10/24 17:23	95-50-1	
1,3-Dichlorobenzene	<0.94	ug/kg	7.4	0.94	1	04/10/24 09:05	04/10/24 17:23	541-73-1	
1,4-Dichlorobenzene	<1.3	ug/kg	7.4	1.3	1	04/10/24 09:05	04/10/24 17:23	106-46-7	
Dichlorodifluoromethane	<1.4	ug/kg	19.3	1.4	1	04/10/24 09:05	04/10/24 17:23	75-71-8	
1,1-Dichloroethane	<1.7	ug/kg	7.4	1.7	1	04/10/24 09:05	04/10/24 17:23	75-34-3	
1,2-Dichloroethane	<1.4	ug/kg	7.4	1.4	1	04/10/24 09:05	04/10/24 17:23	107-06-2	
1,2-Dichloroethene (Total)	<2.8	ug/kg	14.8	2.8	1	04/10/24 09:05	04/10/24 17:23	540-59-0	
1,1-Dichloroethene	<3.0	ug/kg	7.4	3.0	1	04/10/24 09:05	04/10/24 17:23	75-35-4	
cis-1,2-Dichloroethene	<1.4	ug/kg	7.4	1.4	1	04/10/24 09:05	04/10/24 17:23	156-59-2	
trans-1,2-Dichloroethene	<1.6	ug/kg	7.4	1.6	1	04/10/24 09:05	04/10/24 17:23	156-60-5	
1,2-Dichloropropane	<1.5	ug/kg	7.4	1.5	1	04/10/24 09:05	04/10/24 17:23	78-87-5	
1,3-Dichloropropane	<0.29	ug/kg	7.4	0.29	1	04/10/24 09:05	04/10/24 17:23	142-28-9	
2,2-Dichloropropane	<2.2	ug/kg	7.4	2.2	1	04/10/24 09:05	04/10/24 17:23	594-20-7	
1,1-Dichloropropene	<1.6	ug/kg	7.4	1.6	1	04/10/24 09:05	04/10/24 17:23	563-58-6	
cis-1,3-Dichloropropene	<1.1	ug/kg	7.4	1.1	1	04/10/24 09:05	04/10/24 17:23	10061-01-5	
trans-1,3-Dichloropropene	<0.89	ug/kg	7.4	0.89	1	04/10/24 09:05	04/10/24 17:23	10061-02-6	
Ethylbenzene	<1.3	ug/kg	7.4	1.3	1	04/10/24 09:05	04/10/24 17:23	100-41-4	
Hexachloro-1,3-butadiene	<1.3	ug/kg	7.4	1.3	1	04/10/24 09:05	04/10/24 17:23	87-68-3	
2-Hexanone	<15.4	ug/kg	93.5	15.4	1	04/10/24 09:05	04/10/24 17:23	591-78-6	
Isopropylbenzene (Cumene)	<0.47	ug/kg	7.4	0.47	1	04/10/24 09:05	04/10/24 17:23	98-82-8	
p-Isopropyltoluene	<0.65	ug/kg	7.4	0.65	1	04/10/24 09:05	04/10/24 17:23	99-87-6	
Methylene Chloride	<28.8	ug/kg	37.1	28.8	1	04/10/24 09:05	04/10/24 17:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	<10.4	ug/kg	93.5	10.4	1	04/10/24 09:05	04/10/24 17:23	108-10-1	
Methyl-tert-butyl ether	<1.4	ug/kg	7.4	1.4	1	04/10/24 09:05	04/10/24 17:23	1634-04-4	
Naphthalene	<1.1	ug/kg	14.8	1.1	1	04/10/24 09:05	04/10/24 17:23	91-20-3	
n-Propylbenzene	<0.90	ug/kg	7.4	0.90	1	04/10/24 09:05	04/10/24 17:23	103-65-1	
Styrene	<0.60	ug/kg	7.4	0.60	1	04/10/24 09:05	04/10/24 17:23	100-42-5	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD10/SD-1 Lab ID: 60450582003 Collected: 04/09/24 11:50 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<1.1	ug/kg	7.4	1.1	1	04/10/24 09:05	04/10/24 17:23	630-20-6	
1,1,2,2-Tetrachloroethane	<1.0	ug/kg	7.4	1.0	1	04/10/24 09:05	04/10/24 17:23	79-34-5	
Tetrachloroethene	<0.79	ug/kg	7.4	0.79	1	04/10/24 09:05	04/10/24 17:23	127-18-4	
Toluene	<6.6	ug/kg	29.7	6.6	1	04/10/24 09:05	04/10/24 17:23	108-88-3	
1,2,3-Trichlorobenzene	<0.86	ug/kg	7.4	0.86	1	04/10/24 09:05	04/10/24 17:23	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/kg	7.4	0.73	1	04/10/24 09:05	04/10/24 17:23	120-82-1	
1,1,1-Trichloroethane	<1.5	ug/kg	7.4	1.5	1	04/10/24 09:05	04/10/24 17:23	71-55-6	
1,1,2-Trichloroethane	<1.1	ug/kg	7.4	1.1	1	04/10/24 09:05	04/10/24 17:23	79-00-5	
Trichloroethene	<2.8	ug/kg	7.4	2.8	1	04/10/24 09:05	04/10/24 17:23	79-01-6	
Trichlorofluoromethane	<14.2	ug/kg	19.3	14.2	1	04/10/24 09:05	04/10/24 17:23	75-69-4	
1,2,3-Trichloropropane	<2.3	ug/kg	7.4	2.3	1	04/10/24 09:05	04/10/24 17:23	96-18-4	
1,2,4-Trimethylbenzene	<1.0	ug/kg	7.4	1.0	1	04/10/24 09:05	04/10/24 17:23	95-63-6	
1,3,5-Trimethylbenzene	<0.64	ug/kg	7.4	0.64	1	04/10/24 09:05	04/10/24 17:23	108-67-8	
Vinyl chloride	<1.4	ug/kg	19.3	1.4	1	04/10/24 09:05	04/10/24 17:23	75-01-4	
Xylene (Total)	<5.5	ug/kg	22.3	5.5	1	04/10/24 09:05	04/10/24 17:23	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	109	%	80-120		1	04/10/24 09:05	04/10/24 17:23	2037-26-5	
4-Bromofluorobenzene (S)	101	%	83-119		1	04/10/24 09:05	04/10/24 17:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/10/24 09:05	04/10/24 17:23	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	0.33J	mg/kg	0.54	0.073	1	04/12/24 08:18	04/12/24 13:18		
<b>Surrogates</b>									
Toluene-d8 (S)	107	%	78-122		1	04/12/24 08:18	04/12/24 13:18	2037-26-5	IO
4-Bromofluorobenzene (S)	124	%	69-133		1	04/12/24 08:18	04/12/24 13:18	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/12/24 08:18	04/12/24 13:18	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	26.7	%	0.50	0.50	1		04/10/24 13:58		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	84.5	%			1	04/12/24 08:59	04/12/24 09:06		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<0.99	mg/kg	1.2	0.99	1	04/15/24 09:34	04/16/24 15:43	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.16	mg/kg	0.20	0.16	1	04/18/24 08:30	04/18/24 12:01	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD10/SD-1 Lab ID: 60450582003 Collected: 04/09/24 11:50 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<8.2	mg/kg	14.5	8.2	10	04/12/24 08:00	04/12/24 19:31	14797-55-8	
Nitrite as N	<7.6	mg/kg	14.5	7.6	10	04/12/24 08:00	04/12/24 19:31	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD09/SD-1 Lab ID: 60450582004 Collected: 04/09/24 13:30 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00540	mg/kg	0.0287	0.00540	1	04/17/24 09:56	04/19/24 00:30	309-00-2	
alpha-BHC	<0.00528	mg/kg	0.0287	0.00528	1	04/17/24 09:56	04/19/24 00:30	319-84-6	
beta-BHC	<0.00544	mg/kg	0.0287	0.00544	1	04/17/24 09:56	04/19/24 00:30	319-85-7	
delta-BHC	<0.00497	mg/kg	0.0287	0.00497	1	04/17/24 09:56	04/19/24 00:30	319-86-8	
gamma-BHC (Lindane)	<0.00494	mg/kg	0.0287	0.00494	1	04/17/24 09:56	04/19/24 00:30	58-89-9	
Chlordane (Technical)	<0.148	mg/kg	0.431	0.148	1	04/17/24 09:56	04/19/24 00:30	57-74-9	
4,4'-DDD	<0.00531	mg/kg	0.0287	0.00531	1	04/17/24 09:56	04/19/24 00:30	72-54-8	
4,4'-DDE	<0.00525	mg/kg	0.0287	0.00525	1	04/17/24 09:56	04/19/24 00:30	72-55-9	
4,4'-DDT	<0.00900	mg/kg	0.0287	0.00900	1	04/17/24 09:56	04/19/24 00:30	50-29-3	
Dieldrin	<0.00494	mg/kg	0.0287	0.00494	1	04/17/24 09:56	04/19/24 00:30	60-57-1	
Endosulfan I	<0.00521	mg/kg	0.0287	0.00521	1	04/17/24 09:56	04/19/24 00:30	959-98-8	
Endosulfan II	<0.00481	mg/kg	0.0287	0.00481	1	04/17/24 09:56	04/19/24 00:30	33213-65-9	
Endosulfan sulfate	<0.00523	mg/kg	0.0287	0.00523	1	04/17/24 09:56	04/19/24 00:30	1031-07-8	
Endrin	<0.00503	mg/kg	0.0287	0.00503	1	04/17/24 09:56	04/19/24 00:30	72-20-8	LO
Endrin aldehyde	<0.00487	mg/kg	0.0287	0.00487	1	04/17/24 09:56	04/19/24 00:30	7421-93-4	
Endrin ketone	<0.0102	mg/kg	0.0287	0.0102	1	04/17/24 09:56	04/19/24 00:30	53494-70-5	
Hexachlorobenzene	<0.00497	mg/kg	0.0287	0.00497	1	04/17/24 09:56	04/19/24 00:30	118-74-1	
Heptachlor	<0.00615	mg/kg	0.0287	0.00615	1	04/17/24 09:56	04/19/24 00:30	76-44-8	
Heptachlor epoxide	<0.00487	mg/kg	0.0287	0.00487	1	04/17/24 09:56	04/19/24 00:30	1024-57-3	
Methoxychlor	<0.00695	mg/kg	0.0287	0.00695	1	04/17/24 09:56	04/19/24 00:30	72-43-5	
Toxaphene	<0.178	mg/kg	0.574	0.178	1	04/17/24 09:56	04/19/24 00:30	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	72.3	%	10.0-135		1	04/17/24 09:56	04/19/24 00:30	2051-24-3	
Tetrachloro-m-xylene (S)	80.1	%	10.0-139		1	04/17/24 09:56	04/19/24 00:30	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.0101	mg/kg	0.101	0.0101	1	04/15/24 13:10	04/16/24 20:56	94-75-7	
Dalapon	<0.0162	mg/kg	0.101	0.0162	1	04/15/24 13:10	04/16/24 20:56	127-20-8	
2,4-DB	<0.0426	mg/kg	0.101	0.0426	1	04/15/24 13:10	04/16/24 20:56	94-82-6	
Dicamba	<0.0225	mg/kg	0.101	0.0225	1	04/15/24 13:10	04/16/24 20:56	1918-00-9	
Dichlorprop	<0.0352	mg/kg	0.101	0.0352	1	04/15/24 13:10	04/16/24 20:56	120-36-5	
Dinoseb	<0.0100	mg/kg	0.101	0.0100	1	04/15/24 13:10	04/16/24 20:56	88-85-7	
MCPA	<0.636	mg/kg	9.33	0.636	1	04/15/24 13:10	04/16/24 20:56	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.527	mg/kg	9.33	0.527	1	04/15/24 13:10	04/16/24 20:56	93-65-2	
2,4,5-T	<0.0122	mg/kg	0.101	0.0122	1	04/15/24 13:10	04/16/24 20:56	93-76-5	
2,4,5-TP (Silvex)	<0.0154	mg/kg	0.101	0.0154	1	04/15/24 13:10	04/16/24 20:56	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	43.1	%	22.0-132		1	04/15/24 13:10	04/16/24 20:56	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<11.6	ug/kg	42.9	11.6	1	04/12/24 10:44	04/15/24 18:23	12674-11-2	
PCB-1221 (Aroclor 1221)	<14.4	ug/kg	42.9	14.4	1	04/12/24 10:44	04/15/24 18:23	11104-28-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD09/SD-1 Lab ID: 60450582004 Collected: 04/09/24 13:30 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<14.4	ug/kg	42.9	14.4	1	04/12/24 10:44	04/15/24 18:23	11141-16-5	
PCB-1242 (Aroclor 1242)	<14.4	ug/kg	42.9	14.4	1	04/12/24 10:44	04/15/24 18:23	53469-21-9	
PCB-1248 (Aroclor 1248)	<14.4	ug/kg	42.9	14.4	1	04/12/24 10:44	04/15/24 18:23	12672-29-6	
PCB-1254 (Aroclor 1254)	<14.4	ug/kg	42.9	14.4	1	04/12/24 10:44	04/15/24 18:23	11097-69-1	
PCB-1260 (Aroclor 1260)	<14.4	ug/kg	42.9	14.4	1	04/12/24 10:44	04/15/24 18:23	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	81	%	20-120		1	04/12/24 10:44	04/15/24 18:23	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	13100	mg/kg	71.8	9.91	5	04/14/24 22:12	04/22/24 17:12	7429-90-5	P6,R1
Antimony	0.569J	mg/kg	4.31	0.238	5	04/14/24 22:12	04/22/24 17:12	7440-36-0	B,J,ML,PH
Arsenic	6.35	mg/kg	1.44	0.144	5	04/14/24 22:12	04/22/24 17:12	7440-38-2	
Barium	168	mg/kg	3.59	0.218	5	04/14/24 22:12	04/22/24 17:12	7440-39-3	MH,R1
Beryllium	0.781J	mg/kg	3.59	0.198	5	04/14/24 22:12	04/22/24 17:12	7440-41-7	J
Cadmium	0.493J	mg/kg	1.44	0.123	5	04/14/24 22:12	04/22/24 17:12	7440-43-9	J,PH
Calcium	84600	mg/kg	718	108	5	04/14/24 22:12	04/22/24 17:12	7440-70-2	P6,PH
Chromium	24.1	mg/kg	7.18	0.425	5	04/14/24 22:12	04/22/24 17:12	7440-47-3	
Cobalt	11.2	mg/kg	1.44	0.0663	5	04/14/24 22:12	04/22/24 17:12	7440-48-4	
Copper	16.1	mg/kg	7.18	0.190	5	04/14/24 22:12	04/22/24 17:12	7440-50-8	
Iron	17700	mg/kg	71.8	12.9	5	04/14/24 22:12	04/22/24 17:12	7439-89-6	P6,PH,R1
Lead	17.3	mg/kg	2.87	0.142	5	04/14/24 22:12	04/22/24 17:12	7439-92-1	PH
Magnesium	6540	mg/kg	718	65.9	5	04/14/24 22:12	04/22/24 17:12	7439-95-4	P6,R1
Manganese	1110	mg/kg	3.59	0.385	5	04/14/24 22:12	04/22/24 17:12	7439-96-5	P6,PH,R1
Molybdenum	1.73J	mg/kg	3.59	0.145	5	04/14/24 22:12	04/22/24 17:12	7439-98-7	J,PH
Nickel	29.3	mg/kg	3.59	0.283	5	04/14/24 22:12	04/22/24 17:12	7440-02-0	
Potassium	3010	mg/kg	718	97.6	5	04/14/24 22:12	04/22/24 17:12	7440-09-7	MH,R1
Selenium	1.72J	mg/kg	3.59	0.258	5	04/14/24 22:12	04/22/24 17:12	7782-49-2	J,PH
Silver	<0.124	mg/kg	0.718	0.124	5	04/14/24 22:12	04/22/24 17:12	7440-22-4	
Sodium	315J	mg/kg	718	110	5	04/14/24 22:12	04/22/24 17:12	7440-23-5	J,PH
Thallium	0.320J	mg/kg	2.87	0.0933	5	04/14/24 22:12	04/22/24 17:12	7440-28-0	J,PH
Vanadium	28.7	mg/kg	3.59	0.268	5	04/14/24 22:12	04/22/24 17:12	7440-62-2	
Zinc	74.8	mg/kg	35.9	1.06	5	04/14/24 22:12	04/22/24 17:12	7440-66-6	PH
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0258	mg/kg	0.0574	0.0258	1	04/12/24 15:37	04/13/24 10:28	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<470	ug/kg	2190	470	5	04/10/24 14:25	04/12/24 18:17	83-32-9	
Acenaphthylene	<358	ug/kg	2190	358	5	04/10/24 14:25	04/12/24 18:17	208-96-8	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD09/SD-1 Lab ID: 60450582004 Collected: 04/09/24 13:30 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Anthracene	<458	ug/kg	2190	458	5	04/10/24 14:25	04/12/24 18:17	120-12-7	
Benzo(a)anthracene	<463	ug/kg	2190	463	5	04/10/24 14:25	04/12/24 18:17	56-55-3	
Benzo(a)pyrene	<471	ug/kg	2190	471	5	04/10/24 14:25	04/12/24 18:17	50-32-8	
Benzo(b)fluoranthene	<534	ug/kg	2190	534	5	04/10/24 14:25	04/12/24 18:17	205-99-2	
Benzo(g,h,i)perylene	<380	ug/kg	2190	380	5	04/10/24 14:25	04/12/24 18:17	191-24-2	
Benzo(k)fluoranthene	<471	ug/kg	2190	471	5	04/10/24 14:25	04/12/24 18:17	207-08-9	
Benzoic Acid	<1190	ug/kg	11100	1190	5	04/10/24 14:25	04/12/24 18:17	65-85-0	
Benzyl alcohol	<402	ug/kg	4380	402	5	04/10/24 14:25	04/12/24 18:17	100-51-6	
4-Bromophenylphenyl ether	<472	ug/kg	2190	472	5	04/10/24 14:25	04/12/24 18:17	101-55-3	
Butylbenzylphthalate	<446	ug/kg	2190	446	5	04/10/24 14:25	04/12/24 18:17	85-68-7	
Carbazole	<450	ug/kg	2190	450	5	04/10/24 14:25	04/12/24 18:17	86-74-8	
4-Chloro-3-methylphenol	<459	ug/kg	4380	459	5	04/10/24 14:25	04/12/24 18:17	59-50-7	
4-Chloroaniline	<343	ug/kg	4380	343	5	04/10/24 14:25	04/12/24 18:17	106-47-8	
bis(2-Chloroethoxy)methane	<435	ug/kg	2190	435	5	04/10/24 14:25	04/12/24 18:17	111-91-1	
bis(2-Chloroethyl) ether	<442	ug/kg	2190	442	5	04/10/24 14:25	04/12/24 18:17	111-44-4	
bis(2-Chloroisopropyl) ether	<474	ug/kg	2190	474	5	04/10/24 14:25	04/12/24 18:17	108-60-1	
2-Chloronaphthalene	<461	ug/kg	2190	461	5	04/10/24 14:25	04/12/24 18:17	91-58-7	
2-Chlorophenol	<447	ug/kg	2190	447	5	04/10/24 14:25	04/12/24 18:17	95-57-8	
4-Chlorophenylphenyl ether	<470	ug/kg	2190	470	5	04/10/24 14:25	04/12/24 18:17	7005-72-3	
Chrysene	<487	ug/kg	2190	487	5	04/10/24 14:25	04/12/24 18:17	218-01-9	
Dibenz(a,h)anthracene	<393	ug/kg	2190	393	5	04/10/24 14:25	04/12/24 18:17	53-70-3	
Dibenzofuran	<468	ug/kg	2190	468	5	04/10/24 14:25	04/12/24 18:17	132-64-9	
1,2-Dichlorobenzene	<436	ug/kg	2190	436	5	04/10/24 14:25	04/12/24 18:17	95-50-1	
1,3-Dichlorobenzene	<428	ug/kg	2190	428	5	04/10/24 14:25	04/12/24 18:17	541-73-1	
1,4-Dichlorobenzene	<422	ug/kg	2190	422	5	04/10/24 14:25	04/12/24 18:17	106-46-7	
3,3'-Dichlorobenzidine	<215	ug/kg	4380	215	5	04/10/24 14:25	04/12/24 18:17	91-94-1	
2,4-Dichlorophenol	<438	ug/kg	2190	438	5	04/10/24 14:25	04/12/24 18:17	120-83-2	
Diethylphthalate	<500	ug/kg	2190	500	5	04/10/24 14:25	04/12/24 18:17	84-66-2	
2,4-Dimethylphenol	<318	ug/kg	2190	318	5	04/10/24 14:25	04/12/24 18:17	105-67-9	
Dimethylphthalate	<454	ug/kg	2190	454	5	04/10/24 14:25	04/12/24 18:17	131-11-3	
Di-n-butylphthalate	<518	ug/kg	2190	518	5	04/10/24 14:25	04/12/24 18:17	84-74-2	
4,6-Dinitro-2-methylphenol	<379	ug/kg	11100	379	5	04/10/24 14:25	04/12/24 18:17	534-52-1	
2,4-Dinitrophenol	<661	ug/kg	11100	661	5	04/10/24 14:25	04/12/24 18:17	51-28-5	
2,4-Dinitrotoluene	<493	ug/kg	2190	493	5	04/10/24 14:25	04/12/24 18:17	121-14-2	
2,6-Dinitrotoluene	<426	ug/kg	2190	426	5	04/10/24 14:25	04/12/24 18:17	606-20-2	
Di-n-octylphthalate	<533	ug/kg	2190	533	5	04/10/24 14:25	04/12/24 18:17	117-84-0	
bis(2-Ethylhexyl)phthalate	<491	ug/kg	2190	491	5	04/10/24 14:25	04/12/24 18:17	117-81-7	
Fluoranthene	<482	ug/kg	2190	482	5	04/10/24 14:25	04/12/24 18:17	206-44-0	
Fluorene	<466	ug/kg	2190	466	5	04/10/24 14:25	04/12/24 18:17	86-73-7	
Hexachloro-1,3-butadiene	<469	ug/kg	2190	469	5	04/10/24 14:25	04/12/24 18:17	87-68-3	
Hexachlorobenzene	<458	ug/kg	2190	458	5	04/10/24 14:25	04/12/24 18:17	118-74-1	
Hexachlorocyclopentadiene	<1350	ug/kg	2190	1350	5	04/10/24 14:25	04/12/24 18:17	77-47-4	
Hexachloroethane	<401	ug/kg	2190	401	5	04/10/24 14:25	04/12/24 18:17	67-72-1	
Indeno(1,2,3-cd)pyrene	<448	ug/kg	2190	448	5	04/10/24 14:25	04/12/24 18:17	193-39-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD09/SD-1 Lab ID: 60450582004 Collected: 04/09/24 13:30 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Isophorone	<423	ug/kg	2190	423	5	04/10/24 14:25	04/12/24 18:17	78-59-1	
2-Methylnaphthalene	<444	ug/kg	2190	444	5	04/10/24 14:25	04/12/24 18:17	91-57-6	
2-Methylphenol(o-Cresol)	<399	ug/kg	2190	399	5	04/10/24 14:25	04/12/24 18:17	95-48-7	
3&4-Methylphenol(m&p Cresol)	<407	ug/kg	2190	407	5	04/10/24 14:25	04/12/24 18:17	15831-10-4	
Naphthalene	<471	ug/kg	2190	471	5	04/10/24 14:25	04/12/24 18:17	91-20-3	
2-Nitroaniline	<363	ug/kg	4380	363	5	04/10/24 14:25	04/12/24 18:17	88-74-4	
3-Nitroaniline	<341	ug/kg	4380	341	5	04/10/24 14:25	04/12/24 18:17	99-09-2	
4-Nitroaniline	<375	ug/kg	4380	375	5	04/10/24 14:25	04/12/24 18:17	100-01-6	
Nitrobenzene	<464	ug/kg	2190	464	5	04/10/24 14:25	04/12/24 18:17	98-95-3	
2-Nitrophenol	<342	ug/kg	2190	342	5	04/10/24 14:25	04/12/24 18:17	88-75-5	
4-Nitrophenol	<322	ug/kg	11100	322	5	04/10/24 14:25	04/12/24 18:17	100-02-7	
N-Nitroso-di-n-propylamine	<417	ug/kg	2190	417	5	04/10/24 14:25	04/12/24 18:17	621-64-7	
N-Nitrosodiphenylamine	<435	ug/kg	2190	435	5	04/10/24 14:25	04/12/24 18:17	86-30-6	
Pentachlorophenol	<723	ug/kg	11100	723	5	04/10/24 14:25	04/12/24 18:17	87-86-5	
Phenanthrene	<468	ug/kg	2190	468	5	04/10/24 14:25	04/12/24 18:17	85-01-8	
Phenol	<412	ug/kg	2190	412	5	04/10/24 14:25	04/12/24 18:17	108-95-2	
Pyrene	<467	ug/kg	2190	467	5	04/10/24 14:25	04/12/24 18:17	129-00-0	
Pyridine	<324	ug/kg	2190	324	5	04/10/24 14:25	04/12/24 18:17	110-86-1	
1,2,4-Trichlorobenzene	<458	ug/kg	2190	458	5	04/10/24 14:25	04/12/24 18:17	120-82-1	
2,4,5-Trichlorophenol	<448	ug/kg	2190	448	5	04/10/24 14:25	04/12/24 18:17	95-95-4	
2,4,6-Trichlorophenol	<405	ug/kg	2190	405	5	04/10/24 14:25	04/12/24 18:17	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	77	%	30-120		5	04/10/24 14:25	04/12/24 18:17	4165-60-0	D3
2-Fluorobiphenyl (S)	69	%	40-120		5	04/10/24 14:25	04/12/24 18:17	321-60-8	
Terphenyl-d14 (S)	75	%	45-120		5	04/10/24 14:25	04/12/24 18:17	1718-51-0	
Phenol-d6 (S)	79	%	40-120		5	04/10/24 14:25	04/12/24 18:17	13127-88-3	
2-Fluorophenol (S)	77	%	40-120		5	04/10/24 14:25	04/12/24 18:17	367-12-4	
2,4,6-Tribromophenol (S)	72	%	35-120		5	04/10/24 14:25	04/12/24 18:17	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	34.1	mg/kg	19.7	6.7	1	04/11/24 13:51	04/12/24 16:54		
TPH-DRO	8.6J	mg/kg	19.7	6.7	1	04/11/24 13:51	04/12/24 16:54		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	87	%	35-120		1	04/11/24 13:51	04/12/24 16:54	4165-60-0	
2-Fluorobiphenyl (S)	93	%	50-120		1	04/11/24 13:51	04/12/24 16:54	321-60-8	
Terphenyl-d14 (S)	91	%	45-120		1	04/11/24 13:51	04/12/24 16:54	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<85.4	ug/kg	89.5	85.4	1	04/10/24 09:05	04/10/24 17:42	67-64-1	
Benzene	<0.65	ug/kg	7.1	0.65	1	04/10/24 09:05	04/10/24 17:42	71-43-2	
Bromobenzene	<0.88	ug/kg	7.1	0.88	1	04/10/24 09:05	04/10/24 17:42	108-86-1	
Bromochloromethane	<1.1	ug/kg	7.1	1.1	1	04/10/24 09:05	04/10/24 17:42	74-97-5	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD09/SD-1 Lab ID: 60450582004 Collected: 04/09/24 13:30 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromodichloromethane	<1.2	ug/kg	18.5	1.2	1	04/10/24 09:05	04/10/24 17:42	75-27-4	
Bromoform	<0.55	ug/kg	18.5	0.55	1	04/10/24 09:05	04/10/24 17:42	75-25-2	
Bromomethane	<8.8	ug/kg	18.5	8.8	1	04/10/24 09:05	04/10/24 17:42	74-83-9	
2-Butanone (MEK)	<45.3	ug/kg	89.5	45.3	1	04/10/24 09:05	04/10/24 17:42	78-93-3	
n-Butylbenzene	<0.68	ug/kg	7.1	0.68	1	04/10/24 09:05	04/10/24 17:42	104-51-8	
sec-Butylbenzene	<0.70	ug/kg	7.1	0.70	1	04/10/24 09:05	04/10/24 17:42	135-98-8	
tert-Butylbenzene	<0.46	ug/kg	7.1	0.46	1	04/10/24 09:05	04/10/24 17:42	98-06-6	
Carbon disulfide	<3.3	ug/kg	7.1	3.3	1	04/10/24 09:05	04/10/24 17:42	75-15-0	
Carbon tetrachloride	<2.4	ug/kg	7.1	2.4	1	04/10/24 09:05	04/10/24 17:42	56-23-5	
Chlorobenzene	<0.41	ug/kg	7.1	0.41	1	04/10/24 09:05	04/10/24 17:42	108-90-7	
Chloroethane	<11.8	ug/kg	35.5	11.8	1	04/10/24 09:05	04/10/24 17:42	75-00-3	
Chloroform	<2.6	ug/kg	7.1	2.6	1	04/10/24 09:05	04/10/24 17:42	67-66-3	
Chloromethane	<1.7	ug/kg	18.5	1.7	1	04/10/24 09:05	04/10/24 17:42	74-87-3	
2-Chlorotoluene	<0.99	ug/kg	7.1	0.99	1	04/10/24 09:05	04/10/24 17:42	95-49-8	
4-Chlorotoluene	<0.56	ug/kg	7.1	0.56	1	04/10/24 09:05	04/10/24 17:42	106-43-4	
1,2-Dibromo-3-chloropropane	<4.7	ug/kg	18.5	4.7	1	04/10/24 09:05	04/10/24 17:42	96-12-8	
Dibromochloromethane	<0.43	ug/kg	7.1	0.43	1	04/10/24 09:05	04/10/24 17:42	124-48-1	
1,2-Dibromoethane (EDB)	<0.75	ug/kg	7.1	0.75	1	04/10/24 09:05	04/10/24 17:42	106-93-4	
Dibromomethane	<2.1	ug/kg	7.1	2.1	1	04/10/24 09:05	04/10/24 17:42	74-95-3	
1,2-Dichlorobenzene	<1.2	ug/kg	7.1	1.2	1	04/10/24 09:05	04/10/24 17:42	95-50-1	
1,3-Dichlorobenzene	<0.90	ug/kg	7.1	0.90	1	04/10/24 09:05	04/10/24 17:42	541-73-1	
1,4-Dichlorobenzene	<1.2	ug/kg	7.1	1.2	1	04/10/24 09:05	04/10/24 17:42	106-46-7	
Dichlorodifluoromethane	<1.3	ug/kg	18.5	1.3	1	04/10/24 09:05	04/10/24 17:42	75-71-8	
1,1-Dichloroethane	<1.6	ug/kg	7.1	1.6	1	04/10/24 09:05	04/10/24 17:42	75-34-3	
1,2-Dichloroethane	<1.4	ug/kg	7.1	1.4	1	04/10/24 09:05	04/10/24 17:42	107-06-2	
1,2-Dichloroethene (Total)	<2.7	ug/kg	14.2	2.7	1	04/10/24 09:05	04/10/24 17:42	540-59-0	
1,1-Dichloroethene	<2.9	ug/kg	7.1	2.9	1	04/10/24 09:05	04/10/24 17:42	75-35-4	
cis-1,2-Dichloroethene	<1.3	ug/kg	7.1	1.3	1	04/10/24 09:05	04/10/24 17:42	156-59-2	
trans-1,2-Dichloroethene	<1.6	ug/kg	7.1	1.6	1	04/10/24 09:05	04/10/24 17:42	156-60-5	
1,2-Dichloropropane	<1.5	ug/kg	7.1	1.5	1	04/10/24 09:05	04/10/24 17:42	78-87-5	
1,3-Dichloropropane	<0.28	ug/kg	7.1	0.28	1	04/10/24 09:05	04/10/24 17:42	142-28-9	
2,2-Dichloropropane	<2.1	ug/kg	7.1	2.1	1	04/10/24 09:05	04/10/24 17:42	594-20-7	
1,1-Dichloropropene	<1.5	ug/kg	7.1	1.5	1	04/10/24 09:05	04/10/24 17:42	563-58-6	
cis-1,3-Dichloropropene	<1.1	ug/kg	7.1	1.1	1	04/10/24 09:05	04/10/24 17:42	10061-01-5	
trans-1,3-Dichloropropene	<0.85	ug/kg	7.1	0.85	1	04/10/24 09:05	04/10/24 17:42	10061-02-6	
Ethylbenzene	<1.2	ug/kg	7.1	1.2	1	04/10/24 09:05	04/10/24 17:42	100-41-4	
Hexachloro-1,3-butadiene	<1.3	ug/kg	7.1	1.3	1	04/10/24 09:05	04/10/24 17:42	87-68-3	
2-Hexanone	<14.8	ug/kg	89.5	14.8	1	04/10/24 09:05	04/10/24 17:42	591-78-6	
Isopropylbenzene (Cumene)	<0.45	ug/kg	7.1	0.45	1	04/10/24 09:05	04/10/24 17:42	98-82-8	
p-Isopropyltoluene	<0.62	ug/kg	7.1	0.62	1	04/10/24 09:05	04/10/24 17:42	99-87-6	
Methylene Chloride	<27.6	ug/kg	35.5	27.6	1	04/10/24 09:05	04/10/24 17:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	<9.9	ug/kg	89.5	9.9	1	04/10/24 09:05	04/10/24 17:42	108-10-1	
Methyl-tert-butyl ether	<1.4	ug/kg	7.1	1.4	1	04/10/24 09:05	04/10/24 17:42	1634-04-4	
Naphthalene	<1.0	ug/kg	14.2	1.0	1	04/10/24 09:05	04/10/24 17:42	91-20-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD09/SD-1 Lab ID: 60450582004 Collected: 04/09/24 13:30 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
n-Propylbenzene	<0.86	ug/kg	7.1	0.86	1	04/10/24 09:05	04/10/24 17:42	103-65-1	
Styrene	<0.57	ug/kg	7.1	0.57	1	04/10/24 09:05	04/10/24 17:42	100-42-5	
1,1,1,2-Tetrachloroethane	<1.0	ug/kg	7.1	1.0	1	04/10/24 09:05	04/10/24 17:42	630-20-6	
1,1,2,2-Tetrachloroethane	<1.0	ug/kg	7.1	1.0	1	04/10/24 09:05	04/10/24 17:42	79-34-5	
Tetrachloroethene	<0.76	ug/kg	7.1	0.76	1	04/10/24 09:05	04/10/24 17:42	127-18-4	
Toluene	<6.3	ug/kg	28.4	6.3	1	04/10/24 09:05	04/10/24 17:42	108-88-3	
1,2,3-Trichlorobenzene	<0.83	ug/kg	7.1	0.83	1	04/10/24 09:05	04/10/24 17:42	87-61-6	
1,2,4-Trichlorobenzene	<0.70	ug/kg	7.1	0.70	1	04/10/24 09:05	04/10/24 17:42	120-82-1	
1,1,1-Trichloroethane	<1.4	ug/kg	7.1	1.4	1	04/10/24 09:05	04/10/24 17:42	71-55-6	
1,1,2-Trichloroethane	<1.0	ug/kg	7.1	1.0	1	04/10/24 09:05	04/10/24 17:42	79-00-5	
Trichloroethene	<2.7	ug/kg	7.1	2.7	1	04/10/24 09:05	04/10/24 17:42	79-01-6	
Trichlorofluoromethane	<13.6	ug/kg	18.5	13.6	1	04/10/24 09:05	04/10/24 17:42	75-69-4	
1,2,3-Trichloropropane	<2.2	ug/kg	7.1	2.2	1	04/10/24 09:05	04/10/24 17:42	96-18-4	
1,2,4-Trimethylbenzene	<0.98	ug/kg	7.1	0.98	1	04/10/24 09:05	04/10/24 17:42	95-63-6	
1,3,5-Trimethylbenzene	<0.62	ug/kg	7.1	0.62	1	04/10/24 09:05	04/10/24 17:42	108-67-8	
Vinyl chloride	<1.3	ug/kg	18.5	1.3	1	04/10/24 09:05	04/10/24 17:42	75-01-4	
Xylene (Total)	<5.2	ug/kg	21.3	5.2	1	04/10/24 09:05	04/10/24 17:42	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	108	%	80-120		1	04/10/24 09:05	04/10/24 17:42	2037-26-5	
4-Bromofluorobenzene (S)	100	%	83-119		1	04/10/24 09:05	04/10/24 17:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/10/24 09:05	04/10/24 17:42	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<b>0.33J</b>	mg/kg	0.56	0.076	1	04/12/24 08:18	04/12/24 13:33		
<b>Surrogates</b>									
Toluene-d8 (S)	103	%	78-122		1	04/12/24 08:18	04/12/24 13:33	2037-26-5	
4-Bromofluorobenzene (S)	114	%	69-133		1	04/12/24 08:18	04/12/24 13:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1	04/12/24 08:18	04/12/24 13:33	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	<b>24.8</b>	%	0.50	0.50	1		04/10/24 13:58		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>69.6</b>	%			1	04/12/24 08:59	04/12/24 09:06		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<1.1	mg/kg	1.4	1.1	1	04/15/24 09:34	04/16/24 15:44	7664-41-7	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD09/SD-1 Lab ID: 60450582004 Collected: 04/09/24 13:30 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500CNE Cyanide, Total</b>	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City								
Cyanide	<0.15	mg/kg	0.19	0.15	1	04/18/24 08:30	04/18/24 12:03	57-12-5	
<b>9056 IC Anions</b>	Analytical Method: EPA 9056 Preparation Method: EPA 9056 Pace Analytical Services - Kansas City								
Nitrate as N	<7.4	mg/kg	13.1	7.4	10	04/12/24 08:00	04/12/24 19:46	14797-55-8	
Nitrite as N	<6.8	mg/kg	13.1	6.8	10	04/12/24 08:00	04/12/24 19:46	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD08/SD-1 Lab ID: 60450582005 Collected: 04/09/24 14:10 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00444	mg/kg	0.0236	0.00444	1	04/17/24 09:56	04/18/24 00:24	309-00-2	
alpha-BHC	<0.00435	mg/kg	0.0236	0.00435	1	04/17/24 09:56	04/18/24 00:24	319-84-6	
beta-BHC	<0.00448	mg/kg	0.0236	0.00448	1	04/17/24 09:56	04/18/24 00:24	319-85-7	
delta-BHC	<0.00409	mg/kg	0.0236	0.00409	1	04/17/24 09:56	04/18/24 00:24	319-86-8	
gamma-BHC (Lindane)	<0.00406	mg/kg	0.0236	0.00406	1	04/17/24 09:56	04/18/24 00:24	58-89-9	
Chlordane (Technical)	<0.122	mg/kg	0.354	0.122	1	04/17/24 09:56	04/18/24 00:24	57-74-9	
4,4'-DDD	<0.00437	mg/kg	0.0236	0.00437	1	04/17/24 09:56	04/18/24 00:24	72-54-8	
4,4'-DDE	<0.00432	mg/kg	0.0236	0.00432	1	04/17/24 09:56	04/18/24 00:24	72-55-9	
4,4'-DDT	<0.00740	mg/kg	0.0236	0.00740	1	04/17/24 09:56	04/18/24 00:24	50-29-3	
Dieldrin	<0.00406	mg/kg	0.0236	0.00406	1	04/17/24 09:56	04/18/24 00:24	60-57-1	
Endosulfan I	<0.00429	mg/kg	0.0236	0.00429	1	04/17/24 09:56	04/18/24 00:24	959-98-8	
Endosulfan II	<0.00396	mg/kg	0.0236	0.00396	1	04/17/24 09:56	04/18/24 00:24	33213-65-9	
Endosulfan sulfate	<0.00430	mg/kg	0.0236	0.00430	1	04/17/24 09:56	04/18/24 00:24	1031-07-8	
Endrin	<0.00413	mg/kg	0.0236	0.00413	1	04/17/24 09:56	04/18/24 00:24	72-20-8	LO
Endrin aldehyde	<0.00400	mg/kg	0.0236	0.00400	1	04/17/24 09:56	04/18/24 00:24	7421-93-4	
Endrin ketone	<0.00840	mg/kg	0.0236	0.00840	1	04/17/24 09:56	04/18/24 00:24	53494-70-5	
Hexachlorobenzene	<0.00409	mg/kg	0.0236	0.00409	1	04/17/24 09:56	04/18/24 00:24	118-74-1	
Heptachlor	<0.00505	mg/kg	0.0236	0.00505	1	04/17/24 09:56	04/18/24 00:24	76-44-8	
Heptachlor epoxide	<0.00400	mg/kg	0.0236	0.00400	1	04/17/24 09:56	04/18/24 00:24	1024-57-3	
Methoxychlor	<0.00572	mg/kg	0.0236	0.00572	1	04/17/24 09:56	04/18/24 00:24	72-43-5	
Toxaphene	<0.146	mg/kg	0.472	0.146	1	04/17/24 09:56	04/18/24 00:24	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	68.3	%	10.0-135		1	04/17/24 09:56	04/18/24 00:24	2051-24-3	
Tetrachloro-m-xylene (S)	69.4	%	10.0-139		1	04/17/24 09:56	04/18/24 00:24	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00829	mg/kg	0.0827	0.00829	1	04/15/24 07:02	04/17/24 17:41	94-75-7	
Dalapon	<0.0133	mg/kg	0.0827	0.0133	1	04/15/24 07:02	04/17/24 17:41	127-20-8	
2,4-DB	<0.0351	mg/kg	0.0827	0.0351	1	04/15/24 07:02	04/17/24 17:41	94-82-6	
Dicamba	<0.0185	mg/kg	0.0827	0.0185	1	04/15/24 07:02	04/17/24 17:41	1918-00-9	
Dichlorprop	<0.0289	mg/kg	0.0827	0.0289	1	04/15/24 07:02	04/17/24 17:41	120-36-5	
Dinoseb	<0.00823	mg/kg	0.0827	0.00823	1	04/15/24 07:02	04/17/24 17:41	88-85-7	
MCPA	<0.523	mg/kg	7.68	0.523	1	04/15/24 07:02	04/17/24 17:41	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.433	mg/kg	7.68	0.433	1	04/15/24 07:02	04/17/24 17:41	93-65-2	
2,4,5-T	<0.0101	mg/kg	0.0827	0.0101	1	04/15/24 07:02	04/17/24 17:41	93-76-5	
2,4,5-TP (Silvex)	<0.0126	mg/kg	0.0827	0.0126	1	04/15/24 07:02	04/17/24 17:41	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	73.2	%	22.0-132		1	04/15/24 07:02	04/17/24 17:41	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<12.0	ug/kg	44.4	12.0	1	04/12/24 10:44	04/15/24 18:38	12674-11-2	
PCB-1221 (Aroclor 1221)	<14.9	ug/kg	44.4	14.9	1	04/12/24 10:44	04/15/24 18:38	11104-28-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD08/SD-1 Lab ID: 60450582005 Collected: 04/09/24 14:10 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<14.9	ug/kg	44.4	14.9	1	04/12/24 10:44	04/15/24 18:38	11141-16-5	
PCB-1242 (Aroclor 1242)	<14.9	ug/kg	44.4	14.9	1	04/12/24 10:44	04/15/24 18:38	53469-21-9	
PCB-1248 (Aroclor 1248)	<14.9	ug/kg	44.4	14.9	1	04/12/24 10:44	04/15/24 18:38	12672-29-6	
PCB-1254 (Aroclor 1254)	<14.9	ug/kg	44.4	14.9	1	04/12/24 10:44	04/15/24 18:38	11097-69-1	
PCB-1260 (Aroclor 1260)	<14.9	ug/kg	44.4	14.9	1	04/12/24 10:44	04/15/24 18:38	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	76	%	20-120		1	04/12/24 10:44	04/15/24 18:38	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	6520	mg/kg	59.0	8.15	5	04/14/24 22:12	04/22/24 18:05	7429-90-5	
Antimony	0.329J	mg/kg	3.54	0.196	5	04/14/24 22:12	04/22/24 18:05	7440-36-0	B,J
Arsenic	14.8	mg/kg	1.18	0.118	5	04/14/24 22:12	04/22/24 18:05	7440-38-2	
Barium	203	mg/kg	2.95	0.180	5	04/14/24 22:12	04/22/24 18:05	7440-39-3	
Beryllium	0.620J	mg/kg	2.95	0.163	5	04/14/24 22:12	04/22/24 18:05	7440-41-7	J
Cadmium	0.448J	mg/kg	1.18	0.101	5	04/14/24 22:12	04/22/24 18:05	7440-43-9	J
Calcium	125000	mg/kg	590	89.2	5	04/14/24 22:12	04/22/24 18:05	7440-70-2	
Chromium	13.3	mg/kg	5.90	0.350	5	04/14/24 22:12	04/22/24 18:05	7440-47-3	
Cobalt	18.1	mg/kg	1.18	0.0546	5	04/14/24 22:12	04/22/24 18:05	7440-48-4	
Copper	10.4	mg/kg	5.90	0.156	5	04/14/24 22:12	04/22/24 18:05	7440-50-8	
Iron	22700	mg/kg	59.0	10.6	5	04/14/24 22:12	04/22/24 18:05	7439-89-6	
Lead	18.5	mg/kg	2.36	0.117	5	04/14/24 22:12	04/22/24 18:05	7439-92-1	
Magnesium	4840	mg/kg	590	54.2	5	04/14/24 22:12	04/22/24 18:05	7439-95-4	
Manganese	2020	mg/kg	2.95	0.316	5	04/14/24 22:12	04/22/24 18:05	7439-96-5	
Molybdenum	1.32J	mg/kg	2.95	0.119	5	04/14/24 22:12	04/22/24 18:05	7439-98-7	J
Nickel	22.3	mg/kg	2.95	0.233	5	04/14/24 22:12	04/22/24 18:05	7440-02-0	
Potassium	1510	mg/kg	590	80.3	5	04/14/24 22:12	04/22/24 18:05	7440-09-7	
Selenium	1.05J	mg/kg	2.95	0.213	5	04/14/24 22:12	04/22/24 18:05	7782-49-2	J
Silver	<0.102	mg/kg	0.590	0.102	5	04/14/24 22:12	04/22/24 18:05	7440-22-4	
Sodium	199J	mg/kg	590	90.3	5	04/14/24 22:12	04/22/24 18:05	7440-23-5	J
Thallium	0.123J	mg/kg	2.36	0.0768	5	04/14/24 22:12	04/22/24 18:05	7440-28-0	J
Vanadium	32.0	mg/kg	2.95	0.221	5	04/14/24 22:12	04/22/24 18:05	7440-62-2	
Zinc	56.3	mg/kg	29.5	0.874	5	04/14/24 22:12	04/22/24 18:05	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0213	mg/kg	0.0472	0.0213	1	04/12/24 15:37	04/13/24 10:35	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<190	ug/kg	882	190	2	04/10/24 14:25	04/12/24 18:39	83-32-9	
Acenaphthylene	<144	ug/kg	882	144	2	04/10/24 14:25	04/12/24 18:39	208-96-8	
Anthracene	<185	ug/kg	882	185	2	04/10/24 14:25	04/12/24 18:39	120-12-7	
Benzo(a)anthracene	<187	ug/kg	882	187	2	04/10/24 14:25	04/12/24 18:39	56-55-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD08/SD-1 Lab ID: 60450582005 Collected: 04/09/24 14:10 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<190	ug/kg	882	190	2	04/10/24 14:25	04/12/24 18:39	50-32-8	
Benzo(b)fluoranthene	<215	ug/kg	882	215	2	04/10/24 14:25	04/12/24 18:39	205-99-2	
Benzo(g,h,i)perylene	<153	ug/kg	882	153	2	04/10/24 14:25	04/12/24 18:39	191-24-2	
Benzo(k)fluoranthene	<190	ug/kg	882	190	2	04/10/24 14:25	04/12/24 18:39	207-08-9	
Benzoic Acid	<481	ug/kg	4470	481	2	04/10/24 14:25	04/12/24 18:39	65-85-0	
Benzyl alcohol	<162	ug/kg	1760	162	2	04/10/24 14:25	04/12/24 18:39	100-51-6	
4-Bromophenylphenyl ether	<190	ug/kg	882	190	2	04/10/24 14:25	04/12/24 18:39	101-55-3	
Butylbenzylphthalate	<180	ug/kg	882	180	2	04/10/24 14:25	04/12/24 18:39	85-68-7	
Carbazole	<182	ug/kg	882	182	2	04/10/24 14:25	04/12/24 18:39	86-74-8	
4-Chloro-3-methylphenol	<185	ug/kg	1760	185	2	04/10/24 14:25	04/12/24 18:39	59-50-7	
4-Chloroaniline	<138	ug/kg	1760	138	2	04/10/24 14:25	04/12/24 18:39	106-47-8	
bis(2-Chloroethoxy)methane	<175	ug/kg	882	175	2	04/10/24 14:25	04/12/24 18:39	111-91-1	
bis(2-Chloroethyl) ether	<178	ug/kg	882	178	2	04/10/24 14:25	04/12/24 18:39	111-44-4	
bis(2-Chloroisopropyl) ether	<191	ug/kg	882	191	2	04/10/24 14:25	04/12/24 18:39	108-60-1	
2-Chloronaphthalene	<186	ug/kg	882	186	2	04/10/24 14:25	04/12/24 18:39	91-58-7	
2-Chlorophenol	<180	ug/kg	882	180	2	04/10/24 14:25	04/12/24 18:39	95-57-8	
4-Chlorophenylphenyl ether	<189	ug/kg	882	189	2	04/10/24 14:25	04/12/24 18:39	7005-72-3	
Chrysene	<197	ug/kg	882	197	2	04/10/24 14:25	04/12/24 18:39	218-01-9	
Dibenz(a,h)anthracene	<159	ug/kg	882	159	2	04/10/24 14:25	04/12/24 18:39	53-70-3	
Dibenzofuran	<189	ug/kg	882	189	2	04/10/24 14:25	04/12/24 18:39	132-64-9	
1,2-Dichlorobenzene	<176	ug/kg	882	176	2	04/10/24 14:25	04/12/24 18:39	95-50-1	
1,3-Dichlorobenzene	<172	ug/kg	882	172	2	04/10/24 14:25	04/12/24 18:39	541-73-1	
1,4-Dichlorobenzene	<170	ug/kg	882	170	2	04/10/24 14:25	04/12/24 18:39	106-46-7	
3,3'-Dichlorobenzidine	<86.6	ug/kg	1760	86.6	2	04/10/24 14:25	04/12/24 18:39	91-94-1	
2,4-Dichlorophenol	<177	ug/kg	882	177	2	04/10/24 14:25	04/12/24 18:39	120-83-2	
Diethylphthalate	<202	ug/kg	882	202	2	04/10/24 14:25	04/12/24 18:39	84-66-2	
2,4-Dimethylphenol	<128	ug/kg	882	128	2	04/10/24 14:25	04/12/24 18:39	105-67-9	
Dimethylphthalate	<183	ug/kg	882	183	2	04/10/24 14:25	04/12/24 18:39	131-11-3	
Di-n-butylphthalate	<209	ug/kg	882	209	2	04/10/24 14:25	04/12/24 18:39	84-74-2	
4,6-Dinitro-2-methylphenol	<153	ug/kg	4470	153	2	04/10/24 14:25	04/12/24 18:39	534-52-1	
2,4-Dinitrophenol	<267	ug/kg	4470	267	2	04/10/24 14:25	04/12/24 18:39	51-28-5	
2,4-Dinitrotoluene	<199	ug/kg	882	199	2	04/10/24 14:25	04/12/24 18:39	121-14-2	
2,6-Dinitrotoluene	<172	ug/kg	882	172	2	04/10/24 14:25	04/12/24 18:39	606-20-2	
Di-n-octylphthalate	<215	ug/kg	882	215	2	04/10/24 14:25	04/12/24 18:39	117-84-0	
bis(2-Ethylhexyl)phthalate	<198	ug/kg	882	198	2	04/10/24 14:25	04/12/24 18:39	117-81-7	
Fluoranthene	<194	ug/kg	882	194	2	04/10/24 14:25	04/12/24 18:39	206-44-0	
Fluorene	<188	ug/kg	882	188	2	04/10/24 14:25	04/12/24 18:39	86-73-7	
Hexachloro-1,3-butadiene	<189	ug/kg	882	189	2	04/10/24 14:25	04/12/24 18:39	87-68-3	
Hexachlorobenzene	<185	ug/kg	882	185	2	04/10/24 14:25	04/12/24 18:39	118-74-1	
Hexachlorocyclopentadiene	<543	ug/kg	882	543	2	04/10/24 14:25	04/12/24 18:39	77-47-4	
Hexachloroethane	<162	ug/kg	882	162	2	04/10/24 14:25	04/12/24 18:39	67-72-1	
Indeno(1,2,3-cd)pyrene	<181	ug/kg	882	181	2	04/10/24 14:25	04/12/24 18:39	193-39-5	
Isophorone	<171	ug/kg	882	171	2	04/10/24 14:25	04/12/24 18:39	78-59-1	
2-Methylnaphthalene	<179	ug/kg	882	179	2	04/10/24 14:25	04/12/24 18:39	91-57-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD08/SD-1 Lab ID: 60450582005 Collected: 04/09/24 14:10 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<161	ug/kg	882	161	2	04/10/24 14:25	04/12/24 18:39	95-48-7	
3&4-Methylphenol(m&p Cresol)	<164	ug/kg	882	164	2	04/10/24 14:25	04/12/24 18:39	15831-10-4	
Naphthalene	<190	ug/kg	882	190	2	04/10/24 14:25	04/12/24 18:39	91-20-3	
2-Nitroaniline	<146	ug/kg	1760	146	2	04/10/24 14:25	04/12/24 18:39	88-74-4	
3-Nitroaniline	<137	ug/kg	1760	137	2	04/10/24 14:25	04/12/24 18:39	99-09-2	
4-Nitroaniline	<151	ug/kg	1760	151	2	04/10/24 14:25	04/12/24 18:39	100-01-6	
Nitrobenzene	<187	ug/kg	882	187	2	04/10/24 14:25	04/12/24 18:39	98-95-3	
2-Nitrophenol	<138	ug/kg	882	138	2	04/10/24 14:25	04/12/24 18:39	88-75-5	
4-Nitrophenol	<130	ug/kg	4470	130	2	04/10/24 14:25	04/12/24 18:39	100-02-7	
N-Nitroso-di-n-propylamine	<168	ug/kg	882	168	2	04/10/24 14:25	04/12/24 18:39	621-64-7	
N-Nitrosodiphenylamine	<175	ug/kg	882	175	2	04/10/24 14:25	04/12/24 18:39	86-30-6	
Pentachlorophenol	<291	ug/kg	4470	291	2	04/10/24 14:25	04/12/24 18:39	87-86-5	
Phenanthrene	<189	ug/kg	882	189	2	04/10/24 14:25	04/12/24 18:39	85-01-8	
Phenol	<166	ug/kg	882	166	2	04/10/24 14:25	04/12/24 18:39	108-95-2	
Pyrene	<188	ug/kg	882	188	2	04/10/24 14:25	04/12/24 18:39	129-00-0	
Pyridine	<131	ug/kg	882	131	2	04/10/24 14:25	04/12/24 18:39	110-86-1	
1,2,4-Trichlorobenzene	<185	ug/kg	882	185	2	04/10/24 14:25	04/12/24 18:39	120-82-1	
2,4,5-Trichlorophenol	<181	ug/kg	882	181	2	04/10/24 14:25	04/12/24 18:39	95-95-4	
2,4,6-Trichlorophenol	<163	ug/kg	882	163	2	04/10/24 14:25	04/12/24 18:39	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	74	%	30-120		2	04/10/24 14:25	04/12/24 18:39	4165-60-0	D3
2-Fluorobiphenyl (S)	65	%	40-120		2	04/10/24 14:25	04/12/24 18:39	321-60-8	
Terphenyl-d14 (S)	68	%	45-120		2	04/10/24 14:25	04/12/24 18:39	1718-51-0	
Phenol-d6 (S)	73	%	40-120		2	04/10/24 14:25	04/12/24 18:39	13127-88-3	
2-Fluorophenol (S)	71	%	40-120		2	04/10/24 14:25	04/12/24 18:39	367-12-4	
2,4,6-Tribromophenol (S)	71	%	35-120		2	04/10/24 14:25	04/12/24 18:39	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	55.2	mg/kg	20.1	6.8	1	04/11/24 13:51	04/12/24 17:14		
TPH-DRO	27.7	mg/kg	20.1	6.8	1	04/11/24 13:51	04/12/24 17:14		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	73	%	35-120		1	04/11/24 13:51	04/12/24 17:14	4165-60-0	
2-Fluorobiphenyl (S)	83	%	50-120		1	04/11/24 13:51	04/12/24 17:14	321-60-8	
Terphenyl-d14 (S)	78	%	45-120		1	04/11/24 13:51	04/12/24 17:14	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<98.3	ug/kg	103	98.3	1	04/10/24 09:05	04/10/24 18:02	67-64-1	
Benzene	<0.75	ug/kg	8.2	0.75	1	04/10/24 09:05	04/10/24 18:02	71-43-2	
Bromobenzene	<1.0	ug/kg	8.2	1.0	1	04/10/24 09:05	04/10/24 18:02	108-86-1	
Bromochloromethane	<1.2	ug/kg	8.2	1.2	1	04/10/24 09:05	04/10/24 18:02	74-97-5	
Bromodichloromethane	<1.4	ug/kg	21.3	1.4	1	04/10/24 09:05	04/10/24 18:02	75-27-4	
Bromoform	<0.63	ug/kg	21.3	0.63	1	04/10/24 09:05	04/10/24 18:02	75-25-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD08/SD-1 Lab ID: 60450582005 Collected: 04/09/24 14:10 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<10.1	ug/kg	21.3	10.1	1	04/10/24 09:05	04/10/24 18:02	74-83-9	
2-Butanone (MEK)	<52.2	ug/kg	103	52.2	1	04/10/24 09:05	04/10/24 18:02	78-93-3	
n-Butylbenzene	<0.79	ug/kg	8.2	0.79	1	04/10/24 09:05	04/10/24 18:02	104-51-8	
sec-Butylbenzene	<0.81	ug/kg	8.2	0.81	1	04/10/24 09:05	04/10/24 18:02	135-98-8	
tert-Butylbenzene	<0.53	ug/kg	8.2	0.53	1	04/10/24 09:05	04/10/24 18:02	98-06-6	
Carbon disulfide	4.0J	ug/kg	8.2	3.8	1	04/10/24 09:05	04/10/24 18:02	75-15-0	
Carbon tetrachloride	<2.7	ug/kg	8.2	2.7	1	04/10/24 09:05	04/10/24 18:02	56-23-5	
Chlorobenzene	<0.48	ug/kg	8.2	0.48	1	04/10/24 09:05	04/10/24 18:02	108-90-7	
Chloroethane	<13.6	ug/kg	40.9	13.6	1	04/10/24 09:05	04/10/24 18:02	75-00-3	
Chloroform	<3.0	ug/kg	8.2	3.0	1	04/10/24 09:05	04/10/24 18:02	67-66-3	
Chloromethane	<2.0	ug/kg	21.3	2.0	1	04/10/24 09:05	04/10/24 18:02	74-87-3	
2-Chlorotoluene	<1.1	ug/kg	8.2	1.1	1	04/10/24 09:05	04/10/24 18:02	95-49-8	
4-Chlorotoluene	<0.64	ug/kg	8.2	0.64	1	04/10/24 09:05	04/10/24 18:02	106-43-4	
1,2-Dibromo-3-chloropropane	<5.4	ug/kg	21.3	5.4	1	04/10/24 09:05	04/10/24 18:02	96-12-8	
Dibromochloromethane	<0.49	ug/kg	8.2	0.49	1	04/10/24 09:05	04/10/24 18:02	124-48-1	
1,2-Dibromoethane (EDB)	<0.86	ug/kg	8.2	0.86	1	04/10/24 09:05	04/10/24 18:02	106-93-4	
Dibromomethane	<2.4	ug/kg	8.2	2.4	1	04/10/24 09:05	04/10/24 18:02	74-95-3	
1,2-Dichlorobenzene	<1.4	ug/kg	8.2	1.4	1	04/10/24 09:05	04/10/24 18:02	95-50-1	
1,3-Dichlorobenzene	<1.0	ug/kg	8.2	1.0	1	04/10/24 09:05	04/10/24 18:02	541-73-1	
1,4-Dichlorobenzene	<1.4	ug/kg	8.2	1.4	1	04/10/24 09:05	04/10/24 18:02	106-46-7	
Dichlorodifluoromethane	<1.5	ug/kg	21.3	1.5	1	04/10/24 09:05	04/10/24 18:02	75-71-8	
1,1-Dichloroethane	<1.9	ug/kg	8.2	1.9	1	04/10/24 09:05	04/10/24 18:02	75-34-3	
1,2-Dichloroethane	<1.6	ug/kg	8.2	1.6	1	04/10/24 09:05	04/10/24 18:02	107-06-2	
1,2-Dichloroethene (Total)	<3.1	ug/kg	16.4	3.1	1	04/10/24 09:05	04/10/24 18:02	540-59-0	
1,1-Dichloroethene	<3.3	ug/kg	8.2	3.3	1	04/10/24 09:05	04/10/24 18:02	75-35-4	
cis-1,2-Dichloroethene	<1.5	ug/kg	8.2	1.5	1	04/10/24 09:05	04/10/24 18:02	156-59-2	
trans-1,2-Dichloroethene	<1.8	ug/kg	8.2	1.8	1	04/10/24 09:05	04/10/24 18:02	156-60-5	
1,2-Dichloropropane	<1.7	ug/kg	8.2	1.7	1	04/10/24 09:05	04/10/24 18:02	78-87-5	
1,3-Dichloropropane	<0.32	ug/kg	8.2	0.32	1	04/10/24 09:05	04/10/24 18:02	142-28-9	
2,2-Dichloropropane	<2.5	ug/kg	8.2	2.5	1	04/10/24 09:05	04/10/24 18:02	594-20-7	
1,1-Dichloropropene	<1.8	ug/kg	8.2	1.8	1	04/10/24 09:05	04/10/24 18:02	563-58-6	
cis-1,3-Dichloropropene	<1.2	ug/kg	8.2	1.2	1	04/10/24 09:05	04/10/24 18:02	10061-01-5	
trans-1,3-Dichloropropene	<0.98	ug/kg	8.2	0.98	1	04/10/24 09:05	04/10/24 18:02	10061-02-6	
Ethylbenzene	<1.4	ug/kg	8.2	1.4	1	04/10/24 09:05	04/10/24 18:02	100-41-4	
Hexachloro-1,3-butadiene	<1.5	ug/kg	8.2	1.5	1	04/10/24 09:05	04/10/24 18:02	87-68-3	
2-Hexanone	<17.0	ug/kg	103	17.0	1	04/10/24 09:05	04/10/24 18:02	591-78-6	
Isopropylbenzene (Cumene)	<0.52	ug/kg	8.2	0.52	1	04/10/24 09:05	04/10/24 18:02	98-82-8	
p-Isopropyltoluene	<0.71	ug/kg	8.2	0.71	1	04/10/24 09:05	04/10/24 18:02	99-87-6	
Methylene Chloride	<31.7	ug/kg	40.9	31.7	1	04/10/24 09:05	04/10/24 18:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	<11.5	ug/kg	103	11.5	1	04/10/24 09:05	04/10/24 18:02	108-10-1	
Methyl-tert-butyl ether	<1.6	ug/kg	8.2	1.6	1	04/10/24 09:05	04/10/24 18:02	1634-04-4	
Naphthalene	<1.2	ug/kg	16.4	1.2	1	04/10/24 09:05	04/10/24 18:02	91-20-3	
n-Propylbenzene	<0.99	ug/kg	8.2	0.99	1	04/10/24 09:05	04/10/24 18:02	103-65-1	
Styrene	<0.66	ug/kg	8.2	0.66	1	04/10/24 09:05	04/10/24 18:02	100-42-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD08/SD-1 Lab ID: 60450582005 Collected: 04/09/24 14:10 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<1.2	ug/kg	8.2	1.2	1	04/10/24 09:05	04/10/24 18:02	630-20-6	
1,1,2,2-Tetrachloroethane	<1.1	ug/kg	8.2	1.1	1	04/10/24 09:05	04/10/24 18:02	79-34-5	
Tetrachloroethene	<0.87	ug/kg	8.2	0.87	1	04/10/24 09:05	04/10/24 18:02	127-18-4	
Toluene	<7.3	ug/kg	32.7	7.3	1	04/10/24 09:05	04/10/24 18:02	108-88-3	
1,2,3-Trichlorobenzene	<0.95	ug/kg	8.2	0.95	1	04/10/24 09:05	04/10/24 18:02	87-61-6	
1,2,4-Trichlorobenzene	<0.80	ug/kg	8.2	0.80	1	04/10/24 09:05	04/10/24 18:02	120-82-1	
1,1,1-Trichloroethane	<1.7	ug/kg	8.2	1.7	1	04/10/24 09:05	04/10/24 18:02	71-55-6	
1,1,2-Trichloroethane	<1.2	ug/kg	8.2	1.2	1	04/10/24 09:05	04/10/24 18:02	79-00-5	
Trichloroethene	<3.1	ug/kg	8.2	3.1	1	04/10/24 09:05	04/10/24 18:02	79-01-6	
Trichlorofluoromethane	<15.7	ug/kg	21.3	15.7	1	04/10/24 09:05	04/10/24 18:02	75-69-4	
1,2,3-Trichloropropane	<2.5	ug/kg	8.2	2.5	1	04/10/24 09:05	04/10/24 18:02	96-18-4	
1,2,4-Trimethylbenzene	<1.1	ug/kg	8.2	1.1	1	04/10/24 09:05	04/10/24 18:02	95-63-6	
1,3,5-Trimethylbenzene	<0.71	ug/kg	8.2	0.71	1	04/10/24 09:05	04/10/24 18:02	108-67-8	
Vinyl chloride	<1.5	ug/kg	21.3	1.5	1	04/10/24 09:05	04/10/24 18:02	75-01-4	
Xylene (Total)	<6.0	ug/kg	24.5	6.0	1	04/10/24 09:05	04/10/24 18:02	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	111	%	80-120		1	04/10/24 09:05	04/10/24 18:02	2037-26-5	
4-Bromofluorobenzene (S)	102	%	83-119		1	04/10/24 09:05	04/10/24 18:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/10/24 09:05	04/10/24 18:02	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.074	mg/kg	0.55	0.074	1	04/11/24 07:56	04/11/24 15:12		
<b>Surrogates</b>									
Toluene-d8 (S)	103	%	78-122		1	04/11/24 07:56	04/11/24 15:12	2037-26-5	
4-Bromofluorobenzene (S)	116	%	69-133		1	04/11/24 07:56	04/11/24 15:12	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/11/24 07:56	04/11/24 15:12	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	27.2	%	0.50	0.50	1		04/10/24 13:58		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	84.7	%			1	04/12/24 08:59	04/12/24 09:06		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<1.0	mg/kg	1.3	1.0	1	04/15/24 09:34	04/16/24 15:46	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.16	mg/kg	0.20	0.16	1	04/18/24 08:30	04/18/24 12:04	57-12-5	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Sample: SD08/SD-1 Lab ID: 60450582005 Collected: 04/09/24 14:10 Received: 04/09/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<8.0	mg/kg	14.2	8.0	10	04/12/24 08:00	04/12/24 20:29	14797-55-8	
Nitrite as N	<7.4	mg/kg	14.2	7.4	10	04/12/24 08:00	04/12/24 20:29	14797-65-0	

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch: 2268142

Analysis Method: EPA 8081B

QC Batch Method: 3546/3665A

Analysis Description: Pesticides (GC) 8081B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450582001

METHOD BLANK: R4058896-1

Matrix: Solid

Associated Lab Samples: 60450582001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aldrin	mg/kg	<0.00376	0.0200	0.00376	04/17/24 04:27	
alpha-BHC	mg/kg	<0.00368	0.0200	0.00368	04/17/24 04:27	
beta-BHC	mg/kg	<0.00379	0.0200	0.00379	04/17/24 04:27	
delta-BHC	mg/kg	<0.00346	0.0200	0.00346	04/17/24 04:27	
gamma-BHC (Lindane)	mg/kg	<0.00344	0.0200	0.00344	04/17/24 04:27	
Chlordane (Technical)	mg/kg	<0.103	0.300	0.103	04/17/24 04:27	
4,4'-DDD	mg/kg	<0.00370	0.0200	0.00370	04/17/24 04:27	
4,4'-DDE	mg/kg	<0.00366	0.0200	0.00366	04/17/24 04:27	
4,4'-DDT	mg/kg	<0.00627	0.0200	0.00627	04/17/24 04:27	
Dieldrin	mg/kg	<0.00344	0.0200	0.00344	04/17/24 04:27	
Endosulfan I	mg/kg	<0.00363	0.0200	0.00363	04/17/24 04:27	
Endosulfan II	mg/kg	<0.00335	0.0200	0.00335	04/17/24 04:27	
Endosulfan sulfate	mg/kg	<0.00364	0.0200	0.00364	04/17/24 04:27	
Endrin	mg/kg	<0.00350	0.0200	0.00350	04/17/24 04:27	
Endrin aldehyde	mg/kg	<0.00339	0.0200	0.00339	04/17/24 04:27	
Endrin ketone	mg/kg	<0.00711	0.0200	0.00711	04/17/24 04:27	
Hexachlorobenzene	mg/kg	<0.00346	0.0200	0.00346	04/17/24 04:27	
Heptachlor	mg/kg	<0.00428	0.0200	0.00428	04/17/24 04:27	
Heptachlor epoxide	mg/kg	<0.00339	0.0200	0.00339	04/17/24 04:27	
Methoxychlor	mg/kg	<0.00484	0.0200	0.00484	04/17/24 04:27	
Toxaphene	mg/kg	<0.124	0.400	0.124	04/17/24 04:27	
Decachlorobiphenyl (S)	%	66.8	10.0-135		04/17/24 04:27	
Tetrachloro-m-xylene (S)	%	64.3	10.0-139		04/17/24 04:27	

LABORATORY CONTROL SAMPLE: R4058896-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aldrin	mg/kg	0.0666	0.0507	76.1	34.0-136	
alpha-BHC	mg/kg	0.0666	0.0505	75.8	34.0-139	
beta-BHC	mg/kg	0.0666	0.0589	88.4	34.0-133	
delta-BHC	mg/kg	0.0666	0.0490	73.6	34.0-135	
gamma-BHC (Lindane)	mg/kg	0.0666	0.0519	77.9	34.0-136	
4,4'-DDD	mg/kg	0.0666	0.0512	76.9	33.0-141	
4,4'-DDE	mg/kg	0.0666	0.0523	78.5	34.0-134	
4,4'-DDT	mg/kg	0.0666	0.0522	78.4	30.0-143	
Dieldrin	mg/kg	0.0666	0.0515	77.3	35.0-137	
Endosulfan I	mg/kg	0.0666	0.0516	77.5	34.0-134	
Endosulfan II	mg/kg	0.0666	0.0511	76.7	35.0-132	
Endosulfan sulfate	mg/kg	0.0666	0.0521	78.2	35.0-132	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

LABORATORY CONTROL SAMPLE: R4058896-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	mg/kg	0.0666	0.0514	77.2	34.0-137	
Endrin aldehyde	mg/kg	0.0666	0.0500	75.1	23.0-121	
Endrin ketone	mg/kg	0.0666	0.0512	76.9	35.0-144	
Hexachlorobenzene	mg/kg	0.0666	0.0501	75.2	33.0-129	
Heptachlor	mg/kg	0.0666	0.0541	81.2	36.0-141	
Heptachlor epoxide	mg/kg	0.0666	0.0508	76.3	36.0-134	
Methoxychlor	mg/kg	0.0666	0.0527	79.1	28.0-150	
Decachlorobiphenyl (S)	%			68.5	10.0-135	
Tetrachloro-m-xylene (S)	%			67.4	10.0-139	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058896-3 R4058896-4

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450582001 Result	Spike Conc.	Spike Conc.	Result						
Aldrin	mg/kg	ND	0.0789	0.0793	0.0618	0.0689	78.3	86.9	20.0-135	10.9	37
alpha-BHC	mg/kg	ND	0.0789	0.0793	0.0698	0.0714	88.4	90.1	27.0-140	2.36	35
beta-BHC	mg/kg	ND	0.0789	0.0793	0.0811	0.0824	103	104	23.0-141	1.60	37
delta-BHC	mg/kg	ND	0.0789	0.0793	0.0680	0.0697	86.1	87.8	21.0-138	2.42	35
gamma-BHC (Lindane)	mg/kg	ND	0.0789	0.0793	0.0718	0.0729	91.0	91.9	27.0-137	1.48	36
4,4'-DDD	mg/kg	ND	0.0789	0.0793	0.0675	0.0736	85.5	92.8	15.0-152	8.61	39
4,4'-DDE	mg/kg	ND	0.0789	0.0793	0.0639	0.0711	81.0	89.6	10.0-152	10.6	40
4,4'-DDT	mg/kg	ND	0.0789	0.0793	0.0636	0.0714	80.5	90.1	10.0-151	11.6	40
Dieldrin	mg/kg	ND	0.0789	0.0793	0.0695	0.0723	88.1	91.1	17.0-145	3.86	37
Endosulfan I	mg/kg	ND	0.0789	0.0793	0.0697	0.0719	88.2	90.7	20.0-137	3.20	36
Endosulfan II	mg/kg	ND	0.0789	0.0793	0.0704	0.0722	89.1	91.0	15.0-141	2.51	37
Endosulfan sulfate	mg/kg	ND	0.0789	0.0793	0.0724	0.0748	91.7	94.3	15.0-143	3.24	38
Endrin	mg/kg	ND	0.0789	0.0793	0.0660	0.0706	83.6	89.0	19.0-143	6.80	37
Endrin aldehyde	mg/kg	ND	0.0789	0.0793	0.0625	0.0758	79.2	95.6	10.0-139	19.3	40
Endrin ketone	mg/kg	ND	0.0789	0.0793	0.0725	0.0744	91.9	93.8	17.0-149	2.59	38
Hexachlorobenzene	mg/kg	ND	0.0789	0.0793	0.0642	0.0701	81.3	88.4	25.0-126	8.87	35
Heptachlor	mg/kg	ND	0.0789	0.0793	0.0670	0.0737	84.9	92.9	22.0-138	9.48	37
Heptachlor epoxide	mg/kg	ND	0.0789	0.0793	0.0679	0.0701	86.0	88.4	22.0-138	3.28	36
Methoxychlor	mg/kg	ND	0.0789	0.0793	0.0664	0.0743	84.2	93.7	10.0-159	11.2	40
Decachlorobiphenyl (S)	%						61.1	83.5	10.0-135		
Tetrachloro-m-xylene (S)	%						69.4	78.1	10.0-139		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch: 2268525 Analysis Method: EPA 8081B  
 QC Batch Method: 3546/3665A Analysis Description: Pesticides (GC) 8081B  
 Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450582002, 60450582003, 60450582004, 60450582005

METHOD BLANK: R4059451-1 Matrix: Solid

Associated Lab Samples: 60450582002, 60450582003, 60450582004, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aldrin	mg/kg	<0.00376	0.0200	0.00376	04/17/24 20:07	
alpha-BHC	mg/kg	<0.00368	0.0200	0.00368	04/17/24 20:07	
beta-BHC	mg/kg	<0.00379	0.0200	0.00379	04/17/24 20:07	
delta-BHC	mg/kg	<0.00346	0.0200	0.00346	04/17/24 20:07	
gamma-BHC (Lindane)	mg/kg	<0.00344	0.0200	0.00344	04/17/24 20:07	
Chlordane (Technical)	mg/kg	<0.103	0.300	0.103	04/17/24 20:07	
4,4'-DDD	mg/kg	<0.00370	0.0200	0.00370	04/17/24 20:07	
4,4'-DDE	mg/kg	<0.00366	0.0200	0.00366	04/17/24 20:07	
4,4'-DDT	mg/kg	<0.00627	0.0200	0.00627	04/17/24 20:07	
Dieldrin	mg/kg	<0.00344	0.0200	0.00344	04/17/24 20:07	
Endosulfan I	mg/kg	<0.00363	0.0200	0.00363	04/17/24 20:07	
Endosulfan II	mg/kg	<0.00335	0.0200	0.00335	04/17/24 20:07	
Endosulfan sulfate	mg/kg	<0.00364	0.0200	0.00364	04/17/24 20:07	
Endrin	mg/kg	<0.00350	0.0200	0.00350	04/17/24 20:07	
Endrin aldehyde	mg/kg	<0.00339	0.0200	0.00339	04/17/24 20:07	
Endrin ketone	mg/kg	<0.00711	0.0200	0.00711	04/17/24 20:07	
Hexachlorobenzene	mg/kg	<0.00346	0.0200	0.00346	04/17/24 20:07	
Heptachlor	mg/kg	<0.00428	0.0200	0.00428	04/17/24 20:07	
Heptachlor epoxide	mg/kg	<0.00339	0.0200	0.00339	04/17/24 20:07	
Methoxychlor	mg/kg	<0.00484	0.0200	0.00484	04/17/24 20:07	
Toxaphene	mg/kg	<0.124	0.400	0.124	04/17/24 20:07	
Decachlorobiphenyl (S)	%	84.7	10.0-135		04/17/24 20:07	
Tetrachloro-m-xylene (S)	%	78.8	10.0-139		04/17/24 20:07	

LABORATORY CONTROL SAMPLE: R4059451-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aldrin	mg/kg	0.0666	0.0480	72.1	34.0-136	
alpha-BHC	mg/kg	0.0666	0.0474	71.2	34.0-139	
beta-BHC	mg/kg	0.0666	0.0479	71.9	34.0-133	
delta-BHC	mg/kg	0.0666	0.0449	67.4	34.0-135	
gamma-BHC (Lindane)	mg/kg	0.0666	0.0485	72.8	34.0-136	
4,4'-DDD	mg/kg	0.0666	0.0498	74.8	33.0-141	
4,4'-DDE	mg/kg	0.0666	0.0498	74.8	34.0-134	
4,4'-DDT	mg/kg	0.0666	0.0486	73.0	30.0-143	
Dieldrin	mg/kg	0.0666	0.0425	63.8	35.0-137	
Endosulfan I	mg/kg	0.0666	0.0509	76.4	34.0-134	
Endosulfan II	mg/kg	0.0666	0.0478	71.8	35.0-132	
Endosulfan sulfate	mg/kg	0.0666	0.0505	75.8	35.0-132	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

LABORATORY CONTROL SAMPLE: R4059451-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	mg/kg	0.0666	0.00862	12.9	34.0-137	L0
Endrin aldehyde	mg/kg	0.0666	0.0404	60.7	23.0-121	
Endrin ketone	mg/kg	0.0666	0.0780	117	35.0-144	
Hexachlorobenzene	mg/kg	0.0666	0.0429	64.4	33.0-129	
Heptachlor	mg/kg	0.0666	0.0502	75.4	36.0-141	
Heptachlor epoxide	mg/kg	0.0666	0.0491	73.7	36.0-134	
Methoxychlor	mg/kg	0.0666	0.0528	79.3	28.0-150	
Decachlorobiphenyl (S)	%			79.7	10.0-135	
Tetrachloro-m-xylene (S)	%			78.2	10.0-139	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059451-3 R4059451-4

Parameter	Units	R4059451-3		R4059451-4		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450582002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Aldrin	mg/kg	ND	0.0899	0.0908	0.0529	0.0620	58.8	68.3	20.0-135	15.8	37
alpha-BHC	mg/kg	ND	0.0899	0.0908	0.0719	0.0766	79.9	84.4	27.0-140	6.31	35
beta-BHC	mg/kg	ND	0.0899	0.0908	0.0709	0.0758	78.9	83.5	23.0-141	6.57	37
delta-BHC	mg/kg	ND	0.0899	0.0908	0.0679	0.0724	75.5	79.8	21.0-138	6.48	35
gamma-BHC (Lindane)	mg/kg	ND	0.0899	0.0908	0.0729	0.0773	81.0	85.1	27.0-137	5.87	36
4,4'-DDD	mg/kg	ND	0.0899	0.0908	0.0616	0.0698	68.5	76.9	15.0-152	12.6	39
4,4'-DDE	mg/kg	ND	0.0899	0.0908	0.0541	0.0643	60.2	70.9	10.0-152	17.2	40
4,4'-DDT	mg/kg	ND	0.0899	0.0908	0.0573	0.0657	63.7	72.4	10.0-151	13.7	40
Dieldrin	mg/kg	ND	0.0899	0.0908	0.0627	0.0716	69.7	78.9	17.0-145	13.3	37
Endosulfan I	mg/kg	ND	0.0899	0.0908	0.0664	0.0727	73.8	80.1	20.0-137	9.11	36
Endosulfan II	mg/kg	ND	0.0899	0.0908	0.0664	0.0716	73.8	78.9	15.0-141	7.58	37
Endosulfan sulfate	mg/kg	ND	0.0899	0.0908	0.0722	0.0778	80.2	85.7	15.0-143	7.53	38
Endrin	mg/kg	ND	0.0899	0.0908	0.0263	0.0472	29.2	52.0	19.0-143	56.9	37 R1
Endrin aldehyde	mg/kg	ND	0.0899	0.0908	0.0534	0.0592	59.4	65.3	10.0-139	10.3	40
Endrin ketone	mg/kg	ND	0.0899	0.0908	0.0986	0.0956	110	105	17.0-149	3.12	38
Hexachlorobenzene	mg/kg	ND	0.0899	0.0908	0.0556	0.0624	61.9	68.7	25.0-126	11.4	35
Heptachlor	mg/kg	ND	0.0899	0.0908	0.0599	0.0685	66.6	75.4	22.0-138	13.3	37
Heptachlor epoxide	mg/kg	ND	0.0899	0.0908	0.0643	0.0701	71.5	77.2	22.0-138	8.61	36
Methoxychlor	mg/kg	ND	0.0899	0.0908	0.0698	0.0786	77.6	86.6	10.0-159	11.9	40
Decachlorobiphenyl (S)	%						61.9	74.2	10.0-135		
Tetrachloro-m-xylene (S)	%						69.8	76.3	10.0-139		

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch: 2265407 Analysis Method: EPA 8151A  
 QC Batch Method: 8151A Analysis Description: Chlorinated Herb. (GC) 8151A  
 Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004

METHOD BLANK: R4058398-1 Matrix: Solid  
 Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4-D	mg/kg	<0.00702	0.0700	0.00702	04/16/24 12:59	
Dalapon	mg/kg	<0.0113	0.0700	0.0113	04/16/24 12:59	
2,4-DB	mg/kg	<0.0297	0.0700	0.0297	04/16/24 12:59	
Dicamba	mg/kg	<0.0157	0.0700	0.0157	04/16/24 12:59	
Dichlorprop	mg/kg	<0.0245	0.0700	0.0245	04/16/24 12:59	
Dinoseb	mg/kg	<0.00697	0.0700	0.00697	04/16/24 12:59	
MCPA	mg/kg	<0.443	6.50	0.443	04/16/24 12:59	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	<0.367	6.50	0.367	04/16/24 12:59	
2,4,5-T	mg/kg	<0.00852	0.0700	0.00852	04/16/24 12:59	
2,4,5-TP (Silvex)	mg/kg	<0.0107	0.0700	0.0107	04/16/24 12:59	
2,4-DCAA (S)	%	71.9	22.0-132		04/16/24 12:59	

LABORATORY CONTROL SAMPLE: R4058398-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-D	mg/kg	0.0835	0.0713	85.4	40.0-120	
Dalapon	mg/kg	0.0835	0.0537	64.3	15.0-120	
2,4-DB	mg/kg	0.0835	0.0694	83.1	25.0-143	
Dicamba	mg/kg	0.0835	0.0627	75.1	43.0-120	
Dichlorprop	mg/kg	0.0835	0.0641	76.8	32.0-129	
Dinoseb	mg/kg	0.0835	0.0333	39.9	10.0-120	
MCPA	mg/kg	8.35	7.76	92.9	31.0-121	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	8.35	5.99	71.7	28.0-133	
2,4,5-T	mg/kg	0.0835	0.0644	77.1	41.0-120	
2,4,5-TP (Silvex)	mg/kg	0.0835	0.0736	88.1	42.0-120	
2,4-DCAA (S)	%			73.1	22.0-132	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058398-3 R4058398-4

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		L1724588-08 Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
2,4-D	mg/kg	ND	0.0990	0.0996	0.124	0.110	126	110	10.0-160	12.3	24	P9
Dalapon	mg/kg	ND	0.0990	0.0996	0.0676	0.0729	68.3	73.2	10.0-121	7.56	27	
2,4-DB	mg/kg	ND	0.0990	0.0996	0.0838	0.0873	84.6	87.6	10.0-160	4.09	22	P9
Dicamba	mg/kg	ND	0.0990	0.0996	0.0738	0.0690	74.5	69.3	10.0-154	6.59	21	
Dichlorprop	mg/kg	ND	0.0990	0.0996	0.0829	0.0765	83.8	76.8	10.0-158	8.02	20	
Dinoseb	mg/kg	ND	0.0990	0.0996	0.0396	0.0269	40.0	27.0	10.0-120	38.1	40	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058398-3			R4058398-4			% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		L1724588-08 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
MCPA	mg/kg	ND	9.90	9.96	16.1	25.5	162	256	10.0-160	45.3	40	E,MH, P9,R1		
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	ND	9.90	9.96	9.25	8.46	93.4	85.0	10.0-160	8.86	40			
2,4,5-T	mg/kg	ND	0.0990	0.0996	0.0706	0.0643	71.3	64.6	10.0-157	9.30	20			
2,4,5-TP (Silvex)	mg/kg	ND	0.0990	0.0996	0.0786	0.0689	79.4	69.2	10.0-156	13.1	20			
2,4-DCAA (S)	%						70.7	68.5	22.0-132					

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch: 2266156

Analysis Method: EPA 8151A

QC Batch Method: 8151A

Analysis Description: Chlorinated Herb. (GC) 8151A

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450582005

METHOD BLANK: R4058998-1

Matrix: Solid

Associated Lab Samples: 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4-D	mg/kg	<0.00702	0.0700	0.00702	04/17/24 16:19	
Dalapon	mg/kg	<0.0113	0.0700	0.0113	04/17/24 16:19	
2,4-DB	mg/kg	<0.0297	0.0700	0.0297	04/17/24 16:19	
Dicamba	mg/kg	<0.0157	0.0700	0.0157	04/17/24 16:19	
Dichlorprop	mg/kg	<0.0245	0.0700	0.0245	04/17/24 16:19	
Dinoseb	mg/kg	<0.00697	0.0700	0.00697	04/17/24 16:19	
MCPA	mg/kg	<0.443	6.50	0.443	04/17/24 16:19	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	<0.367	6.50	0.367	04/17/24 16:19	
2,4,5-T	mg/kg	<0.00852	0.0700	0.00852	04/17/24 16:19	
2,4,5-TP (Silvex)	mg/kg	<0.0107	0.0700	0.0107	04/17/24 16:19	
2,4-DCAA (S)	%	85.6	22.0-132		04/17/24 16:19	

LABORATORY CONTROL SAMPLE: R4058998-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-D	mg/kg	0.0835	0.0824	98.7	40.0-120	
Dalapon	mg/kg	0.0835	0.0536	64.2	15.0-120	
2,4-DB	mg/kg	0.0835	0.0772	92.5	25.0-143	
Dicamba	mg/kg	0.0835	0.0727	87.1	43.0-120	
Dichlorprop	mg/kg	0.0835	0.0780	93.4	32.0-129	
Dinoseb	mg/kg	0.0835	0.0450	53.9	10.0-120	
MCPA	mg/kg	8.35	9.06	109	31.0-121	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	8.35	7.22	86.5	28.0-133	
2,4,5-T	mg/kg	0.0835	0.0726	86.9	41.0-120	
2,4,5-TP (Silvex)	mg/kg	0.0835	0.0825	98.8	42.0-120	
2,4-DCAA (S)	%			83.2	22.0-132	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058998-3

R4058998-4

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1725144-01 Result	Spike Conc.	Spike Conc.	Conc.								
2,4-D	mg/kg	ND	0.102	0.103	0.0688	0.0579	67.2	56.2	10.0-160	17.1	24		
Dalapon	mg/kg	ND	0.102	0.103	<0.0141	<0.0141	0.00	0.00	10.0-121	0.00	27	ML	
2,4-DB	mg/kg	ND	0.102	0.103	0.0718	0.0726	70.1	70.5	10.0-160	1.21	22		
Dicamba	mg/kg	ND	0.102	0.103	0.0499	0.0436	48.8	42.3	10.0-154	13.6	21		
Dichlorprop	mg/kg	ND	0.102	0.103	0.0793	0.0814	77.4	79.0	10.0-158	2.64	20		
Dinoseb	mg/kg	ND	0.102	0.103	0.0716	0.0715	70.0	69.5	10.0-120	0.174	40		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Parameter	Units	R4058998-3			R4058998-4			% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		L1725144-01 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
MCPA	mg/kg	ND	10.2	10.3	8.45	8.09	82.6	78.5	10.0-160	4.38	40			
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	ND	10.2	10.3	7.38	6.98	72.1	67.8	10.0-160	5.57	40			
2,4,5-T	mg/kg	ND	0.102	0.103	0.0579	0.0530	56.6	51.5	10.0-157	8.77	20			
2,4,5-TP (Silvex)	mg/kg	ND	0.102	0.103	0.0775	0.0755	75.7	73.3	10.0-156	2.61	20			
2,4-DCAA (S)	%						72.0	69.7	22.0-132					

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch: 2265034

Analysis Method: EPA 6020B

QC Batch Method: 3050B

Analysis Description: Metals (ICPMS) 6020B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

METHOD BLANK: R4060688-1

Matrix: Solid

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	mg/kg	<6.90	50.0	6.90	04/22/24 17:05	
Antimony	mg/kg	0.429J	3.00	0.166	04/22/24 17:05	J
Arsenic	mg/kg	<0.100	1.00	0.100	04/22/24 17:05	
Barium	mg/kg	<0.152	2.50	0.152	04/22/24 17:05	
Beryllium	mg/kg	<0.138	2.50	0.138	04/22/24 17:05	
Cadmium	mg/kg	<0.0855	1.00	0.0855	04/22/24 17:05	
Calcium	mg/kg	<75.5	500	75.5	04/22/24 17:05	
Chromium	mg/kg	<0.297	5.00	0.297	04/22/24 17:05	
Cobalt	mg/kg	<0.0463	1.00	0.0463	04/22/24 17:05	
Copper	mg/kg	<0.133	5.00	0.133	04/22/24 17:05	
Iron	mg/kg	<8.95	50.0	8.95	04/22/24 17:05	
Lead	mg/kg	<0.0990	2.00	0.0990	04/22/24 17:05	
Magnesium	mg/kg	<45.9	500	45.9	04/22/24 17:05	
Manganese	mg/kg	<0.269	2.50	0.269	04/22/24 17:05	
Molybdenum	mg/kg	<0.101	2.50	0.101	04/22/24 17:05	
Nickel	mg/kg	<0.197	2.50	0.197	04/22/24 17:05	
Potassium	mg/kg	<68.0	500	68.0	04/22/24 17:05	
Selenium	mg/kg	<0.180	2.50	0.180	04/22/24 17:05	
Silver	mg/kg	<0.0865	0.500	0.0865	04/22/24 17:05	
Sodium	mg/kg	<76.5	500	76.5	04/22/24 17:05	
Thallium	mg/kg	<0.0650	2.00	0.0650	04/22/24 17:05	
Vanadium	mg/kg	<0.187	2.50	0.187	04/22/24 17:05	
Zinc	mg/kg	<0.740	25.0	0.740	04/22/24 17:05	

LABORATORY CONTROL SAMPLE: R4060688-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/kg	1000	1030	103	80.0-120	
Antimony	mg/kg	100	98.8	98.8	80.0-120	
Arsenic	mg/kg	100	103	103	80.0-120	
Barium	mg/kg	100	96.4	96.4	80.0-120	
Beryllium	mg/kg	100	102	102	80.0-120	
Cadmium	mg/kg	100	106	106	80.0-120	
Calcium	mg/kg	1000	1090	109	80.0-120	
Chromium	mg/kg	100	103	103	80.0-120	
Cobalt	mg/kg	100	104	104	80.0-120	
Copper	mg/kg	100	100	100	80.0-120	
Iron	mg/kg	1000	1050	105	80.0-120	
Lead	mg/kg	100	110	110	80.0-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

LABORATORY CONTROL SAMPLE: R4060688-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	mg/kg	1000	1090	109	80.0-120	
Manganese	mg/kg	100	101	101	80.0-120	
Molybdenum	mg/kg	100	99.2	99.2	80.0-120	
Nickel	mg/kg	100	106	106	80.0-120	
Potassium	mg/kg	1000	999	99.9	80.0-120	
Selenium	mg/kg	100	101	101	80.0-120	
Silver	mg/kg	20.0	20.3	101	80.0-120	
Sodium	mg/kg	1000	1090	109	80.0-120	
Thallium	mg/kg	100	107	107	80.0-120	
Vanadium	mg/kg	100	103	103	80.0-120	
Zinc	mg/kg	100	100	100	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4060688-5 R4060688-6

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450582004 Result	Spike Conc.	Spike Conc.	MS Conc.								
Aluminum	mg/kg	13100	1440	1440	17600	13500	315	25.9	75.0-125	26.7	20	P6,R1	
Antimony	mg/kg	0.569	144	144	92.2	111	63.8	76.7	75.0-125	18.3	20	ML	
Arsenic	mg/kg	6.35	144	144	159	163	106	109	75.0-125	2.65	20		
Barium	mg/kg	168	144	144	442	291	190	85.7	75.0-125	41.0	20	MH,R1	
Beryllium	mg/kg	0.781	144	144	139	156	96.1	108	75.0-125	11.5	20	E	
Cadmium	mg/kg	0.493	144	144	163	169	113	117	75.0-125	3.54	20		
Calcium	mg/kg	84600	1440	1440	89200	105000	322	1400	75.0-125	16.0	20	P6	
Chromium	mg/kg	24.1	144	144	197	179	120	108	75.0-125	9.14	20		
Cobalt	mg/kg	11.2	144	144	171	171	111	111	75.0-125	0.242	20		
Copper	mg/kg	16.1	144	144	171	168	108	106	75.0-125	1.58	20		
Iron	mg/kg	17700	1440	1440	22800	18400	355	50.5	75.0-125	21.2	20	P6,R1	
Lead	mg/kg	17.3	144	144	182	180	115	113	75.0-125	1.04	20		
Magnesium	mg/kg	6540	1440	1440	9130	7430	180	62.1	75.0-125	20.5	20	P6,R1	
Manganese	mg/kg	1110	144	144	2140	1570	722	324	75.0-125	30.8	20	P6,R1	
Molybdenum	mg/kg	1.73	144	144	153	161	105	111	75.0-125	4.91	20		
Nickel	mg/kg	29.3	144	144	205	186	122	109	75.0-125	9.42	20		
Potassium	mg/kg	3010	1440	1440	5260	4300	157	89.8	75.0-125	20.2	20	MH,R1	
Selenium	mg/kg	1.72	144	144	161	165	111	114	75.0-125	2.27	20		
Silver	mg/kg	ND	28.7	28.7	31.8	32.9	111	115	75.0-125	3.32	20		
Sodium	mg/kg	315	1440	1440	1970	1960	115	114	75.0-125	0.465	20		
Thallium	mg/kg	0.320	144	144	153	161	106	112	75.0-125	5.28	20		
Vanadium	mg/kg	28.7	144	144	201	185	120	109	75.0-125	8.50	20		
Zinc	mg/kg	74.8	144	144	229	226	108	105	75.0-125	1.68	20		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch: 2265617 Analysis Method: EPA 7471B  
 QC Batch Method: 7471A Analysis Description: Mercury 7471B  
 Laboratory: Pace National - Mt. Juliet  
 Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

METHOD BLANK: R4057311-1 Matrix: Solid  
 Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	<0.0180	0.0400	0.0180	04/13/24 09:37	

LABORATORY CONTROL SAMPLE: R4057311-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.500	0.449	89.8	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4057311-4 R4057311-5

Parameter	Units	R4057311-4		R4057311-5		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		L1724588-08 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Mercury	mg/kg	ND	0.604	0.604	0.527	0.542	87.3	89.8	75.0-125	2.80	20	

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QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch: 890026

Analysis Method: EPA 8260C

QC Batch Method: EPA 5035A/5030B

Analysis Description: 8260C MSV 5035A Low Level

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

METHOD BLANK: 3522630

Matrix: Solid

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

Table with 7 columns: Parameter, Units, Blank Result, Reporting Limit, MDL, Analyzed, Qualifiers. Lists various chemical compounds and their detection results.

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

METHOD BLANK: 3522630

Matrix: Solid

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/kg	<0.93	5.0	0.93	04/10/24 10:45	
cis-1,3-Dichloropropene	ug/kg	<0.75	5.0	0.75	04/10/24 10:45	
Dibromochloromethane	ug/kg	<0.30	5.0	0.30	04/10/24 10:45	
Dibromomethane	ug/kg	<1.5	5.0	1.5	04/10/24 10:45	
Dichlorodifluoromethane	ug/kg	<0.95	13.0	0.95	04/10/24 10:45	
Ethylbenzene	ug/kg	<0.87	5.0	0.87	04/10/24 10:45	
Hexachloro-1,3-butadiene	ug/kg	<0.89	5.0	0.89	04/10/24 10:45	
Isopropylbenzene (Cumene)	ug/kg	<0.32	5.0	0.32	04/10/24 10:45	
Methyl-tert-butyl ether	ug/kg	<0.96	5.0	0.96	04/10/24 10:45	
Methylene Chloride	ug/kg	<19.4	25.0	19.4	04/10/24 10:45	
n-Butylbenzene	ug/kg	<0.48	5.0	0.48	04/10/24 10:45	
n-Propylbenzene	ug/kg	<0.61	5.0	0.61	04/10/24 10:45	
Naphthalene	ug/kg	<0.73	10.0	0.73	04/10/24 10:45	
p-Isopropyltoluene	ug/kg	<0.44	5.0	0.44	04/10/24 10:45	
sec-Butylbenzene	ug/kg	<0.49	5.0	0.49	04/10/24 10:45	
Styrene	ug/kg	<0.40	5.0	0.40	04/10/24 10:45	
tert-Butylbenzene	ug/kg	<0.32	5.0	0.32	04/10/24 10:45	
Tetrachloroethene	ug/kg	<0.53	5.0	0.53	04/10/24 10:45	
Toluene	ug/kg	<4.4	20.0	4.4	04/10/24 10:45	
trans-1,2-Dichloroethene	ug/kg	<1.1	5.0	1.1	04/10/24 10:45	
trans-1,3-Dichloropropene	ug/kg	<0.60	5.0	0.60	04/10/24 10:45	
Trichloroethene	ug/kg	<1.9	5.0	1.9	04/10/24 10:45	
Trichlorofluoromethane	ug/kg	<9.6	13.0	9.6	04/10/24 10:45	
Vinyl chloride	ug/kg	<0.93	13.0	0.93	04/10/24 10:45	
Xylene (Total)	ug/kg	<3.7	15.0	3.7	04/10/24 10:45	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120		04/10/24 10:45	
4-Bromofluorobenzene (S)	%	103	83-119		04/10/24 10:45	
Toluene-d8 (S)	%	110	80-120		04/10/24 10:45	

LABORATORY CONTROL SAMPLE: 3522631

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	1250	1410	113	84-125	
1,1,1-Trichloroethane	ug/kg	1250	1300	104	81-121	
1,1,2,2-Tetrachloroethane	ug/kg	1250	1300	104	76-121	
1,1,2-Trichloroethane	ug/kg	1250	1300	104	83-118	
1,1-Dichloroethane	ug/kg	1250	1260	101	74-120	
1,1-Dichloroethene	ug/kg	1250	1280	102	71-124	
1,1-Dichloropropene	ug/kg	1250	1180	94	73-123	
1,2,3-Trichlorobenzene	ug/kg	1250	1270	102	81-123	
1,2,3-Trichloropropane	ug/kg	1250	1260	101	81-116	
1,2,4-Trichlorobenzene	ug/kg	1250	1270	102	79-126	
1,2,4-Trimethylbenzene	ug/kg	1250	1300	104	79-121	
1,2-Dibromo-3-chloropropane	ug/kg	1250	1280	102	74-125	

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**REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

LABORATORY CONTROL SAMPLE: 3522631

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/kg	1250	1310	105	64-137	
1,2-Dichlorobenzene	ug/kg	1250	1170	93	83-119	
1,2-Dichloroethane	ug/kg	1250	1290	103	58-128	
1,2-Dichloroethene (Total)	ug/kg	2500	2400	96	82-117	
1,2-Dichloropropane	ug/kg	1250	1320	106	77-122	
1,3,5-Trimethylbenzene	ug/kg	1250	1270	102	81-122	
1,3-Dichlorobenzene	ug/kg	1250	1240	99	83-119	
1,3-Dichloropropane	ug/kg	1250	1270	101	83-118	
1,4-Dichlorobenzene	ug/kg	1250	1140	91	83-116	
2,2-Dichloropropane	ug/kg	1250	1430	114	76-124	
2-Butanone (MEK)	ug/kg	6250	6070	97	63-122	
2-Chlorotoluene	ug/kg	1250	1250	100	79-119	
2-Hexanone	ug/kg	6250	6930	111	68-122	
4-Chlorotoluene	ug/kg	1250	1270	101	84-119	
4-Methyl-2-pentanone (MIBK)	ug/kg	6250	7030	112	63-128	
Acetone	ug/kg	6250	6730	108	55-124	
Benzene	ug/kg	1250	1190	95	67-126	
Bromobenzene	ug/kg	1250	1240	99	85-117	
Bromochloromethane	ug/kg	1250	1310	105	78-122	
Bromodichloromethane	ug/kg	1250	1290	103	82-120	
Bromoform	ug/kg	1250	1500	120	77-133	
Bromomethane	ug/kg	1250	1230	98	20-168	
Carbon disulfide	ug/kg	1250	1320	105	60-133	
Carbon tetrachloride	ug/kg	1250	1310	105	79-128	
Chlorobenzene	ug/kg	1250	1210	97	84-118	
Chloroethane	ug/kg	1250	1190	95	53-139	
Chloroform	ug/kg	1250	1260	101	82-120	
Chloromethane	ug/kg	1250	1130	90	33-143	
cis-1,2-Dichloroethene	ug/kg	1250	1140	91	83-117	
cis-1,3-Dichloropropene	ug/kg	1250	1400	112	80-122	
Dibromochloromethane	ug/kg	1250	1450	116	82-128	
Dibromomethane	ug/kg	1250	1300	104	82-119	
Dichlorodifluoromethane	ug/kg	1250	1270	101	12-159	
Ethylbenzene	ug/kg	1250	1230	98	69-127	
Hexachloro-1,3-butadiene	ug/kg	1250	1280	102	77-133	
Isopropylbenzene (Cumene)	ug/kg	1250	1290	103	83-122	
Methyl-tert-butyl ether	ug/kg	1250	1360	109	58-137	
Methylene Chloride	ug/kg	1250	1180	95	68-125	
n-Butylbenzene	ug/kg	1250	1350	108	73-131	
n-Propylbenzene	ug/kg	1250	1240	99	82-122	
Naphthalene	ug/kg	1250	1330	106	60-136	
p-Isopropyltoluene	ug/kg	1250	1290	103	74-129	
sec-Butylbenzene	ug/kg	1250	1240	99	71-133	
Styrene	ug/kg	1250	1340	107	84-121	
tert-Butylbenzene	ug/kg	1250	1250	100	81-122	
Tetrachloroethene	ug/kg	1250	1270	102	78-130	
Toluene	ug/kg	1250	1150	92	80-118	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

LABORATORY CONTROL SAMPLE: 3522631

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/kg	1250	1260	101	78-118	
trans-1,3-Dichloropropene	ug/kg	1250	1420	114	81-123	
Trichloroethene	ug/kg	1250	1290	103	78-127	
Trichlorofluoromethane	ug/kg	1250	1340	107	64-133	
Vinyl chloride	ug/kg	1250	1260	101	45-139	
Xylene (Total)	ug/kg	3750	3740	100	69-130	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			100	83-119	
Toluene-d8 (S)	%			102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3522632 3522633

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450516008 Result	Spike Conc.	Spike Conc.	MS Result						
1,1,1,2-Tetrachloroethane	ug/kg	<0.91	1600	1600	1630	1730	102	108	12-128	6	59
1,1,1-Trichloroethane	ug/kg	<1.3	1600	1600	1550	1650	97	103	15-131	6	75
1,1,2,2-Tetrachloroethane	ug/kg	<0.90	1600	1600	1590	1620	100	101	10-132	1	65
1,1,2-Trichloroethane	ug/kg	<0.91	1600	1600	1530	1600	96	100	14-132	5	54
1,1-Dichloroethane	ug/kg	<1.5	1600	1600	1470	1550	92	97	23-126	5	64
1,1-Dichloroethene	ug/kg	<2.6	1600	1600	1440	1560	90	98	20-129	8	80
1,1-Dichloropropene	ug/kg	<1.4	1600	1600	1360	1430	85	90	15-127	5	78
1,2,3-Trichlorobenzene	ug/kg	<0.74	1600	1600	1540	1610	97	101	10-124	4	67
1,2,3-Trichloropropane	ug/kg	<2.0	1600	1600	1570	1610	98	101	19-125	3	51
1,2,4-Trichlorobenzene	ug/kg	<0.63	1600	1600	1520	1630	95	102	10-129	7	73
1,2,4-Trimethylbenzene	ug/kg	<0.88	1600	1600	1620	1660	102	104	10-124	2	68
1,2-Dibromo-3-chloropropane	ug/kg	<4.3	1600	1600	1550	1610	97	101	10-135	4	56
1,2-Dibromoethane (EDB)	ug/kg	<0.67	1600	1600	1530	1620	96	101	23-123	6	50
1,2-Dichlorobenzene	ug/kg	<1.1	1600	1600	1470	1510	92	94	10-126	3	60
1,2-Dichloroethane	ug/kg	<1.2	1600	1600	1530	1600	96	100	27-116	4	45
1,2-Dichloroethene (Total)	ug/kg	<2.4	3200	3200	2680	2890	84	91	20-127	8	64
1,2-Dichloropropane	ug/kg	<1.3	1600	1600	1540	1620	96	101	21-125	5	57
1,3,5-Trimethylbenzene	ug/kg	<0.55	1600	1600	1580	1640	99	103	10-125	4	65
1,3-Dichlorobenzene	ug/kg	<0.81	1600	1600	1530	1580	96	99	10-126	3	63
1,3-Dichloropropane	ug/kg	<0.25	1600	1600	1490	1580	93	99	24-114	6	51
1,4-Dichlorobenzene	ug/kg	<1.1	1600	1600	1440	1460	90	91	10-126	1	62
2,2-Dichloropropane	ug/kg	<1.9	1600	1600	1470	1500	92	94	17-124	2	70
2-Butanone (MEK)	ug/kg	<40.7	7980	7980	6920	7210	87	90	29-120	4	50
2-Chlorotoluene	ug/kg	<0.89	1600	1600	1520	1570	95	99	10-138	3	70
2-Hexanone	ug/kg	<13.3	7980	7980	8200	8410	103	105	25-121	3	51
4-Chlorotoluene	ug/kg	<0.50	1600	1600	1520	1590	95	100	10-112	4	62
4-Methyl-2-pentanone (MIBK)	ug/kg	<8.9	7980	7980	8420	8460	106	106	23-131	0	50
Acetone	ug/kg	<76.8	7980	7980	7590	8020	95	100	15-129	5	49
Benzene	ug/kg	<0.58	1600	1600	1370	1440	86	90	17-134	5	53
Bromobenzene	ug/kg	<0.79	1600	1600	1510	1580	95	99	10-129	4	63

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		3522632		3522633							
Parameter	Units	60450516008	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual
		Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	
Bromochloromethane	ug/kg	<0.95	1600	1600	1500	1640	94	102	28-118	9	53
Bromodichloromethane	ug/kg	<1.1	1600	1600	1580	1680	99	105	21-126	6	59
Bromoform	ug/kg	<0.50	1600	1600	1750	1820	110	114	14-127	4	60
Bromomethane	ug/kg	<7.9	1600	1600	1210	1390	76	87	10-121	14	67
Carbon disulfide	ug/kg	<3.0	1600	1600	1420	1520	89	95	10-122	7	78
Carbon tetrachloride	ug/kg	<2.1	1600	1600	1590	1690	99	106	10-134	7	82
Chlorobenzene	ug/kg	<0.37	1600	1600	1440	1510	90	95	10-126	5	60
Chloroethane	ug/kg	<10.6	1600	1600	1460	1510	91	95	10-133	4	79
Chloroform	ug/kg	<2.4	1600	1600	1470	1580	92	99	24-126	7	60
Chloromethane	ug/kg	<1.6	1600	1600	1100	1140	69	71	10-125	3	78
cis-1,2-Dichloroethene	ug/kg	<1.2	1600	1600	1270	1380	80	87	18-131	9	62
cis-1,3-Dichloropropene	ug/kg	<0.96	1600	1600	1600	1690	100	106	24-117	6	60
Dibromochloromethane	ug/kg	<0.39	1600	1600	1680	1780	105	112	22-117	6	59
Dibromomethane	ug/kg	<1.9	1600	1600	1540	1640	96	103	29-118	6	52
Dichlorodifluoromethane	ug/kg	<1.2	1600	1600	1030	1040	64	65	10-161	2	84
Ethylbenzene	ug/kg	<1.1	1600	1600	1450	1540	91	96	10-137	6	60
Hexachloro-1,3-butadiene	ug/kg	<1.1	1600	1600	1480	1540	93	96	10-124	4	76
Isopropylbenzene (Cumene)	ug/kg	<0.40	1600	1600	1590	1660	100	104	10-123	4	72
Methyl-tert-butyl ether	ug/kg	<1.2	1600	1600	1520	1640	95	103	31-126	8	42
Methylene Chloride	ug/kg	<24.8	1600	1600	1310	1420	81	88	23-117	8	59
n-Butylbenzene	ug/kg	<0.61	1600	1600	1600	1630	100	102	10-130	2	78
n-Propylbenzene	ug/kg	<0.78	1600	1600	1530	1590	96	99	10-121	3	70
Naphthalene	ug/kg	<0.93	1600	1600	1630	1710	102	107	10-131	5	63
p-Isopropyltoluene	ug/kg	1.2J	1600	1600	1610	1660	101	104	10-127	3	76
sec-Butylbenzene	ug/kg	<0.63	1600	1600	1570	1610	98	101	10-137	3	81
Styrene	ug/kg	<0.52	1600	1600	1620	1700	102	107	10-119	5	56
tert-Butylbenzene	ug/kg	<0.41	1600	1600	1540	1620	97	101	10-121	5	80
Tetrachloroethene	ug/kg	<0.68	1600	1600	1500	1570	94	98	10-131	5	78
Toluene	ug/kg	<5.7	1600	1600	1340	1420	84	88	13-131	5	60
trans-1,2-Dichloroethene	ug/kg	<1.4	1600	1600	1410	1510	89	95	22-125	7	70
trans-1,3-Dichloropropene	ug/kg	<0.77	1600	1600	1640	1740	103	109	20-122	6	54
Trichloroethene	ug/kg	<2.4	1600	1600	1480	1580	93	99	14-144	6	69
Trichlorofluoromethane	ug/kg	<12.3	1600	1600	1900	1760	119	110	10-134	7	86
Vinyl chloride	ug/kg	<1.2	1600	1600	1260	1340	79	84	10-141	6	81
Xylene (Total)	ug/kg	<4.7	4790	4790	4480	4740	94	99	10-137	6	58
1,2-Dichlorobenzene-d4 (S)	%						101	100	80-120		
4-Bromofluorobenzene (S)	%						100	100	83-119		
Toluene-d8 (S)	%						102	101	80-120		

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### QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch: 890105

Analysis Method: EPA 8260

QC Batch Method: EPA 5035

Analysis Description: 8260 MSV GRO and Oxygenates

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450582001, 60450582002, 60450582005

METHOD BLANK: 3522789

Matrix: Solid

Associated Lab Samples: 60450582001, 60450582002, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.068	0.50	0.068	04/11/24 09:30	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		04/11/24 09:30	
4-Bromofluorobenzene (S)	%	108	69-133		04/11/24 09:30	
Toluene-d8 (S)	%	102	78-122		04/11/24 09:30	

LABORATORY CONTROL SAMPLE: 3522790

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	2.8	71	61-140	
1,2-Dichlorobenzene-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			101	69-133	
Toluene-d8 (S)	%			106	78-122	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch: 890387	Analysis Method: EPA 8260
QC Batch Method: EPA 5035	Analysis Description: 8260 MSV GRO and Oxygenates
	Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450582003, 60450582004

METHOD BLANK: 3524050 Matrix: Solid

Associated Lab Samples: 60450582003, 60450582004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.068	0.50	0.068	04/12/24 12:36	
1,2-Dichlorobenzene-d4 (S)	%	97	80-120		04/12/24 12:36	
4-Bromofluorobenzene (S)	%	105	69-133		04/12/24 12:36	
Toluene-d8 (S)	%	102	78-122		04/12/24 12:36	

LABORATORY CONTROL SAMPLE: 3524051

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	4.1	103	61-140	
1,2-Dichlorobenzene-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			98	69-133	
Toluene-d8 (S)	%			106	78-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3524052 3524053

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		60450458002	Spike Conc.	Spike Conc.	Result					
1,2-Dichlorobenzene-d4 (S)	%					102	103	80-120		
4-Bromofluorobenzene (S)	%					103	103	69-133		
Toluene-d8 (S)	%					104	106	78-122		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch:	890356	Analysis Method:	EPA 8082
QC Batch Method:	EPA 3546	Analysis Description:	8082 GCS PCB
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

METHOD BLANK: 3523811 Matrix: Solid  
 Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<8.7	32.2	8.7	04/19/24 09:14	
PCB-1221 (Aroclor 1221)	ug/kg	<10.8	32.2	10.8	04/19/24 09:14	
PCB-1232 (Aroclor 1232)	ug/kg	<10.8	32.2	10.8	04/19/24 09:14	
PCB-1242 (Aroclor 1242)	ug/kg	<10.8	32.2	10.8	04/19/24 09:14	
PCB-1248 (Aroclor 1248)	ug/kg	<10.8	32.2	10.8	04/19/24 09:14	
PCB-1254 (Aroclor 1254)	ug/kg	<10.8	32.2	10.8	04/19/24 09:14	
PCB-1260 (Aroclor 1260)	ug/kg	<10.8	32.2	10.8	04/19/24 09:14	
Decachlorobiphenyl (S)	%	60	20-120		04/19/24 09:14	

LABORATORY CONTROL SAMPLE: 3523812

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	166	152	91	48-120	
PCB-1260 (Aroclor 1260)	ug/kg	166	172	104	55-120	
Decachlorobiphenyl (S)	%			110	20-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3523813 3523814

Parameter	Units	60450736004		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	% Rec	% Rec					
PCB-1016 (Aroclor 1016)	ug/kg	ND	198	199	163	184	82	92	48-120	12	40		
PCB-1260 (Aroclor 1260)	ug/kg	ND	198	199	172	192	87	96	55-120	11	40		
Decachlorobiphenyl (S)	%						87	91	20-120		40		

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## QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch: 889927

Analysis Method: EPA 8270

QC Batch Method: EPA 3546

Analysis Description: 8270 Solid MSSV Microwave

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

METHOD BLANK: 3522267

Matrix: Solid

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	<68.6	327	68.6	04/12/24 11:03	
1,2-Dichlorobenzene	ug/kg	<65.2	327	65.2	04/12/24 11:03	
1,3-Dichlorobenzene	ug/kg	<64.0	327	64.0	04/12/24 11:03	
1,4-Dichlorobenzene	ug/kg	<63.1	327	63.1	04/12/24 11:03	
2,4,5-Trichlorophenol	ug/kg	<67.1	327	67.1	04/12/24 11:03	
2,4,6-Trichlorophenol	ug/kg	<60.5	327	60.5	04/12/24 11:03	
2,4-Dichlorophenol	ug/kg	<65.6	327	65.6	04/12/24 11:03	
2,4-Dimethylphenol	ug/kg	<47.6	327	47.6	04/12/24 11:03	
2,4-Dinitrophenol	ug/kg	<98.9	1660	98.9	04/12/24 11:03	
2,4-Dinitrotoluene	ug/kg	<73.7	327	73.7	04/12/24 11:03	
2,6-Dinitrotoluene	ug/kg	<63.8	327	63.8	04/12/24 11:03	
2-Chloronaphthalene	ug/kg	<69.0	327	69.0	04/12/24 11:03	
2-Chlorophenol	ug/kg	<66.9	327	66.9	04/12/24 11:03	
2-Methylnaphthalene	ug/kg	<66.4	327	66.4	04/12/24 11:03	
2-Methylphenol(o-Cresol)	ug/kg	<59.6	327	59.6	04/12/24 11:03	
2-Nitroaniline	ug/kg	<54.3	655	54.3	04/12/24 11:03	
2-Nitrophenol	ug/kg	<51.2	327	51.2	04/12/24 11:03	
3&4-Methylphenol(m&p Cresol)	ug/kg	<60.8	327	60.8	04/12/24 11:03	
3,3'-Dichlorobenzidine	ug/kg	<32.2	655	32.2	04/12/24 11:03	
3-Nitroaniline	ug/kg	<51.0	655	51.0	04/12/24 11:03	
4,6-Dinitro-2-methylphenol	ug/kg	<56.7	1660	56.7	04/12/24 11:03	
4-Bromophenylphenyl ether	ug/kg	<70.7	327	70.7	04/12/24 11:03	
4-Chloro-3-methylphenol	ug/kg	<68.7	655	68.7	04/12/24 11:03	
4-Chloroaniline	ug/kg	<51.3	655	51.3	04/12/24 11:03	
4-Chlorophenylphenyl ether	ug/kg	<70.3	327	70.3	04/12/24 11:03	
4-Nitroaniline	ug/kg	<56.1	655	56.1	04/12/24 11:03	
4-Nitrophenol	ug/kg	<48.2	1660	48.2	04/12/24 11:03	
Acenaphthene	ug/kg	<70.4	327	70.4	04/12/24 11:03	
Acenaphthylene	ug/kg	<53.6	327	53.6	04/12/24 11:03	
Anthracene	ug/kg	<68.5	327	68.5	04/12/24 11:03	
Benzo(a)anthracene	ug/kg	<69.3	327	69.3	04/12/24 11:03	
Benzo(a)pyrene	ug/kg	<70.5	327	70.5	04/12/24 11:03	
Benzo(b)fluoranthene	ug/kg	<79.9	327	79.9	04/12/24 11:03	
Benzo(g,h,i)perylene	ug/kg	<56.9	327	56.9	04/12/24 11:03	
Benzo(k)fluoranthene	ug/kg	<70.5	327	70.5	04/12/24 11:03	
Benzoic Acid	ug/kg	<179	1660	179	04/12/24 11:03	
Benzyl alcohol	ug/kg	<60.1	655	60.1	04/12/24 11:03	
bis(2-Chloroethoxy)methane	ug/kg	<65.1	327	65.1	04/12/24 11:03	
bis(2-Chloroethyl) ether	ug/kg	<66.1	327	66.1	04/12/24 11:03	
bis(2-Chloroisopropyl) ether	ug/kg	<71.0	327	71.0	04/12/24 11:03	

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## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

METHOD BLANK: 3522267

Matrix: Solid

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Ethylhexyl)phthalate	ug/kg	<73.5	327	73.5	04/12/24 11:03	
Butylbenzylphthalate	ug/kg	<66.7	327	66.7	04/12/24 11:03	
Carbazole	ug/kg	<67.4	327	67.4	04/12/24 11:03	
Chrysene	ug/kg	<72.9	327	72.9	04/12/24 11:03	
Di-n-butylphthalate	ug/kg	<77.5	327	77.5	04/12/24 11:03	
Di-n-octylphthalate	ug/kg	<79.7	327	79.7	04/12/24 11:03	
Dibenz(a,h)anthracene	ug/kg	<58.8	327	58.8	04/12/24 11:03	
Dibenzofuran	ug/kg	<70.0	327	70.0	04/12/24 11:03	
Diethylphthalate	ug/kg	<74.8	327	74.8	04/12/24 11:03	
Dimethylphthalate	ug/kg	<68.0	327	68.0	04/12/24 11:03	
Fluoranthene	ug/kg	<72.1	327	72.1	04/12/24 11:03	
Fluorene	ug/kg	<69.7	327	69.7	04/12/24 11:03	
Hexachloro-1,3-butadiene	ug/kg	<70.2	327	70.2	04/12/24 11:03	
Hexachlorobenzene	ug/kg	<68.5	327	68.5	04/12/24 11:03	
Hexachlorocyclopentadiene	ug/kg	<201	327	201	04/12/24 11:03	
Hexachloroethane	ug/kg	<60.0	327	60.0	04/12/24 11:03	
Indeno(1,2,3-cd)pyrene	ug/kg	<67.0	327	67.0	04/12/24 11:03	
Isophorone	ug/kg	<63.3	327	63.3	04/12/24 11:03	
N-Nitroso-di-n-propylamine	ug/kg	<62.4	327	62.4	04/12/24 11:03	
N-Nitrosodiphenylamine	ug/kg	<65.1	327	65.1	04/12/24 11:03	
Naphthalene	ug/kg	<70.5	327	70.5	04/12/24 11:03	
Nitrobenzene	ug/kg	<69.4	327	69.4	04/12/24 11:03	
Pentachlorophenol	ug/kg	<108	1660	108	04/12/24 11:03	
Phenanthrene	ug/kg	<70.0	327	70.0	04/12/24 11:03	
Phenol	ug/kg	<61.6	327	61.6	04/12/24 11:03	
Pyrene	ug/kg	<69.9	327	69.9	04/12/24 11:03	
Pyridine	ug/kg	<48.5	327	48.5	04/12/24 11:03	
2,4,6-Tribromophenol (S)	%	77	35-120		04/12/24 11:03	
2-Fluorobiphenyl (S)	%	69	40-120		04/12/24 11:03	
2-Fluorophenol (S)	%	74	40-120		04/12/24 11:03	
Nitrobenzene-d5 (S)	%	75	30-120		04/12/24 11:03	
Phenol-d6 (S)	%	74	40-120		04/12/24 11:03	
Terphenyl-d14 (S)	%	79	45-120		04/12/24 11:03	

LABORATORY CONTROL SAMPLE: 3522268

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1660	1150	70	50-120	
1,2-Dichlorobenzene	ug/kg	1660	1120	68	45-120	
1,3-Dichlorobenzene	ug/kg	1660	1080	65	45-120	
1,4-Dichlorobenzene	ug/kg	1660	1110	67	45-120	
2,4,5-Trichlorophenol	ug/kg	1660	1190	72	50-120	
2,4,6-Trichlorophenol	ug/kg	1660	1220	73	45-120	
2,4-Dichlorophenol	ug/kg	1660	1160	70	50-120	

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**REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

LABORATORY CONTROL SAMPLE: 3522268

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dimethylphenol	ug/kg	1660	1150	70	40-120	
2,4-Dinitrophenol	ug/kg	1660	1090J	66	10-145	
2,4-Dinitrotoluene	ug/kg	1660	1240	75	50-120	
2,6-Dinitrotoluene	ug/kg	1660	1220	74	50-120	
2-Chloronaphthalene	ug/kg	1660	1170	70	45-120	
2-Chlorophenol	ug/kg	1660	1200	72	45-120	
2-Methylnaphthalene	ug/kg	1660	1150	69	50-120	
2-Methylphenol(o-Cresol)	ug/kg	1660	1210	73	45-120	
2-Nitroaniline	ug/kg	1660	1310	79	45-120	
2-Nitrophenol	ug/kg	1660	1180	71	45-120	
3&4-Methylphenol(m&p Cresol)	ug/kg	1660	1210	73	45-120	
3,3'-Dichlorobenzidine	ug/kg	1660	709	43	10-120	
3-Nitroaniline	ug/kg	1660	692	42	15-120	
4,6-Dinitro-2-methylphenol	ug/kg	1660	1170J	71	20-135	
4-Bromophenylphenyl ether	ug/kg	1660	1210	73	50-120	
4-Chloro-3-methylphenol	ug/kg	1660	1240	75	50-120	
4-Chloroaniline	ug/kg	1660	436J	26	10-120	
4-Chlorophenylphenyl ether	ug/kg	1660	1180	71	50-120	
4-Nitroaniline	ug/kg	1660	1090	66	45-120	
4-Nitrophenol	ug/kg	1660	1290J	78	45-125	
Acenaphthene	ug/kg	1660	1160	70	50-120	
Acenaphthylene	ug/kg	1660	1160	70	50-120	
Anthracene	ug/kg	1660	1200	73	50-120	
Benzo(a)anthracene	ug/kg	1660	1240	75	50-120	
Benzo(a)pyrene	ug/kg	1660	1230	74	50-120	
Benzo(b)fluoranthene	ug/kg	1660	1240	75	50-120	
Benzo(g,h,i)perylene	ug/kg	1660	1250	75	45-120	
Benzo(k)fluoranthene	ug/kg	1660	1170	70	50-120	
Benzoic Acid	ug/kg	1660	1080J	65	10-155	
Benzyl alcohol	ug/kg	1660	1200	73	45-120	
bis(2-Chloroethoxy)methane	ug/kg	1660	1190	72	45-120	
bis(2-Chloroethyl) ether	ug/kg	1660	1200	72	45-120	
bis(2-Chloroisopropyl) ether	ug/kg	1660	1230	74	40-120	
bis(2-Ethylhexyl)phthalate	ug/kg	1660	1310	79	50-125	
Butylbenzylphthalate	ug/kg	1660	1340	81	55-120	
Carbazole	ug/kg	1660	1150	70	50-120	
Chrysene	ug/kg	1660	1210	73	50-120	
Di-n-butylphthalate	ug/kg	1660	1280	77	50-120	
Di-n-octylphthalate	ug/kg	1660	1330	81	55-125	
Dibenz(a,h)anthracene	ug/kg	1660	1230	74	45-120	
Dibenzofuran	ug/kg	1660	1160	70	50-120	
Diethylphthalate	ug/kg	1660	1210	73	50-120	
Dimethylphthalate	ug/kg	1660	1160	70	50-120	
Fluoranthene	ug/kg	1660	1220	74	50-120	
Fluorene	ug/kg	1660	1170	71	50-120	
Hexachloro-1,3-butadiene	ug/kg	1660	1130	68	50-120	
Hexachlorobenzene	ug/kg	1660	1240	75	50-120	

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## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

LABORATORY CONTROL SAMPLE: 3522268

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachlorocyclopentadiene	ug/kg	1660	1060	64	20-120	
Hexachloroethane	ug/kg	1660	1150	69	45-120	
Indeno(1,2,3-cd)pyrene	ug/kg	1660	1250	75	45-120	
Isophorone	ug/kg	1660	1210	73	45-120	
N-Nitroso-di-n-propylamine	ug/kg	1660	1240	75	45-120	
N-Nitrosodiphenylamine	ug/kg	1660	1180	72	50-120	
Naphthalene	ug/kg	1660	1140	69	50-120	
Nitrobenzene	ug/kg	1660	1190	72	45-120	
Pentachlorophenol	ug/kg	1660	1250J	76	25-135	
Phenanthrene	ug/kg	1660	1170	71	50-120	
Phenol	ug/kg	1660	1220	74	45-120	
Pyrene	ug/kg	1660	1210	73	55-120	
Pyridine	ug/kg	1660	858	52	25-120	
2,4,6-Tribromophenol (S)	%			78	35-120	
2-Fluorobiphenyl (S)	%			67	40-120	
2-Fluorophenol (S)	%			72	40-120	
Nitrobenzene-d5 (S)	%			73	30-120	
Phenol-d6 (S)	%			74	40-120	
Terphenyl-d14 (S)	%			72	45-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3522269 3522270

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450516008	Spike Conc.	Spike Conc.	Result								
1,2,4-Trichlorobenzene	ug/kg	<81.1	1950	1950	1240	1190	64	61	38-120	4	26		
1,2-Dichlorobenzene	ug/kg	<77.1	1950	1950	1230	1180	63	61	35-120	4	31		
1,3-Dichlorobenzene	ug/kg	<75.7	1950	1950	1210	1140	62	58	35-120	6	31		
1,4-Dichlorobenzene	ug/kg	<74.6	1950	1950	1250	1160	64	59	40-120	8	30		
2,4,5-Trichlorophenol	ug/kg	<79.3	1950	1950	1300	1160	67	59	40-125	11	31		
2,4,6-Trichlorophenol	ug/kg	<71.6	1950	1950	1230	1050	63	53	40-120	16	31		
2,4-Dichlorophenol	ug/kg	<77.5	1950	1950	1230	1050	63	54	35-120	16	29		
2,4-Dimethylphenol	ug/kg	<56.3	1950	1950	665	394	34	20	20-120	51	32	R1	
2,4-Dinitrophenol	ug/kg	<117	1950	1950	1040J	923J	54	47	10-125		35		
2,4-Dinitrotoluene	ug/kg	<87.2	1950	1950	1300	1240	67	63	25-135	5	32		
2,6-Dinitrotoluene	ug/kg	<75.4	1950	1950	1310	1220	67	62	20-140	7	25		
2-Chloronaphthalene	ug/kg	<81.5	1950	1950	1260	1200	65	61	35-120	6	28		
2-Chlorophenol	ug/kg	<79.1	1950	1950	1250	1050	64	54	30-120	18	31		
2-Methylnaphthalene	ug/kg	<78.5	1950	1950	1280	1200	65	61	35-120	6	28		
2-Methylphenol(o-Cresol)	ug/kg	<70.5	1950	1950	993	676	51	35	40-120	38	32	M1,R1	
2-Nitroaniline	ug/kg	<64.2	1950	1950	1460	1350	75	69	30-140	8	28		
2-Nitrophenol	ug/kg	<60.5	1950	1950	1330	1280	68	66	10-165	4	30		
3&4-Methylphenol(m&p Cresol)	ug/kg	<71.9	1950	1950	1070	767	55	39	40-120	33	30	M1,R1	
3,3'-Dichlorobenzidine	ug/kg	<38.0	1950	1950	221J	79.5J	11	4	10-120		39	M1	
3-Nitroaniline	ug/kg	<60.3	1950	1950	1100	990	56	51	10-130	11	27		

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### QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3522269 3522270												
Parameter	Units	60450516008		MS	MSD	MS		MSD		% Rec Limits	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec			
4,6-Dinitro-2-methylphenol	ug/kg	<67.0	1950	1950	1210J	1090J	62	56	10-130		30	
4-Bromophenylphenyl ether	ug/kg	<83.5	1950	1950	1270	1170	65	60	40-120	9	33	
4-Chloro-3-methylphenol	ug/kg	<81.2	1950	1950	1290	1080	66	55	35-125	18	30	
4-Chloroaniline	ug/kg	<60.6	1950	1950	708J	618J	36	32	10-120		33	
4-Chlorophenylphenyl ether	ug/kg	<83.1	1950	1950	1260	1190	64	61	40-120	6	33	
4-Nitroaniline	ug/kg	<66.3	1950	1950	1060	862	54	44	15-125	20	47	
4-Nitrophenol	ug/kg	<57.0	1950	1950	1400J	1300J	72	67	20-140		35	
Acenaphthene	ug/kg	<83.2	1950	1950	1260	1200	65	61	40-120	5	23	
Acenaphthylene	ug/kg	<63.3	1950	1950	1260	1170	65	60	40-120	7	29	
Anthracene	ug/kg	<80.9	1950	1950	1250	1140	64	58	40-120	9	30	
Benzo(a)anthracene	ug/kg	<81.9	1950	1950	1300	1160	67	59	35-130	11	32	
Benzo(a)pyrene	ug/kg	<83.3	1950	1950	1260	1110	65	57	25-135	13	33	
Benzo(b)fluoranthene	ug/kg	<94.4	1950	1950	1310	1180	67	60	15-145	11	37	
Benzo(g,h,i)perylene	ug/kg	<67.2	1950	1950	1300	1110	67	57	25-120	15	41	
Benzo(k)fluoranthene	ug/kg	<83.3	1950	1950	1200	1050	61	54	35-125	13	32	
Benzoic Acid	ug/kg	<211	1950	1950	1080J	970J	55	50	10-160		35	
Benzyl alcohol	ug/kg	<71.1	1950	1950	1350	1270	69	65	40-120	6	31	
bis(2-Chloroethoxy)methane	ug/kg	<77.0	1950	1950	1310	1240	67	63	35-120	5	29	
bis(2-Chloroethyl) ether	ug/kg	<78.1	1950	1950	1330	1270	68	65	35-120	5	32	
bis(2-Chloroisopropyl) ether	ug/kg	<83.9	1950	1950	1380	1310	71	67	30-150	5	29	
bis(2-Ethylhexyl)phthalate	ug/kg	<86.9	1950	1950	1400	1250	72	64	30-150	12	33	
Butylbenzylphthalate	ug/kg	<78.8	1950	1950	1470	1340	75	69	25-155	9	33	
Carbazole	ug/kg	<79.7	1950	1950	1200	1090	62	56	40-120	10	30	
Chrysene	ug/kg	<86.2	1950	1950	1280	1150	66	59	30-125	10	31	
Di-n-butylphthalate	ug/kg	<91.6	1950	1950	1340	1230	69	63	40-125	9	31	
Di-n-octylphthalate	ug/kg	<94.2	1950	1950	1420	1330	73	68	35-155	7	29	
Dibenz(a,h)anthracene	ug/kg	<69.6	1950	1950	1280	1150	65	59	30-125	10	35	
Dibenzofuran	ug/kg	<82.7	1950	1950	1240	1180	63	60	35-125	4	28	
Diethylphthalate	ug/kg	<88.4	1950	1950	1300	1230	67	63	40-120	6	31	
Dimethylphthalate	ug/kg	<80.4	1950	1950	1240	1170	64	60	40-120	6	30	
Fluoranthene	ug/kg	<85.3	1950	1950	1280	1140	66	58	30-130	11	32	
Fluorene	ug/kg	<82.3	1950	1950	1260	1190	65	61	40-120	6	32	
Hexachloro-1,3-butadiene	ug/kg	<82.9	1950	1950	1250	1230	64	63	40-120	2	27	
Hexachlorobenzene	ug/kg	<80.9	1950	1950	1300	1160	66	59	45-120	11	31	
Hexachlorocyclopentadiene	ug/kg	<238	1950	1950	1020	928	53	47	10-125	10	61	
Hexachloroethane	ug/kg	<71.0	1950	1950	1270	1200	65	61	30-120	5	34	
Indeno(1,2,3-cd)pyrene	ug/kg	<79.2	1950	1950	1290	1120	66	57	30-125	14	38	
Isophorone	ug/kg	<74.8	1950	1950	1330	1240	68	64	40-120	7	28	
N-Nitroso-di-n-propylamine	ug/kg	<73.8	1950	1950	1410	1340	72	68	35-120	5	30	
N-Nitrosodiphenylamine	ug/kg	<77.0	1950	1950	1130	870	58	45	35-125	26	36	
Naphthalene	ug/kg	<83.3	1950	1950	1270	1190	65	61	25-125	6	31	
Nitrobenzene	ug/kg	<82.0	1950	1950	1340	1270	69	65	40-120	5	29	
Pentachlorophenol	ug/kg	<128	1950	1950	1280J	1150J	66	59	15-150		35	
Phenanthrene	ug/kg	<82.7	1950	1950	1230	1130	63	58	35-125	9	29	
Phenol	ug/kg	<72.8	1950	1950	1230	1020	63	52	30-120	19	29	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3522269 3522270												
Parameter	Units	60450516008 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.	MS Result	MSD Result						
Pyrene	ug/kg	<82.6	1950	1950	1270	1150	65	59	35-135	10	38	
Pyridine	ug/kg	<57.4	1950	1950	682	602	35	31	10-120	13	35	
2,4,6-Tribromophenol (S)	%						52	49	35-120			
2-Fluorobiphenyl (S)	%						58	59	40-120			
2-Fluorophenol (S)	%						52	50	40-120			
Nitrobenzene-d5 (S)	%						65	66	30-120			
Phenol-d6 (S)	%						59	56	40-120			
Terphenyl-d14 (S)	%						62	62	45-120			

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch:	890176	Analysis Method:	EPA 8270
QC Batch Method:	EPA 3546	Analysis Description:	8270 MSSV TPH ORO
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

METHOD BLANK: 3523067 Matrix: Solid

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-DRO	mg/kg	<5.1	14.9	5.1	04/12/24 10:25	
TPH-ORO	mg/kg	<5.1	14.9	5.1	04/12/24 10:25	
2-Fluorobiphenyl (S)	%	104	50-120		04/12/24 10:25	
Nitrobenzene-d5 (S)	%	90	35-120		04/12/24 10:25	
Terphenyl-d14 (S)	%	99	45-120		04/12/24 10:25	

LABORATORY CONTROL SAMPLE: 3523068

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/kg	333	295	89	40-125	
2-Fluorobiphenyl (S)	%			96	50-120	
Nitrobenzene-d5 (S)	%			92	35-120	
Terphenyl-d14 (S)	%			93	45-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3523069 3523070

Parameter	Units	60450516008		3523070		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
TPH-DRO	mg/kg	<6.0	387	390	355	354	91	90	40-125	0	38
2-Fluorobiphenyl (S)	%						93	97	50-120		
Nitrobenzene-d5 (S)	%						88	92	35-120		
Terphenyl-d14 (S)	%						91	93	45-120		

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### QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch: 890015

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

METHOD BLANK: 3522595

Matrix: Solid

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Percent Moisture	%	<0.50	0.50	0.50	04/10/24 13:56	

SAMPLE DUPLICATE: 3522596

Parameter	Units	60450528002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	20.7	20.7	0	20	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch:	2265539	Analysis Method:	SM 2540G
QC Batch Method:	SM 2540 G	Analysis Description:	Total Solids 2540 G-2011
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

METHOD BLANK: R4057604-1 Matrix: Solid

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	0.00100			04/12/24 09:06	

LABORATORY CONTROL SAMPLE: R4057604-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	90.0-110	

SAMPLE DUPLICATE: R4057604-3

Parameter	Units	60450582002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	72.6	72.0	0.861	10	

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### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch:	890504	Analysis Method:	EPA 350.1
QC Batch Method:	EPA 350.1	Analysis Description:	350.1 Ammonia
		Laboratory:	Pace Analytical Services - Kansas City
Associated Lab Samples:	60450582001, 60450582002, 60450582003, 60450582004, 60450582005		

METHOD BLANK: 3524512 Matrix: Solid  
 Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/kg	<0.76	0.95	0.76	04/16/24 15:33	

LABORATORY CONTROL SAMPLE: 3524513

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/kg	46.1	48.8	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3524514 3524516

Parameter	Units	60450758001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/kg	<0.95	67.1	58.4	60.5	51.6	90	88	80-120	16	20	

SAMPLE DUPLICATE: 3524515

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/kg	<0.95	2.4		20	

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**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch: 890715

Analysis Method: SM 4500-CN-E

QC Batch Method: SM 4500-CN-E

Analysis Description: 4500CNE Cyanide, Total

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

METHOD BLANK: 3525281

Matrix: Solid

Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cyanide	mg/kg	<0.12	0.15	0.12	04/18/24 11:28	

LABORATORY CONTROL SAMPLE: 3525282

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	3	3.0	100	72-115	

MATRIX SPIKE SAMPLE: 3525283

Parameter	Units	60450516008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	<0.14	3.4	2.5	73	10-128	

SAMPLE DUPLICATE: 3525284

Parameter	Units	60450516008 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/kg	<0.14	<0.13		35	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

QC Batch:	890095	Analysis Method:	EPA 9056
QC Batch Method:	EPA 9056	Analysis Description:	9056 IC Anions
		Laboratory:	Pace Analytical Services - Kansas City
Associated Lab Samples:	60450582001, 60450582002, 60450582003, 60450582004, 60450582005		

METHOD BLANK: 3522762 Matrix: Solid  
 Associated Lab Samples: 60450582001, 60450582002, 60450582003, 60450582004, 60450582005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrate as N	mg/kg	<5.6	10.0	5.6	04/12/24 17:49	
Nitrite as N	mg/kg	<5.2	10.0	5.2	04/12/24 17:49	

LABORATORY CONTROL SAMPLE: 3522763

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/kg	200	194	97	80-120	
Nitrite as N	mg/kg	200	218	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3522764 3522765

Parameter	Units	60450582001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/kg	49.1	250	264	183	227	54	67	80-120	21	15	M1,R1
Nitrite as N	mg/kg	<6.1	250	264	175	223	70	84	80-120	24	15	M1,R1

SAMPLE DUPLICATE: 3522766

Parameter	Units	60450582002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrate as N	mg/kg	37.4	32.7	13	15	
Nitrite as N	mg/kg	<6.3	<5.9		15	

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## QUALIFIERS

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

IO The internal standard response was outside the laboratory acceptance limits confirmed by reanalysis. The results reported are from the most QC compliant analysis.

J Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

P3 Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

P9 RPD between the primary and confirmatory analysis exceeded 40%.

PH The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

R1 RPD value was outside control limits.

S3 Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: KC Water Treatment Sediment  
Pace Project No.: 60450582

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450582001	SS06/SS-1	3546/3665A	2268142	EPA 8081B	2268142
60450582002	SS06/SS-2	3546/3665A	2268525	EPA 8081B	2268525
60450582003	SD10/SD-1	3546/3665A	2268525	EPA 8081B	2268525
60450582004	SD09/SD-1	3546/3665A	2268525	EPA 8081B	2268525
60450582005	SD08/SD-1	3546/3665A	2268525	EPA 8081B	2268525
60450582001	SS06/SS-1	8151A	2265407	EPA 8151A	2265407
60450582002	SS06/SS-2	8151A	2265407	EPA 8151A	2265407
60450582003	SD10/SD-1	8151A	2265407	EPA 8151A	2265407
60450582004	SD09/SD-1	8151A	2265407	EPA 8151A	2265407
60450582005	SD08/SD-1	8151A	2266156	EPA 8151A	2266156
60450582001	SS06/SS-1	EPA 3546	890356	EPA 8082	890467
60450582002	SS06/SS-2	EPA 3546	890356	EPA 8082	890467
60450582003	SD10/SD-1	EPA 3546	890356	EPA 8082	890467
60450582004	SD09/SD-1	EPA 3546	890356	EPA 8082	890467
60450582005	SD08/SD-1	EPA 3546	890356	EPA 8082	890467
60450582001	SS06/SS-1	3050B	2265034	EPA 6020B	2265034
60450582002	SS06/SS-2	3050B	2265034	EPA 6020B	2265034
60450582003	SD10/SD-1	3050B	2265034	EPA 6020B	2265034
60450582004	SD09/SD-1	3050B	2265034	EPA 6020B	2265034
60450582005	SD08/SD-1	3050B	2265034	EPA 6020B	2265034
60450582001	SS06/SS-1	7471A	2265617	EPA 7471B	2265617
60450582002	SS06/SS-2	7471A	2265617	EPA 7471B	2265617
60450582003	SD10/SD-1	7471A	2265617	EPA 7471B	2265617
60450582004	SD09/SD-1	7471A	2265617	EPA 7471B	2265617
60450582005	SD08/SD-1	7471A	2265617	EPA 7471B	2265617
60450582001	SS06/SS-1	EPA 3546	889927	EPA 8270	890326
60450582002	SS06/SS-2	EPA 3546	889927	EPA 8270	890326
60450582003	SD10/SD-1	EPA 3546	889927	EPA 8270	890326
60450582004	SD09/SD-1	EPA 3546	889927	EPA 8270	890326
60450582005	SD08/SD-1	EPA 3546	889927	EPA 8270	890326
60450582001	SS06/SS-1	EPA 3546	890176	EPA 8270	890335
60450582002	SS06/SS-2	EPA 3546	890176	EPA 8270	890335
60450582003	SD10/SD-1	EPA 3546	890176	EPA 8270	890335
60450582004	SD09/SD-1	EPA 3546	890176	EPA 8270	890335
60450582005	SD08/SD-1	EPA 3546	890176	EPA 8270	890335
60450582001	SS06/SS-1	EPA 5035A/5030B	890026	EPA 8260C	890038
60450582002	SS06/SS-2	EPA 5035A/5030B	890026	EPA 8260C	890038
60450582003	SD10/SD-1	EPA 5035A/5030B	890026	EPA 8260C	890038
60450582004	SD09/SD-1	EPA 5035A/5030B	890026	EPA 8260C	890038
60450582005	SD08/SD-1	EPA 5035A/5030B	890026	EPA 8260C	890038
60450582001	SS06/SS-1	EPA 5035	890105	EPA 8260	890191
60450582002	SS06/SS-2	EPA 5035	890105	EPA 8260	890191
60450582003	SD10/SD-1	EPA 5035	890387	EPA 8260	890395

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KC Water Treatment Sediment

Pace Project No.: 60450582

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450582004	SD09/SD-1	EPA 5035	890387	EPA 8260	890395
60450582005	SD08/SD-1	EPA 5035	890105	EPA 8260	890191
60450582001	SS06/SS-1	ASTM D2974	890015		
60450582002	SS06/SS-2	ASTM D2974	890015		
60450582003	SD10/SD-1	ASTM D2974	890015		
60450582004	SD09/SD-1	ASTM D2974	890015		
60450582005	SD08/SD-1	ASTM D2974	890015		
60450582001	SS06/SS-1	SM 2540 G	2265539	SM 2540G	2265539
60450582002	SS06/SS-2	SM 2540 G	2265539	SM 2540G	2265539
60450582003	SD10/SD-1	SM 2540 G	2265539	SM 2540G	2265539
60450582004	SD09/SD-1	SM 2540 G	2265539	SM 2540G	2265539
60450582005	SD08/SD-1	SM 2540 G	2265539	SM 2540G	2265539
60450582001	SS06/SS-1	EPA 350.1	890504	EPA 350.1	890813
60450582002	SS06/SS-2	EPA 350.1	890504	EPA 350.1	890813
60450582003	SD10/SD-1	EPA 350.1	890504	EPA 350.1	890813
60450582004	SD09/SD-1	EPA 350.1	890504	EPA 350.1	890813
60450582005	SD08/SD-1	EPA 350.1	890504	EPA 350.1	890813
60450582001	SS06/SS-1	SM 4500-CN-E	890715	SM 4500-CN-E	891324
60450582002	SS06/SS-2	SM 4500-CN-E	890715	SM 4500-CN-E	891324
60450582003	SD10/SD-1	SM 4500-CN-E	890715	SM 4500-CN-E	891324
60450582004	SD09/SD-1	SM 4500-CN-E	890715	SM 4500-CN-E	891324
60450582005	SD08/SD-1	SM 4500-CN-E	890715	SM 4500-CN-E	891324
60450582001	SS06/SS-1	EPA 9056	890095	EPA 9056	890570
60450582002	SS06/SS-2	EPA 9056	890095	EPA 9056	890570
60450582003	SD10/SD-1	EPA 9056	890095	EPA 9056	890570
60450582004	SD09/SD-1	EPA 9056	890095	EPA 9056	890570
60450582005	SD08/SD-1	EPA 9056	890095	EPA 9056	890570

REPORT OF LABORATORY ANALYSIS

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WO#: 60450582



DC#\_Title: ENV-FRM-LENE-0009\_Sample C

Revision: 2      Effective Date: 01/12/2022      Issued By: Lenexa

Client Name: Burns + McDonnell

Courier: FedEx  UPS  VIA  Clay  PEX  ECI  Pace  Xroads  Client  Other

Tracking #: \_\_\_\_\_ Pace Shipping Label Used? Yes  No

Custody Seal on Cooler/Box Present: Yes  No  Seals intact: Yes  No

Packing Material: Bubble Wrap  Bubble Bags  Foam  None  Other

Thermometer Used: TN 8 Type of Ice: Wet Blue  None

Cooler Temperature (°C): As-read 2.7 Corr. Factor -0.3 Corrected 2.4

Date and initials of person examining contents: <u>AF 4/9</u>
--

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>SL</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)      LOT#:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks:		
Lead acetate strip turns dark? (Record only)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area:      State:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N      Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

Company Name: BURNS & MCDONNELL  
 Street Address: 9400 Ward Parkway, Kansas City, MO 64114

Customer Project #: KC Water Treatment Sediment  
 Project Name:

Site Collection Info/Facility ID (as applicable):

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET

[ ] Level II [ ] Level III [ ] Level IV  
 [ ] EQUIS

Date Results Requested:

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):  
 [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other


Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (L), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Time	Collected or Composite End Date	Time	# Cont.	Res. Chlorine Results	Units
SS06/SS-1	SS				4/9/24	0940			
SS06/SS-2	SS					0950			
SD10/SD-1	SED					1150			
SD09/SD-1						1330			
SD08/SD-1						1410			

**LAB USE ONLY - Affix Workorder/Login Label Here**



Scan QR Code for instructions

Specify Container Size \*\*

Identify Container Preservative Type \*\*\*

Analysis Requested

Proj. Mgr: Alice Spiller  
 Acct/Num / Client ID:  
 Table #:  
 Profile / Template: 10409  
 Preg / Bottle Ord. ID: EZ 3093912  
 Sample Comment: 60490992

Preservation non-conformance identified for

450CNE Cyanide, Total	60107471 Metals *see list	8081 Pesticides	8082 GCS PCB SW	8260 MSV GRO	8260C MSV 5035A Low Level	8270 DR/ORO; 8270 SVOCs	8321 Herbicides	Ammonia; NO2/NO3; Percent Moisture
X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X

Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 50mL, (7) Encore, (8) TerraCore, (9) 90mL, (10) Other

Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Thermometer #  
 Correction Factor (°C)  
 On Ice

# Coolers: 298  
 Date/Time: 4/9/24 1635  
 Tracking Number: JAPACE

Collected By: Eric Brown  
 Signature: [Signature]  
 Received by/Company: [Signature]

Received by/Company: [Signature]  
 Date/Time: [Signature]

Received by/Company: [Signature]  
 Date/Time: [Signature]

Received by/Company: [Signature]  
 Date/Time: [Signature]

Delivered by: [ ] In-Person [ ] Courier  
 [ ] FedEx [ ] UPS [ ] Other

Page: 1 of 2

# Internal Transfer Chain of Custody



Rush Multiplier \_\_\_ X  
 Samples Pre-Logged into eCOC

State Of Origin: MO  
 Cert. Needed:  Yes  No

Workorder: 60450582    Workorder Name: KC Water Treatment Sediment

Owner Received Date: 4/9/2024    Results Requested By: 4/24/2024

Report To		Subcontract To					Requested Analysis														
Alice Spiller Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665		Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858					<div style="text-align: right; font-size: 2em; font-weight: bold;">C077</div> <div style="text-align: right; font-size: 1.5em; font-weight: bold;">Lizum687</div>														
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved	Preserved Containers				6020/7471 TAL Metals + Mo *sec list	8081 Pesticides	8321 or 8151 Herbicides								LAB USE ONLY
1	SS06/SS-1	PS	4/9/2024 09:40	60450582001	Solid	3					X	X	X							-01	
2	SS06/SS-2	PS	4/9/2024 09:50	60450582002	Solid	3					X	X	X							-02	
3	SD10/SD-1	PS	4/9/2024 11:50	60450582003	Solid	3					X	X	X							-03	
4	SD09/SD-1	PS	4/9/2024 13:30	60450582004	Solid	3					X	X	X							-04	
5	SD08/SD-1	PS	4/9/2024 14:10	60450582005	Solid	3					X	X	X							-05	

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	KC Spiller	4/10/24 1700	Olson	4/11/24 0900	KS sample location: 60-R28-S2 List: *Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Hg,Ni,K,Se,Ag,Na,Tl,V,Zn
2					
3					

Cooler Temperature on Receipt    °C    Custody Seal    Y or N    Received on Ice    Y or N    Samples Intact    Y or N

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

Sample Receipt Checklist 13

COC Seal Present/Intact:  Y  N    If Applicable

COC Signed/Accurate:  Y  N    VOA Zero Headspace:  Y  N

Bottles archive intact:  Y  N    Pres. Correct/Check:  Y  N

Correct bottles used:  Y  N    RA 70.6 to .1 = 0.7

Sufficient volume sent:  Y  N

RA Screen <0.5 mR/hr:  Y  N    7146 2377 3795





April 24, 2024

Justin Carter  
Burns & McDonnell  
9400 Ward Parkway  
Kansas City, MO 64114

RE: Project: KC Water Treatment WT  
Pace Project No.: 60450589

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on April 09, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller  
alice.spiller@pacelabs.com  
(913)599-5665  
PM Lab Management

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL  
Jacquelin Lee, Burns & McDonnell



## REPORT OF LABORATORY ANALYSIS

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### CERTIFICATIONS

Project: KC Water Treatment WT

Pace Project No.: 60450589

#### Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219  
 Arkansas Inorganic Drinking Water Certification  
 Arkansas Certification #: 88-00679  
 Illinois Certification #: 2000302023-6  
 Colorado Division of Oil and Public Safety  
 Iowa Certification #: 118  
 Kansas Field Laboratory Certification #: E-92587

Kansas/NELAP Certification #: E-10116  
 Louisiana Certification #: 03055  
 Missouri Inorganic Drinking Water Certification  
 Nevada Certification #: KS000212024-1  
 Oklahoma Certification #: 2023-073  
 Texas Certification #: T104704407-23-17  
 Utah Certification #: KS000212022-13

#### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122  
 Alabama Certification #: 40660  
 Alaska Certification 17-026  
 Arizona Certification #: AZ0612  
 Arkansas Certification #: 88-0469  
 California Certification #: 2932  
 Canada Certification #: 1461.01  
 Colorado Certification #: TN00003  
 Connecticut Certification #: PH-0197  
 DOD Certification: #1461.01  
 EPA# TN00003  
 Florida Certification #: E87487  
 Georgia DW Certification #: 923  
 Georgia Certification: NELAP  
 Idaho Certification #: TN00003  
 Illinois Certification #: 200008  
 Indiana Certification #: C-TN-01  
 Iowa Certification #: 364  
 Kansas Certification #: E-10277  
 Kentucky UST Certification #: 16  
 Kentucky Certification #: 90010  
 Louisiana Certification #: AI30792  
 Louisiana DW Certification #: LA180010  
 Maine Certification #: TN0002  
 Maryland Certification #: 324  
 Massachusetts Certification #: M-TN003  
 Michigan Certification #: 9958  
 Minnesota Certification #: 047-999-395  
 Mississippi Certification #: TN00003  
 Missouri Certification #: 340  
 Montana Certification #: CERT0086  
 Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34  
 New Hampshire Certification #: 2975  
 New Jersey Certification #: TN002  
 New Mexico DW Certification  
 New York Certification #: 11742  
 North Carolina Aquatic Toxicity Certification #: 41  
 North Carolina Drinking Water Certification #: 21704  
 North Carolina Environmental Certificate #: 375  
 North Dakota Certification #: R-140  
 Ohio VAP Certification #: CL0069  
 Oklahoma Certification #: 9915  
 Oregon Certification #: TN200002  
 Pennsylvania Certification #: 68-02979  
 Rhode Island Certification #: LAO00356  
 South Carolina Certification #: 84004  
 South Dakota Certification  
 Tennessee DW/Chem/Micro Certification #: 2006  
 Texas Mold Certification #: LAB0152  
 Texas Certification #: T 104704245-17-14  
 USDA Soil Permit #: P330-15-00234  
 Utah Certification #: TN00003  
 Virginia Certification #: VT2006  
 Vermont Dept. of Health: ID# VT-2006  
 Virginia Certification #: 460132  
 Washington Certification #: C847  
 West Virginia Certification #: 233  
 Wisconsin Certification #: 998093910  
 Wyoming UST Certification #: via A2LA 2926.01  
 A2LA-ISO 17025 Certification #: 1461.01  
 A2LA-ISO 17025 Certification #: 1461.02  
 AIHA-LAP/LLC EMLAP Certification #:100789

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: KC Water Treatment WT  
Pace Project No.: 60450589

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60450589001	SW10/SW-1	Water	04/09/24 12:00	04/09/24 16:35
60450589002	SW09/SW-1	Water	04/09/24 13:40	04/09/24 16:35
60450589003	SW08/SW-1	Water	04/09/24 14:20	04/09/24 16:35
60450589004	Rinsate-24-04-09	Water	04/09/24 11:00	04/09/24 16:35
60450589005	Trip Blank	Water	04/09/24 08:00	04/09/24 16:35

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: KC Water Treatment WT

Pace Project No.: 60450589

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory		
60450589001	SW10/SW-1	EPA 8081B	HMH	23	PAN		
		EPA 8151A	NWH	11	PAN		
		EPA 8082	JDS	8	PASI-K		
		EPA 6020B	JPD, LD	23	PAN		
		EPA 7470A	SDG	1	PAN		
		EPA 8270	WFG	73	PASI-K		
		EPA 8270	WDC	5	PASI-K		
		EPA 5030B/8260	PGH	69	PASI-K		
		EPA 8260	BA	5	PASI-K		
		SM 2320B	SR1	1	PASI-K		
		SM 4500-O G	ECF	1	PASI-K		
		SM 4500-S-2 D	DLJ	1	PASI-K		
		EPA 9040	SR1	1	PASI-K		
		EPA 300.0	PL	2	PASI-K		
		EPA 350.1	RKA	1	PASI-K		
		EPA 353.2	RKA	3	PASI-K		
		EPA 353.2	RKA	1	PASI-K		
		SM 4500-CN-E	ECF	1	PASI-K		
		60450589002	SW09/SW-1	EPA 8081B	HMH	23	PAN
				EPA 8151A	NWH	11	PAN
EPA 8082	JDS			8	PASI-K		
EPA 6020B	JPD, LD			23	PAN		
EPA 7470A	SDG			1	PAN		
EPA 8270	WFG			73	PASI-K		
EPA 8270	WDC			5	PASI-K		
EPA 5030B/8260	PGH			69	PASI-K		
EPA 8260	BA			5	PASI-K		
SM 2320B	SR1			1	PASI-K		
SM 4500-O G	ECF			1	PASI-K		
SM 4500-S-2 D	DLJ			1	PASI-K		
EPA 9040	SR1			1	PASI-K		
EPA 300.0	PL			2	PASI-K		
EPA 350.1	RKA			1	PASI-K		
EPA 353.2	RKA			3	PASI-K		
EPA 353.2	RKA			1	PASI-K		
SM 4500-CN-E	ECF			1	PASI-K		
60450589003	SW08/SW-1			EPA 8081B	HMH	23	PAN

### REPORT OF LABORATORY ANALYSIS

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**SAMPLE ANALYTE COUNT**

Project: KC Water Treatment WT

Pace Project No.: 60450589

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8151A	NWH	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN
		EPA 7470A	SDG	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 5030B/8260	PGH	69	PASI-K
		EPA 8260	BA	5	PASI-K
		SM 2320B	SR1	1	PASI-K
		SM 4500-O G	ECF	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 9040	SR1	1	PASI-K
		EPA 300.0	PL	2	PASI-K
		EPA 350.1	RKA	1	PASI-K
		EPA 353.2	RKA	3	PASI-K
		EPA 353.2	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
<b>60450589004</b>	<b>Rinsate-24-04-09</b>	EPA 8081B	HMH	23	PAN
		EPA 8151A	NWH	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN
		EPA 7470A	SDG	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 5030B/8260	PGH	69	PASI-K
		EPA 8260	BA	5	PASI-K
		EPA 350.1	RKA	1	PASI-K
		EPA 353.2	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
<b>60450589005</b>	<b>Trip Blank</b>	EPA 5030B/8260	JLO	69	PASI-K

PAN = Pace National - Mt. Juliet

PASI-K = Pace Analytical Services - Kansas City

**REPORT OF LABORATORY ANALYSIS**

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 8081B

**Description:** Pesticides (GC) 8081B

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

4 samples were analyzed for EPA 8081B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 8151A

**Description:** Chlorinated Herb. (GC) 8151A

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

4 samples were analyzed for EPA 8151A by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 8082

**Description:** 8082 GCS PCB, LV

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

4 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 6020B

**Description:** Metals (ICPMS) 6020B

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

4 samples were analyzed for EPA 6020B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 7470A

**Description:** Mercury 7470A

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

4 samples were analyzed for EPA 7470A by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 8270

**Description:** 8270 MSSV Semivolatile Organic

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

4 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890658

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450682001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 3525036)

- 3-Nitroaniline

- Pyrene

R1: RPD value was outside control limits.

- MSD (Lab ID: 3525036)

- Pyridine

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 8270

**Description:** 8270 MSSV DRO/ORO

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

4 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3511 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 890118

B: Analyte was detected in the associated method blank.

- BLANK for HBN 890118 [OEXT/954 (Lab ID: 3522887)]
  - TPH-DRO
  - TPH-ORO

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 5030B/8260

**Description:** 8260 MSV

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

5 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890032

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 8260

**Description:** 8260 MSV GRO and Oxygenates

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

4 samples were analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** SM 2320B

**Description:** 2320B Alkalinity

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

3 samples were analyzed for SM 2320B by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** SM 4500-O G

**Description:** 4500 OG Oxygen, Dissolved

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

### General Information:

3 samples were analyzed for SM 4500-O G by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA required holding time.

- SW08/SW-1 (Lab ID: 60450589003)
- SW09/SW-1 (Lab ID: 60450589002)
- SW10/SW-1 (Lab ID: 60450589001)

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** SM 4500-S-2 D

**Description:** 4500S2D Sulfide, Total

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

### General Information:

3 samples were analyzed for SM 4500-S-2 D by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890144

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450589001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3522982)
  - Sulfide, Total
- MSD (Lab ID: 3522983)
  - Sulfide, Total

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 9040

**Description:** 9040 pH

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

### General Information:

3 samples were analyzed for EPA 9040 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA required holding time.

- SW08/SW-1 (Lab ID: 60450589003)
- SW09/SW-1 (Lab ID: 60450589002)
- SW10/SW-1 (Lab ID: 60450589001)

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 300.0

**Description:** 300.0 IC Anions 28 Days

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

3 samples were analyzed for EPA 300.0 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890096

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450382001,60450589002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3522769)
  - Fluoride
- MS (Lab ID: 3522771)
  - Sulfate
- MSD (Lab ID: 3522770)
  - Fluoride
  - Sulfate

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 350.1

**Description:** 350.1 Ammonia

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

4 samples were analyzed for EPA 350.1 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 891080

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450551001,60450589002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3526768)
  - Nitrogen, Ammonia
- MS (Lab ID: 3526770)
  - Nitrogen, Ammonia

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 353.2

**Description:** 353.2 Nitrogen, NO2/NO3 unpres

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

3 samples were analyzed for EPA 353.2 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 890111

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 3522871)
- Nitrogen, Nitrite

QC Batch: 890187

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 3523180)
- Nitrogen, Nitrite

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890111

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450614001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 3522874)
- Nitrogen, Nitrite

QC Batch: 890187

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450682001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 3523181)
- Nitrogen, Nitrite
- MSD (Lab ID: 3523183)
- Nitrogen, Nitrite

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3523181)
- Nitrogen, NO2 plus NO3
- MSD (Lab ID: 3523183)

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 353.2

**Description:** 353.2 Nitrogen, NO2/NO3 unpres

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

QC Batch: 890187

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450682001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Nitrogen, NO2 plus NO3

R1: RPD value was outside control limits.

- MSD (Lab ID: 3523183)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrite

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** EPA 353.2

**Description:** 353.2 Nitrogen, NO2/NO3 pres.

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

4 samples were analyzed for EPA 353.2 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890188

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 20311867001,60450551001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3523190)
  - Nitrogen, NO2 plus NO3
- MS (Lab ID: 3523192)
  - Nitrogen, NO2 plus NO3

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450589

---

**Method:** SM 4500-CN-E

**Description:** 4500CNE Cyanide, Total

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

4 samples were analyzed for SM 4500-CN-E by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with SM 4500-CN-E with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890793

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450787009

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3525601)
- Cyanide

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW10/SW-1 Lab ID: 60450589001 Collected: 04/09/24 12:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3510C									
Pace National - Mt. Juliet									
Aldrin	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/13/24 10:14	04/13/24 23:08	309-00-2	
alpha-BHC	<0.000017 2	mg/L	0.000050 0	0.000017 2	1	04/13/24 10:14	04/13/24 23:08	319-84-6	
beta-BHC	<0.000020 8	mg/L	0.000050 0	0.000020 8	1	04/13/24 10:14	04/13/24 23:08	319-85-7	
delta-BHC	<0.000015 0	mg/L	0.000050 0	0.000015 0	1	04/13/24 10:14	04/13/24 23:08	319-86-8	
gamma-BHC (Lindane)	<0.000020 9	mg/L	0.000050 0	0.000020 9	1	04/13/24 10:14	04/13/24 23:08	58-89-9	
Chlordane (Technical)	<0.000019 8	mg/L	0.00500 0	0.000019 8	1	04/13/24 10:14	04/13/24 23:08	57-74-9	
4,4'-DDD	<0.000017 7	mg/L	0.000050 0	0.000017 7	1	04/13/24 10:14	04/13/24 23:08	72-54-8	
4,4'-DDE	<0.000015 4	mg/L	0.000050 0	0.000015 4	1	04/13/24 10:14	04/13/24 23:08	72-55-9	
4,4'-DDT	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/13/24 10:14	04/13/24 23:08	50-29-3	
Dieldrin	<0.000016 2	mg/L	0.000050 0	0.000016 2	1	04/13/24 10:14	04/13/24 23:08	60-57-1	
Endosulfan I	<0.000016 0	mg/L	0.000050 0	0.000016 0	1	04/13/24 10:14	04/13/24 23:08	959-98-8	
Endosulfan II	<0.000016 4	mg/L	0.000050 0	0.000016 4	1	04/13/24 10:14	04/13/24 23:08	33213-65-9	
Endosulfan sulfate	<0.000021 7	mg/L	0.000050 0	0.000021 7	1	04/13/24 10:14	04/13/24 23:08	1031-07-8	
Endrin	<0.000016 1	mg/L	0.000050 0	0.000016 1	1	04/13/24 10:14	04/13/24 23:08	72-20-8	
Endrin aldehyde	<0.000023 7	mg/L	0.000050 0	0.000023 7	1	04/13/24 10:14	04/13/24 23:08	7421-93-4	
Endrin ketone	<0.000021 9	mg/L	0.000050 0	0.000021 9	1	04/13/24 10:14	04/13/24 23:08	53494-70-5	
Hexachlorobenzene	<0.000017 6	mg/L	0.000050 0	0.000017 6	1	04/13/24 10:14	04/13/24 23:08	118-74-1	
Heptachlor	<0.000014 8	mg/L	0.000050 0	0.000014 8	1	04/13/24 10:14	04/13/24 23:08	76-44-8	
Heptachlor epoxide	<0.000018 3	mg/L	0.000050 0	0.000018 3	1	04/13/24 10:14	04/13/24 23:08	1024-57-3	
Methoxychlor	<0.000019 3	mg/L	0.000050 0	0.000019 3	1	04/13/24 10:14	04/13/24 23:08	72-43-5	
Toxaphene	<0.000168	mg/L	0.000500	0.000168	1	04/13/24 10:14	04/13/24 23:08	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	73.9	%	10.0-128		1	04/13/24 10:14	04/13/24 23:08	2051-24-3	
Tetrachloro-m-xylene (S)	81.9	%	10.0-127		1	04/13/24 10:14	04/13/24 23:08	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.000574	mg/L	0.00210	0.000574	1.05	04/12/24 15:48	04/15/24 03:25	94-75-7	
Dalapon	<0.000361	mg/L	0.00210	0.000361	1.05	04/12/24 15:48	04/15/24 03:25	127-20-8	
2,4-DB	<0.000317	mg/L	0.00210	0.000317	1.05	04/12/24 15:48	04/15/24 03:25	94-82-6	
Dicamba	<0.000257	mg/L	0.00210	0.000257	1.05	04/12/24 15:48	04/15/24 03:25	1918-00-9	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW10/SW-1 Lab ID: 60450589001 Collected: 04/09/24 12:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
Dichlorprop	<0.00109	mg/L	0.00210	0.00109	1.05	04/12/24 15:48	04/15/24 03:25	120-36-5	
Dinoseb	<0.000263	mg/L	0.00210	0.000263	1.05	04/12/24 15:48	04/15/24 03:25	88-85-7	
MCPA	<0.0138	mg/L	0.105	0.0138	1.05	04/12/24 15:48	04/15/24 03:25	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.0693	mg/L	0.105	0.0693	1.05	04/12/24 15:48	04/15/24 03:25	93-65-2	
2,4,5-T	<0.000271	mg/L	0.00210	0.000271	1.05	04/12/24 15:48	04/15/24 03:25	93-76-5	
2,4,5-TP (Silvex)	<0.000352	mg/L	0.00210	0.000352	1.05	04/12/24 15:48	04/15/24 03:25	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	87.8	%	14.0-158		1.05	04/12/24 15:48	04/15/24 03:25	19719-28-9	
<b>8082 GCS PCB, LV</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<0.15	ug/L	1.0	0.15	1	04/16/24 12:05	04/17/24 12:34	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 12:34	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 12:34	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 12:34	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 12:34	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 12:34	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.19	ug/L	1.0	0.19	1	04/16/24 12:05	04/17/24 12:34	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	68	%	20-120		1	04/16/24 12:05	04/17/24 12:34	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Aluminum	0.0925J	mg/L	0.100	0.0185	1	04/14/24 11:43	04/18/24 23:43	7429-90-5	J
Antimony	<0.00103	mg/L	0.00400	0.00103	1	04/14/24 11:43	04/18/24 23:43	7440-36-0	
Arsenic	0.000814J	mg/L	0.00200	0.000180	1	04/14/24 11:43	04/18/24 23:43	7440-38-2	J
Barium	0.0590	mg/L	0.00200	0.000381	1	04/14/24 11:43	04/18/24 23:43	7440-39-3	
Beryllium	<0.000190	mg/L	0.00200	0.000190	1	04/14/24 11:43	04/18/24 23:43	7440-41-7	
Cadmium	<0.000150	mg/L	0.00100	0.000150	1	04/14/24 11:43	04/18/24 23:43	7440-43-9	
Calcium	173	mg/L	5.00	0.468	5	04/14/24 11:43	04/18/24 23:58	7440-70-2	
Chromium	<0.00124	mg/L	0.00200	0.00124	1	04/14/24 11:43	04/18/24 23:43	7440-47-3	
Copper	<0.00151	mg/L	0.00500	0.00151	1	04/14/24 11:43	04/18/24 23:43	7440-50-8	
Cobalt	0.000455J	mg/L	0.00200	0.000059	1	04/14/24 11:43	04/18/24 23:43	7440-48-4	J
Iron	0.430	mg/L	0.100	0.0281	1	04/14/24 11:43	04/18/24 23:43	7439-89-6	
Lead	<0.000849	mg/L	0.00200	0.000849	1	04/14/24 11:43	04/18/24 23:43	7439-92-1	
Magnesium	86.7	mg/L	5.00	0.368	5	04/14/24 11:43	04/18/24 23:58	7439-95-4	
Manganese	0.313	mg/L	0.00500	0.000704	1	04/14/24 11:43	04/18/24 23:43	7439-96-5	
Molybdenum	0.00183J	mg/L	0.00500	0.000348	1	04/14/24 11:43	04/18/24 23:43	7439-98-7	J
Nickel	0.00287	mg/L	0.00200	0.000816	1	04/22/24 10:38	04/23/24 11:52	7440-02-0	
Potassium	5.66	mg/L	2.00	0.108	1	04/14/24 11:43	04/18/24 23:43	7440-09-7	
Selenium	0.00130J	mg/L	0.00200	0.000300	1	04/14/24 11:43	04/18/24 23:43	7782-49-2	J
Silver	<0.000070	mg/L	0.00200	0.000070	1	04/14/24 11:43	04/18/24 23:43	7440-22-4	
	0			0					
Sodium	121	mg/L	10.0	1.88	5	04/14/24 11:43	04/18/24 23:58	7440-23-5	
Thallium	<0.000121	mg/L	0.00200	0.000121	1	04/14/24 11:43	04/18/24 23:43	7440-28-0	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW10/SW-1 Lab ID: 60450589001 Collected: 04/09/24 12:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Vanadium	0.000757J	mg/L	0.00500	0.000664	1	04/14/24 11:43	04/18/24 23:43	7440-62-2	J
Zinc	0.00552J	mg/L	0.0250	0.00302	1	04/14/24 11:43	04/19/24 17:38	7440-66-6	J
<b>Mercury 7470A</b>									
Analytical Method: EPA 7470A Preparation Method: 7470A									
Pace National - Mt. Juliet									
Mercury	<0.000100	mg/L	0.000200	0.000100	1	04/12/24 11:03	04/13/24 01:22	7439-97-6	
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
Acenaphthene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:17	83-32-9	
Acenaphthylene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 00:17	208-96-8	
Anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	120-12-7	
Benzo(a)anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	56-55-3	
Benzo(a)pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	50-32-8	
Benzo(b)fluoranthene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 00:17	205-99-2	
Benzo(g,h,i)perylene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:17	191-24-2	
Benzo(k)fluoranthene	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 00:17	207-08-9	
Benzoic Acid	<4.4	ug/L	50.0	4.4	1	04/16/24 18:23	04/19/24 00:17	65-85-0	
Benzyl alcohol	<1.6	ug/L	20.0	1.6	1	04/16/24 18:23	04/19/24 00:17	100-51-6	
4-Bromophenylphenyl ether	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	101-55-3	
Butylbenzylphthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 00:17	85-68-7	
Carbazole	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	86-74-8	
4-Chloro-3-methylphenol	<1.9	ug/L	20.0	1.9	1	04/16/24 18:23	04/19/24 00:17	59-50-7	
4-Chloroaniline	<2.0	ug/L	20.0	2.0	1	04/16/24 18:23	04/19/24 00:17	106-47-8	
bis(2-Chloroethoxy)methane	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 00:17	111-91-1	
bis(2-Chloroethyl) ether	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:17	111-44-4	
bis(2-Chloroisopropyl) ether	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 00:17	108-60-1	
2-Chloronaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:17	91-58-7	
2-Chlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:17	95-57-8	
4-Chlorophenylphenyl ether	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 00:17	7005-72-3	
Chrysene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:17	53-70-3	
Dibenzofuran	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	132-64-9	
1,2-Dichlorobenzene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:17	95-50-1	
1,3-Dichlorobenzene	<1.5	ug/L	10.0	1.5	1	04/16/24 18:23	04/19/24 00:17	541-73-1	
1,4-Dichlorobenzene	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 00:17	106-46-7	
3,3'-Dichlorobenzidine	<3.9	ug/L	20.0	3.9	1	04/16/24 18:23	04/19/24 00:17	91-94-1	
2,4-Dichlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:17	120-83-2	
Diethylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:17	84-66-2	
2,4-Dimethylphenol	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 00:17	105-67-9	
Dimethylphthalate	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 00:17	131-11-3	
Di-n-butylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:17	84-74-2	
4,6-Dinitro-2-methylphenol	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 00:17	534-52-1	
2,4-Dinitrophenol	<2.5	ug/L	50.0	2.5	1	04/16/24 18:23	04/19/24 00:17	51-28-5	
2,4-Dinitrotoluene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	121-14-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW10/SW-1 Lab ID: 60450589001 Collected: 04/09/24 12:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
2,6-Dinitrotoluene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 00:17	606-20-2	
Di-n-octylphthalate	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 00:17	117-84-0	
bis(2-Ethylhexyl)phthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 00:17	117-81-7	
Fluoranthene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	206-44-0	
Fluorene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	86-73-7	
Hexachloro-1,3-butadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 00:17	87-68-3	
Hexachlorobenzene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:17	118-74-1	
Hexachlorocyclopentadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 00:17	77-47-4	
Hexachloroethane	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 00:17	67-72-1	
Indeno(1,2,3-cd)pyrene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:17	193-39-5	
Isophorone	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:17	78-59-1	
2-Methylnaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:17	91-57-6	
2-Methylphenol(o-Cresol)	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:17	95-48-7	
3&4-Methylphenol(m&p Cresol)	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 00:17	15831-10-4	
Naphthalene	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 00:17	91-20-3	
2-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 00:17	88-74-4	
3-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 00:17	99-09-2	
4-Nitroaniline	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 00:17	100-01-6	
Nitrobenzene	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 00:17	98-95-3	
2-Nitrophenol	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	88-75-5	
4-Nitrophenol	<0.37	ug/L	50.0	0.37	1	04/16/24 18:23	04/19/24 00:17	100-02-7	
N-Nitroso-di-n-propylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	621-64-7	
N-Nitrosodiphenylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	86-30-6	
Pentachlorophenol	<3.5	ug/L	50.0	3.5	1	04/16/24 18:23	04/19/24 00:17	87-86-5	
Phenanthrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	85-01-8	
Phenol	<0.83	ug/L	10.0	0.83	1	04/16/24 18:23	04/19/24 00:17	108-95-2	
Pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	129-00-0	
Pyridine	<1.1	ug/L	10.0	1.1	1	04/16/24 18:23	04/19/24 00:17	110-86-1	
1,2,4-Trichlorobenzene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:17	120-82-1	
2,4,5-Trichlorophenol	<1.7	ug/L	25.0	1.7	1	04/16/24 18:23	04/19/24 00:17	95-95-4	
2,4,6-Trichlorophenol	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 00:17	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	57	%	30-120		1	04/16/24 18:23	04/19/24 00:17	4165-60-0	
2-Fluorobiphenyl (S)	52	%	25-120		1	04/16/24 18:23	04/19/24 00:17	321-60-8	
Terphenyl-d14 (S)	57	%	35-125		1	04/16/24 18:23	04/19/24 00:17	1718-51-0	
Phenol-d6 (S)	32	%	10-120		1	04/16/24 18:23	04/19/24 00:17	13127-88-3	
2-Fluorophenol (S)	43	%	20-120		1	04/16/24 18:23	04/19/24 00:17	367-12-4	
2,4,6-Tribromophenol (S)	57	%	25-120		1	04/16/24 18:23	04/19/24 00:17	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
TPH-ORO	0.64J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 12:32		B
TPH-DRO	0.56J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 12:32		B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	101	%	40-140		1	04/11/24 12:40	04/18/24 12:32	4165-60-0	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW10/SW-1 Lab ID: 60450589001 Collected: 04/09/24 12:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV DRO/ORO</b>		Analytical Method: EPA 8270 Preparation Method: EPA 3511 Pace Analytical Services - Kansas City							
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	100	%	30-145		1	04/11/24 12:40	04/18/24 12:32	321-60-8	
Terphenyl-d14 (S)	95	%	35-150		1	04/11/24 12:40	04/18/24 12:32	1718-51-0	
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	<2.5	ug/L	10.0	2.5	1		04/11/24 02:39	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/11/24 02:39	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/11/24 02:39	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/11/24 02:39	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/11/24 02:39	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/11/24 02:39	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/11/24 02:39	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/11/24 02:39	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/11/24 02:39	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/11/24 02:39	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:39	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/11/24 02:39	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/11/24 02:39	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/11/24 02:39	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/11/24 02:39	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/11/24 02:39	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/11/24 02:39	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/11/24 02:39	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/11/24 02:39	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/11/24 02:39	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/11/24 02:39	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/11/24 02:39	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/11/24 02:39	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:39	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/11/24 02:39	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/11/24 02:39	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/11/24 02:39	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/11/24 02:39	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/11/24 02:39	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/11/24 02:39	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/11/24 02:39	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/11/24 02:39	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/11/24 02:39	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/11/24 02:39	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/11/24 02:39	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/11/24 02:39	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/11/24 02:39	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/11/24 02:39	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/11/24 02:39	10061-02-6	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

**Sample:** SW10/SW-1      **Lab ID:** 60450589001      Collected: 04/09/24 12:00      Received: 04/09/24 16:35      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:39	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/11/24 02:39	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/11/24 02:39	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/11/24 02:39	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/11/24 02:39	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/11/24 02:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/11/24 02:39	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/11/24 02:39	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/11/24 02:39	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:39	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:39	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/11/24 02:39	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/11/24 02:39	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/11/24 02:39	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/11/24 02:39	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/11/24 02:39	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/11/24 02:39	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/11/24 02:39	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/11/24 02:39	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/11/24 02:39	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/11/24 02:39	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/11/24 02:39	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/11/24 02:39	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/11/24 02:39	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/11/24 02:39	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/11/24 02:39	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	80-120		1		04/11/24 02:39	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/11/24 02:39	2199-69-1	
Toluene-d8 (S)	109	%	80-120		1		04/11/24 02:39	2037-26-5	
Preservation pH	1.0		0.10		1		04/11/24 02:39		
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Kansas City									
TPH-GRO	<62.6	ug/L	500	62.6	1		04/10/24 15:56		
<b>Surrogates</b>									
Toluene-d8 (S)	97	%	80-120		1		04/10/24 15:56	2037-26-5	
4-Bromofluorobenzene (S)	95	%	80-120		1		04/10/24 15:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/10/24 15:56	2199-69-1	
Preservation pH	11.0		0.10		1		04/10/24 15:56		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B									
Pace Analytical Services - Kansas City									
Alkalinity, Total as CaCO3	356	mg/L	20.0	10.5	1		04/11/24 13:12		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW10/SW-1 Lab ID: 60450589001 Collected: 04/09/24 12:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500 OG Oxygen, Dissolved</b>									
Analytical Method: SM 4500-O G Pace Analytical Services - Kansas City									
Oxygen, Dissolved	10.4	mg/L	0.10	0.10	1		04/15/24 16:10	7782-44-7	H6
<b>4500S2D Sulfide, Total</b>									
Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City									
Sulfide, Total	<0.016	mg/L	0.050	0.016	1		04/11/24 09:13	18496-25-8	M1
<b>9040 pH</b>									
Analytical Method: EPA 9040 Pace Analytical Services - Kansas City									
pH at 25 Degrees C	7.9	Std. Units	0.10	0.10	1		04/18/24 15:35		H6
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City									
Fluoride	<0.12	mg/L	0.20	0.12	1		04/12/24 18:42	16984-48-8	
Sulfate	559	mg/L	50.0	27.5	50		04/12/24 18:55	14808-79-8	
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<0.069	mg/L	0.10	0.069	1		04/18/24 13:36	7664-41-7	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>									
Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City									
Nitrogen, NO2 plus NO3	0.16	mg/L	0.10	0.069	1		04/10/24 20:44		
Nitrogen, Nitrate	0.16	mg/L	0.10	0.069	1		04/10/24 20:44	14797-55-8	
Nitrogen, Nitrite	<0.069	mg/L	0.10	0.069	1		04/10/24 20:44	14797-65-0	L1
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City									
Nitrogen, NO2 plus NO3	0.18	mg/L	0.10	0.069	1		04/11/24 14:56		
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City									
Cyanide	<0.0038	mg/L	0.0050	0.0038	1	04/18/24 08:30	04/18/24 11:14	57-12-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW09/SW-1 Lab ID: 60450589002 Collected: 04/09/24 13:40 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3510C									
Pace National - Mt. Juliet									
Aldrin	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/13/24 10:14	04/13/24 23:18	309-00-2	
alpha-BHC	<0.000017 2	mg/L	0.000050 0	0.000017 2	1	04/13/24 10:14	04/13/24 23:18	319-84-6	
beta-BHC	<0.000020 8	mg/L	0.000050 0	0.000020 8	1	04/13/24 10:14	04/13/24 23:18	319-85-7	
delta-BHC	<0.000015 0	mg/L	0.000050 0	0.000015 0	1	04/13/24 10:14	04/13/24 23:18	319-86-8	
gamma-BHC (Lindane)	<0.000020 9	mg/L	0.000050 0	0.000020 9	1	04/13/24 10:14	04/13/24 23:18	58-89-9	
Chlordane (Technical)	<0.000019 8	mg/L	0.00500 0	0.000019 8	1	04/13/24 10:14	04/13/24 23:18	57-74-9	
4,4'-DDD	<0.000017 7	mg/L	0.000050 0	0.000017 7	1	04/13/24 10:14	04/13/24 23:18	72-54-8	
4,4'-DDE	<0.000015 4	mg/L	0.000050 0	0.000015 4	1	04/13/24 10:14	04/13/24 23:18	72-55-9	
4,4'-DDT	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/13/24 10:14	04/13/24 23:18	50-29-3	
Dieldrin	<0.000016 2	mg/L	0.000050 0	0.000016 2	1	04/13/24 10:14	04/13/24 23:18	60-57-1	
Endosulfan I	<0.000016 0	mg/L	0.000050 0	0.000016 0	1	04/13/24 10:14	04/13/24 23:18	959-98-8	
Endosulfan II	<0.000016 4	mg/L	0.000050 0	0.000016 4	1	04/13/24 10:14	04/13/24 23:18	33213-65-9	
Endosulfan sulfate	<0.000021 7	mg/L	0.000050 0	0.000021 7	1	04/13/24 10:14	04/13/24 23:18	1031-07-8	
Endrin	<0.000016 1	mg/L	0.000050 0	0.000016 1	1	04/13/24 10:14	04/13/24 23:18	72-20-8	
Endrin aldehyde	<0.000023 7	mg/L	0.000050 0	0.000023 7	1	04/13/24 10:14	04/13/24 23:18	7421-93-4	
Endrin ketone	<0.000021 9	mg/L	0.000050 0	0.000021 9	1	04/13/24 10:14	04/13/24 23:18	53494-70-5	
Hexachlorobenzene	<0.000017 6	mg/L	0.000050 0	0.000017 6	1	04/13/24 10:14	04/13/24 23:18	118-74-1	
Heptachlor	<0.000014 8	mg/L	0.000050 0	0.000014 8	1	04/13/24 10:14	04/13/24 23:18	76-44-8	
Heptachlor epoxide	<0.000018 3	mg/L	0.000050 0	0.000018 3	1	04/13/24 10:14	04/13/24 23:18	1024-57-3	
Methoxychlor	<0.000019 3	mg/L	0.000050 0	0.000019 3	1	04/13/24 10:14	04/13/24 23:18	72-43-5	
Toxaphene	<0.000168	mg/L	0.000500	0.000168	1	04/13/24 10:14	04/13/24 23:18	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	75.1	%	10.0-128		1	04/13/24 10:14	04/13/24 23:18	2051-24-3	
Tetrachloro-m-xylene (S)	80.7	%	10.0-127		1	04/13/24 10:14	04/13/24 23:18	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.000591	mg/L	0.00216	0.000591	1.08	04/12/24 15:48	04/15/24 03:36	94-75-7	
Dalapon	<0.000372	mg/L	0.00216	0.000372	1.08	04/12/24 15:48	04/15/24 03:36	127-20-8	
2,4-DB	<0.000326	mg/L	0.00216	0.000326	1.08	04/12/24 15:48	04/15/24 03:36	94-82-6	
Dicamba	<0.000265	mg/L	0.00216	0.000265	1.08	04/12/24 15:48	04/15/24 03:36	1918-00-9	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW09/SW-1 Lab ID: 60450589002 Collected: 04/09/24 13:40 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Chlorinated Herb. (GC) 8151A</b>		Analytical Method: EPA 8151A Preparation Method: 8151A Pace National - Mt. Juliet							
Dichlorprop	<0.00112	mg/L	0.00216	0.00112	1.08	04/12/24 15:48	04/15/24 03:36	120-36-5	
Dinoseb	<0.000270	mg/L	0.00216	0.000270	1.08	04/12/24 15:48	04/15/24 03:36	88-85-7	
MCPA	<0.0141	mg/L	0.108	0.0141	1.08	04/12/24 15:48	04/15/24 03:36	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.0713	mg/L	0.108	0.0713	1.08	04/12/24 15:48	04/15/24 03:36	93-65-2	
2,4,5-T	<0.000279	mg/L	0.00216	0.000279	1.08	04/12/24 15:48	04/15/24 03:36	93-76-5	
2,4,5-TP (Silvex)	<0.000362	mg/L	0.00216	0.000362	1.08	04/12/24 15:48	04/15/24 03:36	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	89.6	%	14.0-158		1.08	04/12/24 15:48	04/15/24 03:36	19719-28-9	
<b>8082 GCS PCB, LV</b>		Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	<0.15	ug/L	1.0	0.15	1	04/16/24 12:05	04/17/24 12:56	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 12:56	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 12:56	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 12:56	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 12:56	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 12:56	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.19	ug/L	1.0	0.19	1	04/16/24 12:05	04/17/24 12:56	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	68	%	20-120		1	04/16/24 12:05	04/17/24 12:56	2051-24-3	
<b>Metals (ICPMS) 6020B</b>		Analytical Method: EPA 6020B Preparation Method: 3015 Pace National - Mt. Juliet							
Aluminum	0.797	mg/L	0.100	0.0185	1	04/14/24 11:43	04/18/24 23:47	7429-90-5	
Antimony	<0.00103	mg/L	0.00400	0.00103	1	04/14/24 11:43	04/18/24 23:47	7440-36-0	
Arsenic	0.00453	mg/L	0.00200	0.000180	1	04/14/24 11:43	04/18/24 23:47	7440-38-2	
Barium	0.123	mg/L	0.00200	0.000381	1	04/14/24 11:43	04/18/24 23:47	7440-39-3	
Beryllium	<0.000190	mg/L	0.00200	0.000190	1	04/14/24 11:43	04/18/24 23:47	7440-41-7	
Cadmium	0.000211J	mg/L	0.00100	0.000150	1	04/14/24 11:43	04/18/24 23:47	7440-43-9	J
Calcium	189	mg/L	5.00	0.468	5	04/14/24 11:43	04/19/24 00:01	7440-70-2	
Chromium	0.00201	mg/L	0.00200	0.00124	1	04/14/24 11:43	04/18/24 23:47	7440-47-3	
Copper	0.00755	mg/L	0.00500	0.00151	1	04/14/24 11:43	04/18/24 23:47	7440-50-8	
Cobalt	0.00523	mg/L	0.00200	0.000059	1	04/14/24 11:43	04/18/24 23:47	7440-48-4	
Iron	4.95	mg/L	0.500	0.140	5	04/14/24 11:43	04/19/24 00:01	7439-89-6	
Lead	0.00874	mg/L	0.00200	0.000849	1	04/14/24 11:43	04/18/24 23:47	7439-92-1	
Magnesium	77.4	mg/L	5.00	0.368	5	04/14/24 11:43	04/19/24 00:01	7439-95-4	
Manganese	4.44	mg/L	0.100	0.0141	20	04/14/24 11:43	04/19/24 00:05	7439-96-5	
Molybdenum	0.000836J	mg/L	0.00500	0.000348	1	04/14/24 11:43	04/18/24 23:47	7439-98-7	J
Nickel	0.0148	mg/L	0.00200	0.000816	1	04/22/24 10:38	04/23/24 11:55	7440-02-0	
Potassium	6.19	mg/L	2.00	0.108	1	04/14/24 11:43	04/18/24 23:47	7440-09-7	
Selenium	0.000952J	mg/L	0.00200	0.000300	1	04/14/24 11:43	04/18/24 23:47	7782-49-2	J
Silver	<0.000070	mg/L	0.00200	0.000070	1	04/14/24 11:43	04/18/24 23:47	7440-22-4	
Sodium	0			0					
Sodium	110	mg/L	10.0	1.88	5	04/14/24 11:43	04/19/24 00:01	7440-23-5	
Thallium	<0.000121	mg/L	0.00200	0.000121	1	04/14/24 11:43	04/18/24 23:47	7440-28-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW09/SW-1 Lab ID: 60450589002 Collected: 04/09/24 13:40 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Vanadium	0.00478J	mg/L	0.00500	0.000664	1	04/14/24 11:43	04/18/24 23:47	7440-62-2	J
Zinc	0.0400	mg/L	0.0250	0.00302	1	04/14/24 11:43	04/19/24 17:41	7440-66-6	
<b>Mercury 7470A</b>									
Analytical Method: EPA 7470A Preparation Method: 7470A									
Pace National - Mt. Juliet									
Mercury	<0.000100	mg/L	0.000200	0.000100	1	04/12/24 11:03	04/13/24 01:24	7439-97-6	
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
Acenaphthene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:39	83-32-9	
Acenaphthylene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 00:39	208-96-8	
Anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	120-12-7	
Benzo(a)anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	56-55-3	
Benzo(a)pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	50-32-8	
Benzo(b)fluoranthene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 00:39	205-99-2	
Benzo(g,h,i)perylene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:39	191-24-2	
Benzo(k)fluoranthene	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 00:39	207-08-9	
Benzoic Acid	<4.4	ug/L	50.0	4.4	1	04/16/24 18:23	04/19/24 00:39	65-85-0	
Benzyl alcohol	<1.6	ug/L	20.0	1.6	1	04/16/24 18:23	04/19/24 00:39	100-51-6	
4-Bromophenylphenyl ether	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	101-55-3	
Butylbenzylphthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 00:39	85-68-7	
Carbazole	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	86-74-8	
4-Chloro-3-methylphenol	<1.9	ug/L	20.0	1.9	1	04/16/24 18:23	04/19/24 00:39	59-50-7	
4-Chloroaniline	<2.0	ug/L	20.0	2.0	1	04/16/24 18:23	04/19/24 00:39	106-47-8	
bis(2-Chloroethoxy)methane	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 00:39	111-91-1	
bis(2-Chloroethyl) ether	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:39	111-44-4	
bis(2-Chloroisopropyl) ether	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 00:39	108-60-1	
2-Chloronaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:39	91-58-7	
2-Chlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:39	95-57-8	
4-Chlorophenylphenyl ether	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 00:39	7005-72-3	
Chrysene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:39	53-70-3	
Dibenzofuran	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	132-64-9	
1,2-Dichlorobenzene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:39	95-50-1	
1,3-Dichlorobenzene	<1.5	ug/L	10.0	1.5	1	04/16/24 18:23	04/19/24 00:39	541-73-1	
1,4-Dichlorobenzene	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 00:39	106-46-7	
3,3'-Dichlorobenzidine	<3.9	ug/L	20.0	3.9	1	04/16/24 18:23	04/19/24 00:39	91-94-1	
2,4-Dichlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:39	120-83-2	
Diethylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:39	84-66-2	
2,4-Dimethylphenol	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 00:39	105-67-9	
Dimethylphthalate	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 00:39	131-11-3	
Di-n-butylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:39	84-74-2	
4,6-Dinitro-2-methylphenol	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 00:39	534-52-1	
2,4-Dinitrophenol	<2.5	ug/L	50.0	2.5	1	04/16/24 18:23	04/19/24 00:39	51-28-5	
2,4-Dinitrotoluene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	121-14-2	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW09/SW-1 Lab ID: 60450589002 Collected: 04/09/24 13:40 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
2,6-Dinitrotoluene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 00:39	606-20-2	
Di-n-octylphthalate	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 00:39	117-84-0	
bis(2-Ethylhexyl)phthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 00:39	117-81-7	
Fluoranthene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	206-44-0	
Fluorene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	86-73-7	
Hexachloro-1,3-butadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 00:39	87-68-3	
Hexachlorobenzene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:39	118-74-1	
Hexachlorocyclopentadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 00:39	77-47-4	
Hexachloroethane	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 00:39	67-72-1	
Indeno(1,2,3-cd)pyrene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:39	193-39-5	
Isophorone	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:39	78-59-1	
2-Methylnaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 00:39	91-57-6	
2-Methylphenol(o-Cresol)	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 00:39	95-48-7	
3&4-Methylphenol(m&p Cresol)	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 00:39	15831-10-4	
Naphthalene	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 00:39	91-20-3	
2-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 00:39	88-74-4	
3-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 00:39	99-09-2	
4-Nitroaniline	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 00:39	100-01-6	
Nitrobenzene	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 00:39	98-95-3	
2-Nitrophenol	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	88-75-5	
4-Nitrophenol	<0.37	ug/L	50.0	0.37	1	04/16/24 18:23	04/19/24 00:39	100-02-7	
N-Nitroso-di-n-propylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	621-64-7	
N-Nitrosodiphenylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	86-30-6	
Pentachlorophenol	<3.5	ug/L	50.0	3.5	1	04/16/24 18:23	04/19/24 00:39	87-86-5	
Phenanthrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	85-01-8	
Phenol	<0.83	ug/L	10.0	0.83	1	04/16/24 18:23	04/19/24 00:39	108-95-2	
Pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	129-00-0	
Pyridine	<1.1	ug/L	10.0	1.1	1	04/16/24 18:23	04/19/24 00:39	110-86-1	
1,2,4-Trichlorobenzene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 00:39	120-82-1	
2,4,5-Trichlorophenol	<1.7	ug/L	25.0	1.7	1	04/16/24 18:23	04/19/24 00:39	95-95-4	
2,4,6-Trichlorophenol	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 00:39	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	62	%	30-120		1	04/16/24 18:23	04/19/24 00:39	4165-60-0	
2-Fluorobiphenyl (S)	55	%	25-120		1	04/16/24 18:23	04/19/24 00:39	321-60-8	
Terphenyl-d14 (S)	66	%	35-125		1	04/16/24 18:23	04/19/24 00:39	1718-51-0	
Phenol-d6 (S)	34	%	10-120		1	04/16/24 18:23	04/19/24 00:39	13127-88-3	
2-Fluorophenol (S)	43	%	20-120		1	04/16/24 18:23	04/19/24 00:39	367-12-4	
2,4,6-Tribromophenol (S)	63	%	25-120		1	04/16/24 18:23	04/19/24 00:39	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
TPH-ORO	0.82J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 12:52		B
TPH-DRO	0.56J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 12:52		B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	99	%	40-140		1	04/11/24 12:40	04/18/24 12:52	4165-60-0	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW09/SW-1 Lab ID: 60450589002 Collected: 04/09/24 13:40 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	102	%	30-145		1	04/11/24 12:40	04/18/24 12:52	321-60-8	
Terphenyl-d14 (S)	96	%	35-150		1	04/11/24 12:40	04/18/24 12:52	1718-51-0	
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/11/24 02:53	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/11/24 02:53	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/11/24 02:53	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/11/24 02:53	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/11/24 02:53	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/11/24 02:53	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/11/24 02:53	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/11/24 02:53	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/11/24 02:53	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/11/24 02:53	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:53	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/11/24 02:53	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/11/24 02:53	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/11/24 02:53	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/11/24 02:53	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/11/24 02:53	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/11/24 02:53	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/11/24 02:53	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/11/24 02:53	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/11/24 02:53	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/11/24 02:53	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/11/24 02:53	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/11/24 02:53	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:53	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/11/24 02:53	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/11/24 02:53	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/11/24 02:53	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/11/24 02:53	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/11/24 02:53	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/11/24 02:53	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/11/24 02:53	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/11/24 02:53	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/11/24 02:53	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/11/24 02:53	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/11/24 02:53	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/11/24 02:53	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/11/24 02:53	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/11/24 02:53	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/11/24 02:53	10061-02-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW09/SW-1 Lab ID: 60450589002 Collected: 04/09/24 13:40 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:53	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/11/24 02:53	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/11/24 02:53	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/11/24 02:53	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/11/24 02:53	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/11/24 02:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/11/24 02:53	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/11/24 02:53	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/11/24 02:53	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:53	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:53	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/11/24 02:53	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/11/24 02:53	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/11/24 02:53	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/11/24 02:53	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/11/24 02:53	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/11/24 02:53	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/11/24 02:53	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/11/24 02:53	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/11/24 02:53	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/11/24 02:53	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/11/24 02:53	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/11/24 02:53	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/11/24 02:53	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/11/24 02:53	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/11/24 02:53	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	103	%	80-120		1		04/11/24 02:53	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		04/11/24 02:53	2199-69-1	
Toluene-d8 (S)	102	%	80-120		1		04/11/24 02:53	2037-26-5	
Preservation pH	1.0		0.10		1		04/11/24 02:53		
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Kansas City									
TPH-GRO	<62.6	ug/L	500	62.6	1		04/10/24 16:10		
<b>Surrogates</b>									
Toluene-d8 (S)	98	%	80-120		1		04/10/24 16:10	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120		1		04/10/24 16:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/10/24 16:10	2199-69-1	
Preservation pH	11.0		0.10		1		04/10/24 16:10		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B									
Pace Analytical Services - Kansas City									
Alkalinity, Total as CaCO3	98.4	mg/L	20.0	10.5	1		04/11/24 13:18		

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW09/SW-1 Lab ID: 60450589002 Collected: 04/09/24 13:40 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500 OG Oxygen, Dissolved</b>	Analytical Method: SM 4500-O G Pace Analytical Services - Kansas City								
Oxygen, Dissolved	6.9	mg/L	0.10	0.10	1		04/15/24 16:10	7782-44-7	H6
<b>4500S2D Sulfide, Total</b>	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	0.042J	mg/L	0.050	0.016	1		04/11/24 09:13	18496-25-8	
<b>9040 pH</b>	Analytical Method: EPA 9040 Pace Analytical Services - Kansas City								
pH at 25 Degrees C	7.5	Std. Units	0.10	0.10	1		04/18/24 15:38		H6
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Fluoride	0.14J	mg/L	0.20	0.12	1		04/12/24 19:07	16984-48-8	
Sulfate	431	mg/L	50.0	27.5	50		04/12/24 19:32	14808-79-8	M1
<b>350.1 Ammonia</b>	Analytical Method: EPA 350.1 Pace Analytical Services - Kansas City								
Nitrogen, Ammonia	0.48	mg/L	0.10	0.069	1		04/18/24 13:37	7664-41-7	M1
<b>353.2 Nitrogen, NO2/NO3 unpres</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/10/24 20:44		
Nitrogen, Nitrate	<0.069	mg/L	0.10	0.069	1		04/10/24 20:44	14797-55-8	
Nitrogen, Nitrite	<0.069	mg/L	0.10	0.069	1		04/10/24 20:44	14797-65-0	L1
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/11/24 14:57		
<b>4500CNE Cyanide, Total</b>	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City								
Cyanide	<0.0038	mg/L	0.0050	0.0038	1	04/18/24 08:30	04/18/24 11:15	57-12-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW08/SW-1 Lab ID: 60450589003 Collected: 04/09/24 14:20 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3510C									
Pace National - Mt. Juliet									
Aldrin	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/13/24 10:14	04/13/24 23:28	309-00-2	
alpha-BHC	<0.000017 2	mg/L	0.000050 0	0.000017 2	1	04/13/24 10:14	04/13/24 23:28	319-84-6	
beta-BHC	<0.000020 8	mg/L	0.000050 0	0.000020 8	1	04/13/24 10:14	04/13/24 23:28	319-85-7	
delta-BHC	<0.000015 0	mg/L	0.000050 0	0.000015 0	1	04/13/24 10:14	04/13/24 23:28	319-86-8	
gamma-BHC (Lindane)	<0.000020 9	mg/L	0.000050 0	0.000020 9	1	04/13/24 10:14	04/13/24 23:28	58-89-9	
Chlordane (Technical)	<0.000019 8	mg/L	0.00500 0	0.000019 8	1	04/13/24 10:14	04/13/24 23:28	57-74-9	
4,4'-DDD	<0.000017 7	mg/L	0.000050 0	0.000017 7	1	04/13/24 10:14	04/13/24 23:28	72-54-8	
4,4'-DDE	<0.000015 4	mg/L	0.000050 0	0.000015 4	1	04/13/24 10:14	04/13/24 23:28	72-55-9	
4,4'-DDT	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/13/24 10:14	04/13/24 23:28	50-29-3	
Dieldrin	<0.000016 2	mg/L	0.000050 0	0.000016 2	1	04/13/24 10:14	04/13/24 23:28	60-57-1	
Endosulfan I	<0.000016 0	mg/L	0.000050 0	0.000016 0	1	04/13/24 10:14	04/13/24 23:28	959-98-8	
Endosulfan II	<0.000016 4	mg/L	0.000050 0	0.000016 4	1	04/13/24 10:14	04/13/24 23:28	33213-65-9	
Endosulfan sulfate	<0.000021 7	mg/L	0.000050 0	0.000021 7	1	04/13/24 10:14	04/13/24 23:28	1031-07-8	
Endrin	<0.000016 1	mg/L	0.000050 0	0.000016 1	1	04/13/24 10:14	04/13/24 23:28	72-20-8	
Endrin aldehyde	<0.000023 7	mg/L	0.000050 0	0.000023 7	1	04/13/24 10:14	04/13/24 23:28	7421-93-4	
Endrin ketone	<0.000021 9	mg/L	0.000050 0	0.000021 9	1	04/13/24 10:14	04/13/24 23:28	53494-70-5	
Hexachlorobenzene	<0.000017 6	mg/L	0.000050 0	0.000017 6	1	04/13/24 10:14	04/13/24 23:28	118-74-1	
Heptachlor	<0.000014 8	mg/L	0.000050 0	0.000014 8	1	04/13/24 10:14	04/13/24 23:28	76-44-8	
Heptachlor epoxide	<0.000018 3	mg/L	0.000050 0	0.000018 3	1	04/13/24 10:14	04/13/24 23:28	1024-57-3	
Methoxychlor	<0.000019 3	mg/L	0.000050 0	0.000019 3	1	04/13/24 10:14	04/13/24 23:28	72-43-5	
Toxaphene	<0.000168	mg/L	0.000500	0.000168	1	04/13/24 10:14	04/13/24 23:28	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	74.1	%	10.0-128		1	04/13/24 10:14	04/13/24 23:28	2051-24-3	
Tetrachloro-m-xylene (S)	81.0	%	10.0-127		1	04/13/24 10:14	04/13/24 23:28	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.000607	mg/L	0.00222	0.000607	1.11	04/12/24 15:48	04/15/24 03:46	94-75-7	
Dalapon	<0.000382	mg/L	0.00222	0.000382	1.11	04/12/24 15:48	04/15/24 03:46	127-20-8	
2,4-DB	<0.000335	mg/L	0.00222	0.000335	1.11	04/12/24 15:48	04/15/24 03:46	94-82-6	
Dicamba	<0.000272	mg/L	0.00222	0.000272	1.11	04/12/24 15:48	04/15/24 03:46	1918-00-9	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW08/SW-1 Lab ID: 60450589003 Collected: 04/09/24 14:20 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
Dichlorprop	<0.00115	mg/L	0.00222	0.00115	1.11	04/12/24 15:48	04/15/24 03:46	120-36-5	
Dinoseb	<0.000278	mg/L	0.00222	0.000278	1.11	04/12/24 15:48	04/15/24 03:46	88-85-7	
MCPA	<0.0145	mg/L	0.111	0.0145	1.11	04/12/24 15:48	04/15/24 03:46	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.0733	mg/L	0.111	0.0733	1.11	04/12/24 15:48	04/15/24 03:46	93-65-2	
2,4,5-T	<0.000286	mg/L	0.00222	0.000286	1.11	04/12/24 15:48	04/15/24 03:46	93-76-5	
2,4,5-TP (Silvex)	<0.000372	mg/L	0.00222	0.000372	1.11	04/12/24 15:48	04/15/24 03:46	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	90.1	%	14.0-158		1.11	04/12/24 15:48	04/15/24 03:46	19719-28-9	
<b>8082 GCS PCB, LV</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<0.15	ug/L	1.0	0.15	1	04/16/24 12:05	04/17/24 13:03	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:03	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:03	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:03	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:03	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:03	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.19	ug/L	1.0	0.19	1	04/16/24 12:05	04/17/24 13:03	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	73	%	20-120		1	04/16/24 12:05	04/17/24 13:03	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Aluminum	0.133	mg/L	0.100	0.0185	1	04/17/24 12:16	04/23/24 00:13	7429-90-5	
Antimony	<0.00103	mg/L	0.00400	0.00103	1	04/17/24 12:16	04/23/24 00:13	7440-36-0	
Arsenic	0.00101J	mg/L	0.00200	0.000180	1	04/17/24 12:16	04/23/24 00:13	7440-38-2	J
Barium	0.0649	mg/L	0.00200	0.000381	1	04/17/24 12:16	04/23/24 00:13	7440-39-3	
Beryllium	<0.000190	mg/L	0.00200	0.000190	1	04/17/24 12:16	04/23/24 00:13	7440-41-7	
Cadmium	<0.000150	mg/L	0.00100	0.000150	1	04/17/24 12:16	04/23/24 00:13	7440-43-9	
Calcium	135	mg/L	10.0	0.936	10	04/17/24 12:16	04/23/24 13:24	7440-70-2	
Chromium	<0.00124	mg/L	0.00200	0.00124	1	04/17/24 12:16	04/23/24 00:13	7440-47-3	
Copper	0.00230J	mg/L	0.00500	0.00151	1	04/17/24 12:16	04/23/24 00:13	7440-50-8	J
Cobalt	0.000442J	mg/L	0.00200	0.000059	1	04/17/24 12:16	04/23/24 00:13	7440-48-4	J
Iron	0.564	mg/L	0.100	0.0281	1	04/17/24 12:16	04/23/24 00:13	7439-89-6	
Lead	<0.000849	mg/L	0.00200	0.000849	1	04/17/24 12:16	04/23/24 00:13	7439-92-1	
Magnesium	67.6	mg/L	10.0	0.735	10	04/17/24 12:16	04/23/24 13:24	7439-95-4	
Manganese	0.391	mg/L	0.00500	0.000704	1	04/17/24 12:16	04/23/24 00:13	7439-96-5	
Molybdenum	0.00277J	mg/L	0.00500	0.000348	1	04/17/24 12:16	04/23/24 00:13	7439-98-7	J
Nickel	0.00562	mg/L	0.00200	0.000816	1	04/17/24 12:16	04/23/24 00:13	7440-02-0	
Potassium	5.81	mg/L	2.00	0.108	1	04/17/24 12:16	04/23/24 00:13	7440-09-7	
Selenium	0.000768J	mg/L	0.00200	0.000300	1	04/17/24 12:16	04/23/24 00:13	7782-49-2	J
Silver	<0.000070	mg/L	0.00200	0.000070	1	04/17/24 12:16	04/23/24 00:13	7440-22-4	
	0			0					
Sodium	95.1	mg/L	20.0	3.76	10	04/17/24 12:16	04/23/24 13:24	7440-23-5	
Thallium	<0.000121	mg/L	0.00200	0.000121	1	04/17/24 12:16	04/23/24 00:13	7440-28-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW08/SW-1 Lab ID: 60450589003 Collected: 04/09/24 14:20 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Vanadium	0.000819J	mg/L	0.00500	0.000664	1	04/17/24 12:16	04/23/24 00:13	7440-62-2	J
Zinc	0.00502J	mg/L	0.0250	0.00302	1	04/17/24 12:16	04/23/24 00:13	7440-66-6	J
<b>Mercury 7470A</b>									
Analytical Method: EPA 7470A Preparation Method: 7470A									
Pace National - Mt. Juliet									
Mercury	<0.000100	mg/L	0.000200	0.000100	1	04/12/24 11:03	04/13/24 01:27	7439-97-6	
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
Acenaphthene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:01	83-32-9	
Acenaphthylene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:01	208-96-8	
Anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	120-12-7	
Benzo(a)anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	56-55-3	
Benzo(a)pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	50-32-8	
Benzo(b)fluoranthene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:01	205-99-2	
Benzo(g,h,i)perylene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:01	191-24-2	
Benzo(k)fluoranthene	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 01:01	207-08-9	
Benzoic Acid	<4.4	ug/L	50.0	4.4	1	04/16/24 18:23	04/19/24 01:01	65-85-0	
Benzyl alcohol	<1.6	ug/L	20.0	1.6	1	04/16/24 18:23	04/19/24 01:01	100-51-6	
4-Bromophenylphenyl ether	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	101-55-3	
Butylbenzylphthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 01:01	85-68-7	
Carbazole	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	86-74-8	
4-Chloro-3-methylphenol	<1.9	ug/L	20.0	1.9	1	04/16/24 18:23	04/19/24 01:01	59-50-7	
4-Chloroaniline	<2.0	ug/L	20.0	2.0	1	04/16/24 18:23	04/19/24 01:01	106-47-8	
bis(2-Chloroethoxy)methane	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 01:01	111-91-1	
bis(2-Chloroethyl) ether	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:01	111-44-4	
bis(2-Chloroisopropyl) ether	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 01:01	108-60-1	
2-Chloronaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:01	91-58-7	
2-Chlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:01	95-57-8	
4-Chlorophenylphenyl ether	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:01	7005-72-3	
Chrysene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:01	53-70-3	
Dibenzofuran	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	132-64-9	
1,2-Dichlorobenzene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:01	95-50-1	
1,3-Dichlorobenzene	<1.5	ug/L	10.0	1.5	1	04/16/24 18:23	04/19/24 01:01	541-73-1	
1,4-Dichlorobenzene	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 01:01	106-46-7	
3,3'-Dichlorobenzidine	<3.9	ug/L	20.0	3.9	1	04/16/24 18:23	04/19/24 01:01	91-94-1	
2,4-Dichlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:01	120-83-2	
Diethylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:01	84-66-2	
2,4-Dimethylphenol	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:01	105-67-9	
Dimethylphthalate	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:01	131-11-3	
Di-n-butylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:01	84-74-2	
4,6-Dinitro-2-methylphenol	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 01:01	534-52-1	
2,4-Dinitrophenol	<2.5	ug/L	50.0	2.5	1	04/16/24 18:23	04/19/24 01:01	51-28-5	
2,4-Dinitrotoluene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	121-14-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW08/SW-1 Lab ID: 60450589003 Collected: 04/09/24 14:20 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
2,6-Dinitrotoluene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:01	606-20-2	
Di-n-octylphthalate	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 01:01	117-84-0	
bis(2-Ethylhexyl)phthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 01:01	117-81-7	
Fluoranthene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	206-44-0	
Fluorene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	86-73-7	
Hexachloro-1,3-butadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 01:01	87-68-3	
Hexachlorobenzene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:01	118-74-1	
Hexachlorocyclopentadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 01:01	77-47-4	
Hexachloroethane	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 01:01	67-72-1	
Indeno(1,2,3-cd)pyrene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:01	193-39-5	
Isophorone	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:01	78-59-1	
2-Methylnaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:01	91-57-6	
2-Methylphenol(o-Cresol)	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:01	95-48-7	
3&4-Methylphenol(m&p Cresol)	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 01:01	15831-10-4	
Naphthalene	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 01:01	91-20-3	
2-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 01:01	88-74-4	
3-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 01:01	99-09-2	
4-Nitroaniline	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 01:01	100-01-6	
Nitrobenzene	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 01:01	98-95-3	
2-Nitrophenol	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	88-75-5	
4-Nitrophenol	<0.37	ug/L	50.0	0.37	1	04/16/24 18:23	04/19/24 01:01	100-02-7	
N-Nitroso-di-n-propylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	621-64-7	
N-Nitrosodiphenylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	86-30-6	
Pentachlorophenol	<3.5	ug/L	50.0	3.5	1	04/16/24 18:23	04/19/24 01:01	87-86-5	
Phenanthrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	85-01-8	
Phenol	<0.83	ug/L	10.0	0.83	1	04/16/24 18:23	04/19/24 01:01	108-95-2	
Pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	129-00-0	
Pyridine	<1.1	ug/L	10.0	1.1	1	04/16/24 18:23	04/19/24 01:01	110-86-1	
1,2,4-Trichlorobenzene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:01	120-82-1	
2,4,5-Trichlorophenol	<1.7	ug/L	25.0	1.7	1	04/16/24 18:23	04/19/24 01:01	95-95-4	
2,4,6-Trichlorophenol	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 01:01	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	61	%	30-120		1	04/16/24 18:23	04/19/24 01:01	4165-60-0	
2-Fluorobiphenyl (S)	54	%	25-120		1	04/16/24 18:23	04/19/24 01:01	321-60-8	
Terphenyl-d14 (S)	63	%	35-125		1	04/16/24 18:23	04/19/24 01:01	1718-51-0	
Phenol-d6 (S)	34	%	10-120		1	04/16/24 18:23	04/19/24 01:01	13127-88-3	
2-Fluorophenol (S)	45	%	20-120		1	04/16/24 18:23	04/19/24 01:01	367-12-4	
2,4,6-Tribromophenol (S)	65	%	25-120		1	04/16/24 18:23	04/19/24 01:01	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
TPH-ORO	0.63J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 13:11		B
TPH-DRO	0.54J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 13:11		B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	101	%	40-140		1	04/11/24 12:40	04/18/24 13:11	4165-60-0	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW08/SW-1 Lab ID: 60450589003 Collected: 04/09/24 14:20 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	100	%	30-145		1	04/11/24 12:40	04/18/24 13:11	321-60-8	
Terphenyl-d14 (S)	96	%	35-150		1	04/11/24 12:40	04/18/24 13:11	1718-51-0	
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/11/24 03:07	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/11/24 03:07	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/11/24 03:07	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/11/24 03:07	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/11/24 03:07	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/11/24 03:07	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/11/24 03:07	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/11/24 03:07	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/11/24 03:07	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/11/24 03:07	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 03:07	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/11/24 03:07	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/11/24 03:07	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/11/24 03:07	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/11/24 03:07	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/11/24 03:07	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/11/24 03:07	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/11/24 03:07	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/11/24 03:07	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/11/24 03:07	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/11/24 03:07	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/11/24 03:07	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/11/24 03:07	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 03:07	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/11/24 03:07	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/11/24 03:07	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/11/24 03:07	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/11/24 03:07	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/11/24 03:07	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/11/24 03:07	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/11/24 03:07	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/11/24 03:07	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/11/24 03:07	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/11/24 03:07	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/11/24 03:07	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/11/24 03:07	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/11/24 03:07	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/11/24 03:07	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/11/24 03:07	10061-02-6	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW08/SW-1 Lab ID: 60450589003 Collected: 04/09/24 14:20 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 03:07	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/11/24 03:07	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/11/24 03:07	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/11/24 03:07	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/11/24 03:07	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/11/24 03:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/11/24 03:07	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/11/24 03:07	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/11/24 03:07	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 03:07	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/11/24 03:07	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/11/24 03:07	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/11/24 03:07	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/11/24 03:07	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/11/24 03:07	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/11/24 03:07	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/11/24 03:07	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/11/24 03:07	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/11/24 03:07	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/11/24 03:07	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/11/24 03:07	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/11/24 03:07	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/11/24 03:07	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/11/24 03:07	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/11/24 03:07	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/11/24 03:07	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	80-120		1		04/11/24 03:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/11/24 03:07	2199-69-1	
Toluene-d8 (S)	101	%	80-120		1		04/11/24 03:07	2037-26-5	
Preservation pH	1.0		0.10		1		04/11/24 03:07		
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Kansas City									
TPH-GRO	<62.6	ug/L	500	62.6	1		04/11/24 15:43		
<b>Surrogates</b>									
Toluene-d8 (S)	99	%	80-120		1		04/11/24 15:43	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120		1		04/11/24 15:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		04/11/24 15:43	2199-69-1	
Preservation pH	11.0		0.10		1		04/11/24 15:43		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B									
Pace Analytical Services - Kansas City									
Alkalinity, Total as CaCO3	327	mg/L	20.0	10.5	1		04/11/24 13:22		

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: SW08/SW-1 Lab ID: 60450589003 Collected: 04/09/24 14:20 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500 OG Oxygen, Dissolved</b>	Analytical Method: SM 4500-O G Pace Analytical Services - Kansas City								
Oxygen, Dissolved	11.2	mg/L	0.10	0.10	1		04/15/24 16:10	7782-44-7	H6
<b>4500S2D Sulfide, Total</b>	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	0.028J	mg/L	0.050	0.016	1		04/11/24 09:13	18496-25-8	
<b>9040 pH</b>	Analytical Method: EPA 9040 Pace Analytical Services - Kansas City								
pH at 25 Degrees C	8.1	Std. Units	0.10	0.10	1		04/18/24 15:41		H6
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Fluoride	0.20	mg/L	0.20	0.12	1		04/12/24 19:57	16984-48-8	
Sulfate	328	mg/L	50.0	27.5	50		04/12/24 20:34	14808-79-8	
<b>350.1 Ammonia</b>	Analytical Method: EPA 350.1 Pace Analytical Services - Kansas City								
Nitrogen, Ammonia	<0.069	mg/L	0.10	0.069	1		04/18/24 13:40	7664-41-7	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/11/24 14:14		
Nitrogen, Nitrate	<0.069	mg/L	0.10	0.069	1		04/11/24 14:14	14797-55-8	
Nitrogen, Nitrite	<0.069	mg/L	0.10	0.069	1		04/11/24 14:14	14797-65-0	L1
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/11/24 14:58		
<b>4500CNE Cyanide, Total</b>	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City								
Cyanide	<0.0038	mg/L	0.0050	0.0038	1	04/18/24 08:30	04/18/24 11:16	57-12-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: Rinsate-24-04-09 Lab ID: 60450589004 Collected: 04/09/24 11:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3510C									
Pace National - Mt. Juliet									
Aldrin	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/13/24 10:14	04/13/24 23:39	309-00-2	
alpha-BHC	<0.000017 2	mg/L	0.000050 0	0.000017 2	1	04/13/24 10:14	04/13/24 23:39	319-84-6	
beta-BHC	<0.000020 8	mg/L	0.000050 0	0.000020 8	1	04/13/24 10:14	04/13/24 23:39	319-85-7	
delta-BHC	<0.000015 0	mg/L	0.000050 0	0.000015 0	1	04/13/24 10:14	04/13/24 23:39	319-86-8	
gamma-BHC (Lindane)	<0.000020 9	mg/L	0.000050 0	0.000020 9	1	04/13/24 10:14	04/13/24 23:39	58-89-9	
Chlordane (Technical)	<0.000019 8	mg/L	0.00500 0	0.000019 8	1	04/13/24 10:14	04/13/24 23:39	57-74-9	
4,4'-DDD	<0.000017 7	mg/L	0.000050 0	0.000017 7	1	04/13/24 10:14	04/13/24 23:39	72-54-8	
4,4'-DDE	<0.000015 4	mg/L	0.000050 0	0.000015 4	1	04/13/24 10:14	04/13/24 23:39	72-55-9	
4,4'-DDT	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/13/24 10:14	04/13/24 23:39	50-29-3	
Dieldrin	<0.000016 2	mg/L	0.000050 0	0.000016 2	1	04/13/24 10:14	04/13/24 23:39	60-57-1	
Endosulfan I	<0.000016 0	mg/L	0.000050 0	0.000016 0	1	04/13/24 10:14	04/13/24 23:39	959-98-8	
Endosulfan II	<0.000016 4	mg/L	0.000050 0	0.000016 4	1	04/13/24 10:14	04/13/24 23:39	33213-65-9	
Endosulfan sulfate	<0.000021 7	mg/L	0.000050 0	0.000021 7	1	04/13/24 10:14	04/13/24 23:39	1031-07-8	
Endrin	<0.000016 1	mg/L	0.000050 0	0.000016 1	1	04/13/24 10:14	04/13/24 23:39	72-20-8	
Endrin aldehyde	<0.000023 7	mg/L	0.000050 0	0.000023 7	1	04/13/24 10:14	04/13/24 23:39	7421-93-4	
Endrin ketone	<0.000021 9	mg/L	0.000050 0	0.000021 9	1	04/13/24 10:14	04/13/24 23:39	53494-70-5	
Hexachlorobenzene	<0.000017 6	mg/L	0.000050 0	0.000017 6	1	04/13/24 10:14	04/13/24 23:39	118-74-1	
Heptachlor	<0.000014 8	mg/L	0.000050 0	0.000014 8	1	04/13/24 10:14	04/13/24 23:39	76-44-8	
Heptachlor epoxide	<0.000018 3	mg/L	0.000050 0	0.000018 3	1	04/13/24 10:14	04/13/24 23:39	1024-57-3	
Methoxychlor	<0.000019 3	mg/L	0.000050 0	0.000019 3	1	04/13/24 10:14	04/13/24 23:39	72-43-5	
Toxaphene	<0.000168	mg/L	0.000500	0.000168	1	04/13/24 10:14	04/13/24 23:39	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	72.9	%	10.0-128		1	04/13/24 10:14	04/13/24 23:39	2051-24-3	
Tetrachloro-m-xylene (S)	78.1	%	10.0-127		1	04/13/24 10:14	04/13/24 23:39	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.000591	mg/L	0.00216	0.000591	1.08	04/12/24 15:48	04/15/24 03:56	94-75-7	
Dalapon	<0.000372	mg/L	0.00216	0.000372	1.08	04/12/24 15:48	04/15/24 03:56	127-20-8	
2,4-DB	<0.000326	mg/L	0.00216	0.000326	1.08	04/12/24 15:48	04/15/24 03:56	94-82-6	
Dicamba	<0.000265	mg/L	0.00216	0.000265	1.08	04/12/24 15:48	04/15/24 03:56	1918-00-9	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: Rinsate-24-04-09 Lab ID: 60450589004 Collected: 04/09/24 11:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
Dichlorprop	<0.00112	mg/L	0.00216	0.00112	1.08	04/12/24 15:48	04/15/24 03:56	120-36-5	
Dinoseb	<0.000270	mg/L	0.00216	0.000270	1.08	04/12/24 15:48	04/15/24 03:56	88-85-7	
MCPA	<0.0141	mg/L	0.108	0.0141	1.08	04/12/24 15:48	04/15/24 03:56	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.0713	mg/L	0.108	0.0713	1.08	04/12/24 15:48	04/15/24 03:56	93-65-2	
2,4,5-T	<0.000279	mg/L	0.00216	0.000279	1.08	04/12/24 15:48	04/15/24 03:56	93-76-5	
2,4,5-TP (Silvex)	<0.000362	mg/L	0.00216	0.000362	1.08	04/12/24 15:48	04/15/24 03:56	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	84.8	%	14.0-158		1.08	04/12/24 15:48	04/15/24 03:56	19719-28-9	
<b>8082 GCS PCB, LV</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<0.15	ug/L	1.0	0.15	1	04/16/24 12:05	04/17/24 13:11	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:11	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:11	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:11	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:11	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:11	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.19	ug/L	1.0	0.19	1	04/16/24 12:05	04/17/24 13:11	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	61	%	20-120		1	04/16/24 12:05	04/17/24 13:11	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Aluminum	<0.0185	mg/L	0.100	0.0185	1	04/17/24 12:16	04/23/24 00:16	7429-90-5	
Antimony	<0.00103	mg/L	0.00400	0.00103	1	04/17/24 12:16	04/23/24 00:16	7440-36-0	
Arsenic	<0.000180	mg/L	0.00200	0.000180	1	04/17/24 12:16	04/23/24 00:16	7440-38-2	
Barium	<0.000381	mg/L	0.00200	0.000381	1	04/17/24 12:16	04/23/24 00:16	7440-39-3	
Beryllium	<0.000190	mg/L	0.00200	0.000190	1	04/17/24 12:16	04/23/24 00:16	7440-41-7	
Cadmium	<0.000150	mg/L	0.00100	0.000150	1	04/17/24 12:16	04/23/24 00:16	7440-43-9	
Calcium	<0.0936	mg/L	1.00	0.0936	1	04/17/24 12:16	04/23/24 00:16	7440-70-2	
Chromium	<0.00124	mg/L	0.00200	0.00124	1	04/17/24 12:16	04/23/24 00:16	7440-47-3	
Copper	<0.00151	mg/L	0.00500	0.00151	1	04/17/24 12:16	04/23/24 00:16	7440-50-8	
Cobalt	<0.000059	mg/L	0.00200	0.000059	1	04/17/24 12:16	04/23/24 00:16	7440-48-4	
Iron	<0.0281	mg/L	0.100	0.0281	1	04/17/24 12:16	04/23/24 00:16	7439-89-6	
Lead	<0.000849	mg/L	0.00200	0.000849	1	04/17/24 12:16	04/23/24 00:16	7439-92-1	
Magnesium	<0.0735	mg/L	1.00	0.0735	1	04/17/24 12:16	04/23/24 00:16	7439-95-4	
Manganese	<0.000704	mg/L	0.00500	0.000704	1	04/17/24 12:16	04/23/24 00:16	7439-96-5	
Molybdenum	<0.000348	mg/L	0.00500	0.000348	1	04/17/24 12:16	04/23/24 00:16	7439-98-7	
Nickel	<0.000816	mg/L	0.00200	0.000816	1	04/17/24 12:16	04/23/24 00:16	7440-02-0	
Potassium	<0.108	mg/L	2.00	0.108	1	04/17/24 12:16	04/23/24 00:16	7440-09-7	
Selenium	<0.000300	mg/L	0.00200	0.000300	1	04/17/24 12:16	04/23/24 00:16	7782-49-2	
Silver	<0.000070	mg/L	0.00200	0.000070	1	04/17/24 12:16	04/23/24 00:16	7440-22-4	
Sodium	<0.376	mg/L	2.00	0.376	1	04/17/24 12:16	04/23/24 00:16	7440-23-5	
Thallium	<0.000121	mg/L	0.00200	0.000121	1	04/17/24 12:16	04/23/24 00:16	7440-28-0	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: Rinsate-24-04-09 Lab ID: 60450589004 Collected: 04/09/24 11:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Vanadium	<0.000664	mg/L	0.00500	0.000664	1	04/17/24 12:16	04/23/24 00:16	7440-62-2	
Zinc	<0.00302	mg/L	0.0250	0.00302	1	04/17/24 12:16	04/23/24 00:16	7440-66-6	
<b>Mercury 7470A</b>									
Analytical Method: EPA 7470A Preparation Method: 7470A									
Pace National - Mt. Juliet									
Mercury	<0.000100	mg/L	0.000200	0.000100	1	04/12/24 11:03	04/13/24 01:45	7439-97-6	
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
Acenaphthene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:22	83-32-9	
Acenaphthylene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:22	208-96-8	
Anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	120-12-7	
Benzo(a)anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	56-55-3	
Benzo(a)pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	50-32-8	
Benzo(b)fluoranthene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:22	205-99-2	
Benzo(g,h,i)perylene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:22	191-24-2	
Benzo(k)fluoranthene	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 01:22	207-08-9	
Benzoic Acid	<4.4	ug/L	50.0	4.4	1	04/16/24 18:23	04/19/24 01:22	65-85-0	
Benzyl alcohol	<1.6	ug/L	20.0	1.6	1	04/16/24 18:23	04/19/24 01:22	100-51-6	
4-Bromophenylphenyl ether	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	101-55-3	
Butylbenzylphthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 01:22	85-68-7	
Carbazole	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	86-74-8	
4-Chloro-3-methylphenol	<1.9	ug/L	20.0	1.9	1	04/16/24 18:23	04/19/24 01:22	59-50-7	
4-Chloroaniline	<2.0	ug/L	20.0	2.0	1	04/16/24 18:23	04/19/24 01:22	106-47-8	
bis(2-Chloroethoxy)methane	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 01:22	111-91-1	
bis(2-Chloroethyl) ether	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:22	111-44-4	
bis(2-Chloroisopropyl) ether	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 01:22	108-60-1	
2-Chloronaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:22	91-58-7	
2-Chlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:22	95-57-8	
4-Chlorophenylphenyl ether	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:22	7005-72-3	
Chrysene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:22	53-70-3	
Dibenzofuran	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	132-64-9	
1,2-Dichlorobenzene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:22	95-50-1	
1,3-Dichlorobenzene	<1.5	ug/L	10.0	1.5	1	04/16/24 18:23	04/19/24 01:22	541-73-1	
1,4-Dichlorobenzene	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 01:22	106-46-7	
3,3'-Dichlorobenzidine	<3.9	ug/L	20.0	3.9	1	04/16/24 18:23	04/19/24 01:22	91-94-1	
2,4-Dichlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:22	120-83-2	
Diethylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:22	84-66-2	
2,4-Dimethylphenol	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:22	105-67-9	
Dimethylphthalate	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:22	131-11-3	
Di-n-butylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:22	84-74-2	
4,6-Dinitro-2-methylphenol	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 01:22	534-52-1	
2,4-Dinitrophenol	<2.5	ug/L	50.0	2.5	1	04/16/24 18:23	04/19/24 01:22	51-28-5	
2,4-Dinitrotoluene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	121-14-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: Rinsate-24-04-09 Lab ID: 60450589004 Collected: 04/09/24 11:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
2,6-Dinitrotoluene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:22	606-20-2	
Di-n-octylphthalate	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 01:22	117-84-0	
bis(2-Ethylhexyl)phthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 01:22	117-81-7	
Fluoranthene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	206-44-0	
Fluorene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	86-73-7	
Hexachloro-1,3-butadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 01:22	87-68-3	
Hexachlorobenzene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:22	118-74-1	
Hexachlorocyclopentadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 01:22	77-47-4	
Hexachloroethane	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 01:22	67-72-1	
Indeno(1,2,3-cd)pyrene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:22	193-39-5	
Isophorone	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:22	78-59-1	
2-Methylnaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:22	91-57-6	
2-Methylphenol(o-Cresol)	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:22	95-48-7	
3&4-Methylphenol(m&p Cresol)	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 01:22	15831-10-4	
Naphthalene	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 01:22	91-20-3	
2-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 01:22	88-74-4	
3-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 01:22	99-09-2	
4-Nitroaniline	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 01:22	100-01-6	
Nitrobenzene	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 01:22	98-95-3	
2-Nitrophenol	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	88-75-5	
4-Nitrophenol	<0.37	ug/L	50.0	0.37	1	04/16/24 18:23	04/19/24 01:22	100-02-7	
N-Nitroso-di-n-propylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	621-64-7	
N-Nitrosodiphenylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	86-30-6	
Pentachlorophenol	<3.5	ug/L	50.0	3.5	1	04/16/24 18:23	04/19/24 01:22	87-86-5	
Phenanthrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	85-01-8	
Phenol	<0.83	ug/L	10.0	0.83	1	04/16/24 18:23	04/19/24 01:22	108-95-2	
Pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	129-00-0	
Pyridine	<1.1	ug/L	10.0	1.1	1	04/16/24 18:23	04/19/24 01:22	110-86-1	
1,2,4-Trichlorobenzene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:22	120-82-1	
2,4,5-Trichlorophenol	<1.7	ug/L	25.0	1.7	1	04/16/24 18:23	04/19/24 01:22	95-95-4	
2,4,6-Trichlorophenol	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 01:22	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	65	%	30-120		1	04/16/24 18:23	04/19/24 01:22	4165-60-0	
2-Fluorobiphenyl (S)	57	%	25-120		1	04/16/24 18:23	04/19/24 01:22	321-60-8	
Terphenyl-d14 (S)	63	%	35-125		1	04/16/24 18:23	04/19/24 01:22	1718-51-0	
Phenol-d6 (S)	36	%	10-120		1	04/16/24 18:23	04/19/24 01:22	13127-88-3	
2-Fluorophenol (S)	49	%	20-120		1	04/16/24 18:23	04/19/24 01:22	367-12-4	
2,4,6-Tribromophenol (S)	64	%	25-120		1	04/16/24 18:23	04/19/24 01:22	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
TPH-ORO	0.42J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 13:30		B
TPH-DRO	0.59J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 13:30		B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	103	%	40-140		1	04/11/24 12:40	04/18/24 13:30	4165-60-0	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: Rinsate-24-04-09 Lab ID: 60450589004 Collected: 04/09/24 11:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	104	%	30-145		1	04/11/24 12:40	04/18/24 13:30	321-60-8	
Terphenyl-d14 (S)	104	%	35-150		1	04/11/24 12:40	04/18/24 13:30	1718-51-0	
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/11/24 02:25	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/11/24 02:25	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/11/24 02:25	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/11/24 02:25	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/11/24 02:25	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/11/24 02:25	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/11/24 02:25	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/11/24 02:25	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/11/24 02:25	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/11/24 02:25	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:25	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/11/24 02:25	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/11/24 02:25	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/11/24 02:25	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/11/24 02:25	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/11/24 02:25	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/11/24 02:25	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/11/24 02:25	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/11/24 02:25	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/11/24 02:25	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/11/24 02:25	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/11/24 02:25	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/11/24 02:25	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:25	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/11/24 02:25	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/11/24 02:25	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/11/24 02:25	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/11/24 02:25	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/11/24 02:25	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/11/24 02:25	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/11/24 02:25	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/11/24 02:25	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/11/24 02:25	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/11/24 02:25	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/11/24 02:25	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/11/24 02:25	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/11/24 02:25	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/11/24 02:25	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/11/24 02:25	10061-02-6	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

**Sample: Rinsate-24-04-09**      **Lab ID: 60450589004**      Collected: 04/09/24 11:00      Received: 04/09/24 16:35      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:25	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/11/24 02:25	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/11/24 02:25	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/11/24 02:25	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/11/24 02:25	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/11/24 02:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/11/24 02:25	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/11/24 02:25	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/11/24 02:25	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:25	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/11/24 02:25	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/11/24 02:25	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/11/24 02:25	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/11/24 02:25	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/11/24 02:25	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/11/24 02:25	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/11/24 02:25	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/11/24 02:25	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/11/24 02:25	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/11/24 02:25	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/11/24 02:25	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/11/24 02:25	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/11/24 02:25	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/11/24 02:25	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/11/24 02:25	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/11/24 02:25	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/11/24 02:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	96	%	80-120		1		04/11/24 02:25	2199-69-1	
Toluene-d8 (S)	105	%	80-120		1		04/11/24 02:25	2037-26-5	
Preservation pH	1.0		0.10		1		04/11/24 02:25		
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Kansas City									
TPH-GRO	<62.6	ug/L	500	62.6	1		04/11/24 15:58		
<b>Surrogates</b>									
Toluene-d8 (S)	98	%	80-120		1		04/11/24 15:58	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120		1		04/11/24 15:58	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		04/11/24 15:58	2199-69-1	
Preservation pH	11.0		0.10		1		04/11/24 15:58		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	0.50	mg/L	0.10	0.069	1		04/18/24 13:42	7664-41-7	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: Rinsate-24-04-09 Lab ID: 60450589004 Collected: 04/09/24 11:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/11/24 14:59		
<b>4500CNE Cyanide, Total</b>	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City								
Cyanide	<0.0038	mg/L	0.0050	0.0038	1	04/18/24 08:30	04/18/24 11:21	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: Trip Blank Lab ID: 60450589005 Collected: 04/09/24 08:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/13/24 02:07	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/13/24 02:07	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/13/24 02:07	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/13/24 02:07	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/13/24 02:07	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/13/24 02:07	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/13/24 02:07	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/13/24 02:07	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/13/24 02:07	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/13/24 02:07	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/13/24 02:07	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/13/24 02:07	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/13/24 02:07	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/13/24 02:07	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/13/24 02:07	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/13/24 02:07	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/13/24 02:07	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/13/24 02:07	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/13/24 02:07	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/13/24 02:07	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/13/24 02:07	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/13/24 02:07	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/13/24 02:07	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/13/24 02:07	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/13/24 02:07	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/13/24 02:07	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/16/24 19:57	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/13/24 02:07	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/13/24 02:07	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/13/24 02:07	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/13/24 02:07	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/13/24 02:07	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/13/24 02:07	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/13/24 02:07	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/13/24 02:07	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/13/24 02:07	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/13/24 02:07	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/13/24 02:07	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/13/24 02:07	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/13/24 02:07	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/16/24 19:57	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/13/24 02:07	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/13/24 02:07	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/13/24 02:07	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/13/24 02:07	75-09-2	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450589

Sample: Trip Blank Lab ID: 60450589005 Collected: 04/09/24 08:00 Received: 04/09/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/13/24 02:07	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/16/24 19:57	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/13/24 02:07	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/13/24 02:07	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/13/24 02:07	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/13/24 02:07	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/13/24 02:07	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/13/24 02:07	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/13/24 02:07	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/13/24 02:07	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/16/24 19:57	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/13/24 02:07	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/13/24 02:07	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/13/24 02:07	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/13/24 02:07	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/13/24 02:07	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/13/24 02:07	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/16/24 19:57	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/16/24 19:57	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/16/24 19:57	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/13/24 02:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/13/24 02:07	2199-69-1	
Toluene-d8 (S)	99	%	80-120		1		04/13/24 02:07	2037-26-5	
Preservation pH	1.0		0.10		1		04/13/24 02:07		

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch: 2266296

Analysis Method: EPA 8081B

QC Batch Method: 3510C

Analysis Description: Pesticides (GC) 8081B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

METHOD BLANK: R4057646-1

Matrix: Water

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aldrin	mg/L	<0.0000198	0.0000500	0.0000198	04/13/24 21:46	
alpha-BHC	mg/L	<0.0000172	0.0000500	0.0000172	04/13/24 21:46	
beta-BHC	mg/L	<0.0000208	0.0000500	0.0000208	04/13/24 21:46	
delta-BHC	mg/L	<0.0000150	0.0000500	0.0000150	04/13/24 21:46	
gamma-BHC (Lindane)	mg/L	<0.0000209	0.0000500	0.0000209	04/13/24 21:46	
Chlordane (Technical)	mg/L	<0.0000198	0.00500	0.0000198	04/13/24 21:46	
4,4'-DDD	mg/L	<0.0000177	0.0000500	0.0000177	04/13/24 21:46	
4,4'-DDE	mg/L	<0.0000154	0.0000500	0.0000154	04/13/24 21:46	
4,4'-DDT	mg/L	<0.0000198	0.0000500	0.0000198	04/13/24 21:46	
Dieldrin	mg/L	<0.0000162	0.0000500	0.0000162	04/13/24 21:46	
Endosulfan I	mg/L	<0.0000160	0.0000500	0.0000160	04/13/24 21:46	
Endosulfan II	mg/L	<0.0000164	0.0000500	0.0000164	04/13/24 21:46	
Endosulfan sulfate	mg/L	<0.0000217	0.0000500	0.0000217	04/13/24 21:46	
Endrin	mg/L	<0.0000161	0.0000500	0.0000161	04/13/24 21:46	
Endrin aldehyde	mg/L	<0.0000237	0.0000500	0.0000237	04/13/24 21:46	
Endrin ketone	mg/L	<0.0000219	0.0000500	0.0000219	04/13/24 21:46	
Hexachlorobenzene	mg/L	<0.0000176	0.0000500	0.0000176	04/13/24 21:46	
Heptachlor	mg/L	<0.0000148	0.0000500	0.0000148	04/13/24 21:46	
Heptachlor epoxide	mg/L	<0.0000183	0.0000500	0.0000183	04/13/24 21:46	
Methoxychlor	mg/L	<0.0000193	0.0000500	0.0000193	04/13/24 21:46	
Toxaphene	mg/L	<0.0000168	0.0000500	0.0000168	04/13/24 21:46	
Decachlorobiphenyl (S)	%	41.9	10.0-128		04/13/24 21:46	
Tetrachloro-m-xylene (S)	%	71.2	10.0-127		04/13/24 21:46	

LABORATORY CONTROL SAMPLE: R4057646-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aldrin	mg/L	0.00100	0.000779	77.9	22.0-124	
alpha-BHC	mg/L	0.00100	0.000861	86.1	54.0-130	
beta-BHC	mg/L	0.00100	0.000913	91.3	53.0-136	
delta-BHC	mg/L	0.00100	0.000905	90.5	54.0-133	
gamma-BHC (Lindane)	mg/L	0.00100	0.000897	89.7	55.0-129	
4,4'-DDD	mg/L	0.00100	0.000913	91.3	56.0-140	
4,4'-DDE	mg/L	0.00100	0.000775	77.5	52.0-128	
4,4'-DDT	mg/L	0.00100	0.000934	93.4	50.0-141	
Dieldrin	mg/L	0.00100	0.000854	85.4	59.0-133	
Endosulfan I	mg/L	0.00100	0.000873	87.3	57.0-131	
Endosulfan II	mg/L	0.00100	0.000976	97.6	58.0-133	
Endosulfan sulfate	mg/L	0.00100	0.000961	96.1	58.0-133	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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### QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450589

LABORATORY CONTROL SAMPLE: R4057646-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	mg/L	0.00100	0.000903	90.3	57.0-134	
Endrin aldehyde	mg/L	0.00100	0.000877	87.7	53.0-129	
Endrin ketone	mg/L	0.00100	0.000933	93.3	60.0-145	
Hexachlorobenzene	mg/L	0.00100	0.000774	77.4	30.0-114	
Heptachlor	mg/L	0.00100	0.000969	96.9	27.0-132	
Heptachlor epoxide	mg/L	0.00100	0.000884	88.4	57.0-130	
Methoxychlor	mg/L	0.00100	0.000999	99.9	54.0-155	
Decachlorobiphenyl (S)	%			24.9	10.0-128	
Tetrachloro-m-xylene (S)	%			77.1	10.0-127	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch: 2265070 Analysis Method: EPA 8151A  
 QC Batch Method: 8151A Analysis Description: Chlorinated Herb. (GC) 8151A  
 Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

METHOD BLANK: R4057812-1 Matrix: Water

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4-D	mg/L	<0.000547	0.00200	0.000547	04/14/24 19:27	
Dalapon	mg/L	<0.000344	0.00200	0.000344	04/14/24 19:27	
2,4-DB	mg/L	<0.000302	0.00200	0.000302	04/14/24 19:27	
Dicamba	mg/L	<0.000245	0.00200	0.000245	04/14/24 19:27	
Dichlorprop	mg/L	<0.00104	0.00200	0.00104	04/14/24 19:27	
Dinoseb	mg/L	<0.000250	0.00200	0.000250	04/14/24 19:27	
MCPA	mg/L	<0.0131	0.100	0.0131	04/14/24 19:27	
2-(2-methyl-4-chlorophenoxy)pa	mg/L	<0.0660	0.100	0.0660	04/14/24 19:27	
2,4,5-T	mg/L	<0.000258	0.00200	0.000258	04/14/24 19:27	
2,4,5-TP (Silvex)	mg/L	<0.000335	0.00200	0.000335	04/14/24 19:27	
2,4-DCAA (S)	%	89.2	14.0-158		04/14/24 19:27	

LABORATORY CONTROL SAMPLE & LCSD: R4057812-2 R4057812-3

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
2,4-D	mg/L	0.00250	0.00286	0.00294	114	118	50.0-120	2.76	20	P9
Dalapon	mg/L	0.00250	0.00197	0.00211	78.8	84.4	32.0-120	6.86	20	
2,4-DB	mg/L	0.00250	0.00266	0.00256	106	102	53.0-140	3.83	20	P9
Dicamba	mg/L	0.00250	0.00240	0.00233	96.0	93.2	51.0-120	2.96	20	
Dichlorprop	mg/L	0.00250	0.00284	0.00293	114	117	55.0-127	3.12	20	P9
Dinoseb	mg/L	0.00250	0.00268	0.00254	107	102	36.0-134	5.36	20	P9
MCPA	mg/L	0.250	0.305	0.297	122	119	10.0-160	2.66	40	P9
2-(2-methyl-4-chlorophenoxy)pa	mg/L	0.250	0.239	0.248	95.6	99.2	10.0-160	3.70	23	P9
2,4,5-T	mg/L	0.00250	0.00264	0.00249	106	99.6	54.0-120	5.85	20	
2,4,5-TP (Silvex)	mg/L	0.00250	0.00294	0.00284	118	114	50.0-125	3.46	20	P9
2,4-DCAA (S)	%				88.8	87.4	14.0-158			

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch: 2265598

Analysis Method: EPA 6020B

QC Batch Method: 3015

Analysis Description: Metals (ICPMS) 6020B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450589001, 60450589002

METHOD BLANK: R4059543-1

Matrix: Water

Associated Lab Samples: 60450589001, 60450589002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	mg/L	<0.0185	0.100	0.0185	04/18/24 22:09	
Antimony	mg/L	<0.00103	0.00400	0.00103	04/18/24 22:09	
Arsenic	mg/L	<0.000180	0.00200	0.000180	04/18/24 22:09	
Barium	mg/L	<0.000381	0.00200	0.000381	04/18/24 22:09	
Beryllium	mg/L	<0.000190	0.00200	0.000190	04/18/24 22:09	
Cadmium	mg/L	<0.000150	0.00100	0.000150	04/18/24 22:09	
Calcium	mg/L	<0.0936	1.00	0.0936	04/18/24 22:09	
Chromium	mg/L	<0.00124	0.00200	0.00124	04/18/24 22:09	
Copper	mg/L	<0.00151	0.00500	0.00151	04/18/24 22:09	
Cobalt	mg/L	<0.0000596	0.00200	0.0000596	04/18/24 22:09	
Iron	mg/L	<0.0281	0.100	0.0281	04/18/24 22:09	
Lead	mg/L	<0.000849	0.00200	0.000849	04/18/24 22:09	
Magnesium	mg/L	<0.0735	1.00	0.0735	04/18/24 22:09	
Manganese	mg/L	<0.000704	0.00500	0.000704	04/18/24 22:09	
Molybdenum	mg/L	<0.000348	0.00500	0.000348	04/18/24 22:09	
Potassium	mg/L	<0.108	2.00	0.108	04/18/24 22:09	
Selenium	mg/L	<0.000300	0.00200	0.000300	04/18/24 22:09	
Silver	mg/L	<0.0000700	0.00200	0.0000700	04/18/24 22:09	
Sodium	mg/L	<0.376	2.00	0.376	04/18/24 22:09	
Thallium	mg/L	0.000226J	0.00200	0.000121	04/18/24 22:09	J
Vanadium	mg/L	<0.000664	0.00500	0.000664	04/18/24 22:09	

METHOD BLANK: R4059971-1

Matrix: Water

Associated Lab Samples: 60450589001, 60450589002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Zinc	mg/L	<0.00302	0.0250	0.00302	04/19/24 17:01	

LABORATORY CONTROL SAMPLE: R4059543-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/L	1.00	0.962	96.2	80.0-120	
Antimony	mg/L	0.0500	0.0531	106	80.0-120	
Arsenic	mg/L	0.0500	0.0489	97.8	80.0-120	
Barium	mg/L	0.0500	0.0474	94.7	80.0-120	
Beryllium	mg/L	0.0500	0.0472	94.3	80.0-120	
Cadmium	mg/L	0.0500	0.0493	98.6	80.0-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

LABORATORY CONTROL SAMPLE: R4059543-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	5.00	5.12	102	80.0-120	
Chromium	mg/L	0.0500	0.0490	97.9	80.0-120	
Copper	mg/L	0.0500	0.0504	101	80.0-120	
Cobalt	mg/L	0.0500	0.0498	99.5	80.0-120	
Iron	mg/L	1.00	0.982	98.2	80.0-120	
Lead	mg/L	0.0500	0.0492	98.5	80.0-120	
Magnesium	mg/L	5.00	4.90	97.9	80.0-120	
Manganese	mg/L	0.0500	0.0491	98.3	80.0-120	
Molybdenum	mg/L	0.0500	0.0472	94.4	80.0-120	
Potassium	mg/L	5.00	5.00	100	80.0-120	
Selenium	mg/L	0.0500	0.0505	101	80.0-120	
Silver	mg/L	0.0500	0.0502	100	80.0-120	
Sodium	mg/L	5.00	4.80	96.0	80.0-120	
Thallium	mg/L	0.0500	0.0487	97.4	80.0-120	
Vanadium	mg/L	0.0500	0.0490	98.0	80.0-120	

LABORATORY CONTROL SAMPLE: R4059971-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Zinc	mg/L	0.0500	0.0495	98.9	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059543-4 R4059543-5

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		L1720680-01 Result	Spike Conc.	Spike Conc.	Result							Result
Aluminum	mg/L	ND	1.00	1.00	0.974	0.947	97.4	94.7	75.0-125	2.74	20	
Antimony	mg/L	ND	0.0500	0.0500	0.0559	0.0570	112	114	75.0-125	1.93	20	
Arsenic	mg/L	ND	0.0500	0.0500	0.0486	0.0521	97.1	104	75.0-125	7.03	20	
Barium	mg/L	0.124	0.0500	0.0500	0.172	0.172	96.8	95.6	75.0-125	0.367	20	
Beryllium	mg/L	ND	0.0500	0.0500	0.0481	0.0473	96.1	94.6	75.0-125	1.63	20	
Cadmium	mg/L	ND	0.0500	0.0500	0.0498	0.0497	99.6	99.3	75.0-125	0.247	20	
Calcium	mg/L	64.0	5.00	5.00	68.2	69.0	84.6	99.8	75.0-125	1.11	20	
Chromium	mg/L	ND	0.0500	0.0500	0.0482	0.0501	96.5	100	75.0-125	3.88	20	
Copper	mg/L	ND	0.0500	0.0500	0.0485	0.0492	97.0	98.4	75.0-125	1.45	20	
Cobalt	mg/L	ND	0.0500	0.0500	0.0484	0.0496	96.7	99.3	75.0-125	2.64	20	
Iron	mg/L	0.0383	1.00	1.00	1.01	1.03	97.2	98.9	75.0-125	1.66	20	
Lead	mg/L	ND	0.0500	0.0500	0.0501	0.0501	100	100	75.0-125	0.050	20	
Magnesium	mg/L	29.2	5.00	5.00	33.3	33.6	81.8	88.5	75.0-125	1.01	20	
Manganese	mg/L	0.0184	0.0500	0.0500	0.0664	0.0680	96.1	99.3	75.0-125	2.37	20	
Molybdenum	mg/L	ND	0.0500	0.0500	0.0494	0.0507	98.8	101	75.0-125	2.60	20	
Potassium	mg/L	4.90	5.00	5.00	9.96	9.77	101	97.3	75.0-125	1.98	20	
Selenium	mg/L	ND	0.0500	0.0500	0.0487	0.0488	97.4	97.6	75.0-125	0.184	20	
Silver	mg/L	ND	0.0500	0.0500	0.0512	0.0520	102	104	75.0-125	1.44	20	
Sodium	mg/L	20.7	5.00	5.00	25.2	25.5	89.9	95.4	75.0-125	1.10	20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059543-4												R4059543-5	
Parameter	Units	L1720680-01 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
			Spike Conc.	Spike Conc.									
Thallium	mg/L	ND	0.0500	0.0500	0.0497	0.0496	99.3	99.2	75.0-125	0.175	20		
Vanadium	mg/L	ND	0.0500	0.0500	0.0484	0.0504	96.9	101	75.0-125	3.95	20		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059971-4												R4059971-5	
Parameter	Units	L1720680-01 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
			Spike Conc.	Spike Conc.									
Zinc	mg/L	0.00359	0.0500	0.0500	0.0479	0.0485	88.7	89.8	75.0-125	1.09	20		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch: 2266907

Analysis Method: EPA 6020B

QC Batch Method: 3015

Analysis Description: Metals (ICPMS) 6020B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450589003, 60450589004

METHOD BLANK: R4060772-1

Matrix: Water

Associated Lab Samples: 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	mg/L	<0.0185	0.100	0.0185	04/22/24 23:53	
Antimony	mg/L	<0.00103	0.00400	0.00103	04/22/24 23:53	
Arsenic	mg/L	<0.000180	0.00200	0.000180	04/22/24 23:53	
Barium	mg/L	<0.000381	0.00200	0.000381	04/22/24 23:53	
Beryllium	mg/L	<0.000190	0.00200	0.000190	04/22/24 23:53	
Cadmium	mg/L	<0.000150	0.00100	0.000150	04/22/24 23:53	
Calcium	mg/L	<0.0936	1.00	0.0936	04/22/24 23:53	
Chromium	mg/L	<0.00124	0.00200	0.00124	04/22/24 23:53	
Copper	mg/L	<0.00151	0.00500	0.00151	04/22/24 23:53	
Cobalt	mg/L	<0.0000596	0.00200	0.0000596	04/22/24 23:53	
Iron	mg/L	<0.0281	0.100	0.0281	04/22/24 23:53	
Lead	mg/L	<0.000849	0.00200	0.000849	04/22/24 23:53	
Magnesium	mg/L	<0.0735	1.00	0.0735	04/22/24 23:53	
Manganese	mg/L	<0.000704	0.00500	0.000704	04/22/24 23:53	
Molybdenum	mg/L	<0.000348	0.00500	0.000348	04/22/24 23:53	
Nickel	mg/L	<0.000816	0.00200	0.000816	04/22/24 23:53	
Potassium	mg/L	<0.108	2.00	0.108	04/22/24 23:53	
Selenium	mg/L	<0.000300	0.00200	0.000300	04/22/24 23:53	
Silver	mg/L	<0.0000700	0.00200	0.0000700	04/22/24 23:53	
Sodium	mg/L	<0.376	2.00	0.376	04/22/24 23:53	
Thallium	mg/L	<0.000121	0.00200	0.000121	04/22/24 23:53	
Vanadium	mg/L	<0.000664	0.00500	0.000664	04/22/24 23:53	
Zinc	mg/L	<0.00302	0.0250	0.00302	04/22/24 23:53	

LABORATORY CONTROL SAMPLE: R4060772-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/L	1.00	1.03	103	80.0-120	
Antimony	mg/L	0.0500	0.0540	108	80.0-120	
Arsenic	mg/L	0.0500	0.0529	106	80.0-120	
Barium	mg/L	0.0500	0.0511	102	80.0-120	
Beryllium	mg/L	0.0500	0.0486	97.2	80.0-120	
Cadmium	mg/L	0.0500	0.0546	109	80.0-120	
Calcium	mg/L	5.00	5.24	105	80.0-120	
Chromium	mg/L	0.0500	0.0533	107	80.0-120	
Copper	mg/L	0.0500	0.0517	103	80.0-120	
Cobalt	mg/L	0.0500	0.0535	107	80.0-120	
Iron	mg/L	1.00	1.06	106	80.0-120	
Lead	mg/L	0.0500	0.0527	105	80.0-120	

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

LABORATORY CONTROL SAMPLE: R4060772-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	mg/L	5.00	5.16	103	80.0-120	
Manganese	mg/L	0.0500	0.0533	107	80.0-120	
Molybdenum	mg/L	0.0500	0.0523	105	80.0-120	
Nickel	mg/L	0.0500	0.0539	108	80.0-120	
Potassium	mg/L	5.00	5.21	104	80.0-120	
Selenium	mg/L	0.0500	0.0543	109	80.0-120	
Silver	mg/L	0.0500	0.0546	109	80.0-120	
Sodium	mg/L	5.00	5.38	108	80.0-120	
Thallium	mg/L	0.0500	0.0518	104	80.0-120	
Vanadium	mg/L	0.0500	0.0527	105	80.0-120	
Zinc	mg/L	0.0500	0.0517	103	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4060772-4 R4060772-5

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		L1725210-01 Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
Aluminum	mg/L	0.0854	1.00	1.00	1.16	1.17	107	108	75.0-125	1.17	20	
Antimony	mg/L	ND	0.0500	0.0500	0.0566	0.0543	111	109	75.0-125	2.31	20	
Arsenic	mg/L	0.000884	0.0500	0.0500	0.0536	0.0540	106	106	75.0-125	0.669	20	
Barium	mg/L	0.0572	0.0500	0.0500	0.111	0.111	107	107	75.0-125	0.089	20	
Beryllium	mg/L	ND	0.0500	0.0500	0.0473	0.0520	94.6	104	75.0-125	9.46	20	
Cadmium	mg/L	ND	0.0500	0.0500	0.0548	0.0547	110	109	75.0-125	0.127	20	
Calcium	mg/L	147	5.00	5.00	151	150	79.3	62.8	75.0-125	0.547	20	P6
Chromium	mg/L	ND	0.0500	0.0500	0.0534	0.0543	107	109	75.0-125	1.62	20	
Copper	mg/L	0.00202	0.0500	0.0500	0.0513	0.0508	98.5	97.6	75.0-125	0.908	20	
Cobalt	mg/L	0.000389	0.0500	0.0500	0.0534	0.0541	106	107	75.0-125	1.32	20	
Iron	mg/L	0.399	1.00	1.00	1.51	1.57	111	117	75.0-125	3.76	20	
Lead	mg/L	ND	0.0500	0.0500	0.0525	0.0523	105	105	75.0-125	0.412	20	
Magnesium	mg/L	71.5	5.00	5.00	73.6	77.8	42.8	126	75.0-125	5.52	20	P6
Manganese	mg/L	0.426	0.0500	0.0500	0.476	0.481	98.7	110	75.0-125	1.14	20	
Molybdenum	mg/L	0.00228	0.0500	0.0500	0.0570	0.0569	109	109	75.0-125	0.142	20	
Nickel	mg/L	0.00214	0.0500	0.0500	0.0548	0.0563	105	108	75.0-125	2.67	20	
Potassium	mg/L	5.48	5.00	5.00	11.2	11.3	115	117	75.0-125	0.617	20	
Selenium	mg/L	0.000770	0.0500	0.0500	0.0544	0.0557	107	110	75.0-125	2.51	20	
Silver	mg/L	ND	0.0500	0.0500	0.0548	0.0551	110	110	75.0-125	0.522	20	
Sodium	mg/L	95.1	5.00	5.00	99.0	104	77.4	175	75.0-125	4.79	20	P6
Thallium	mg/L	ND	0.0500	0.0500	0.0519	0.0501	104	100	75.0-125	3.49	20	
Vanadium	mg/L	ND	0.0500	0.0500	0.0532	0.0538	106	108	75.0-125	1.02	20	
Zinc	mg/L	0.00349	0.0500	0.0500	0.0532	0.0539	99.4	101	75.0-125	1.43	20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch: 2271497

Analysis Method: EPA 6020B

QC Batch Method: 3015

Analysis Description: Metals (ICPMS) 6020B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450589001, 60450589002

METHOD BLANK: R4060718-6

Matrix: Water

Associated Lab Samples: 60450589001, 60450589002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nickel	mg/L	<0.000816	0.00200	0.000816	04/22/24 23:56	

LABORATORY CONTROL SAMPLE: R4060718-7

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nickel	mg/L	0.0500	0.0494	98.8	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4060718-10 R4060718-11

Parameter	Units	R4060718-10			R4060718-11			% Rec Limits	RPD	Max RPD	Qual	
		L1727592-01 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec					MSD % Rec
Nickel	mg/L	0.00128	0.0500	0.0500	0.0494	0.0506	96.3	98.7	75.0-125	2.42	20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch:	2265186	Analysis Method:	EPA 7470A
QC Batch Method:	7470A	Analysis Description:	Mercury 7470A
		Laboratory:	Pace National - Mt. Juliet
Associated Lab Samples:	60450589001, 60450589002, 60450589003, 60450589004		

METHOD BLANK: R4057237-1 Matrix: Water  
 Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	<0.000100	0.000200	0.000100	04/13/24 00:23	

LABORATORY CONTROL SAMPLE: R4057237-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00300	0.00289	96.2	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4057237-4 R4057237-5

Parameter	Units	R4057237-4		R4057237-5		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		L1724609-03 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Mercury	mg/L	ND	0.00300	0.00300	0.00303	0.00293	101	97.7	75.0-125	3.31	20	

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**REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch: 890032

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

METHOD BLANK: 3522643

Matrix: Water

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.084	1.0	0.084	04/10/24 22:29	
1,1,1-Trichloroethane	ug/L	<0.11	1.0	0.11	04/10/24 22:29	
1,1,2,2-Tetrachloroethane	ug/L	<0.15	1.0	0.15	04/10/24 22:29	
1,1,2-Trichloroethane	ug/L	<0.14	1.0	0.14	04/10/24 22:29	
1,1-Dichloroethane	ug/L	<0.12	1.0	0.12	04/10/24 22:29	
1,1-Dichloroethene	ug/L	<0.22	1.0	0.22	04/10/24 22:29	
1,1-Dichloropropene	ug/L	<0.14	1.0	0.14	04/10/24 22:29	
1,2,3-Trichlorobenzene	ug/L	<0.93	1.0	0.93	04/10/24 22:29	
1,2,3-Trichloropropane	ug/L	<0.41	2.5	0.41	04/10/24 22:29	
1,2,4-Trichlorobenzene	ug/L	<0.73	1.0	0.73	04/10/24 22:29	
1,2,4-Trimethylbenzene	ug/L	<0.32	1.0	0.32	04/10/24 22:29	
1,2-Dibromo-3-chloropropane	ug/L	<0.78	2.5	0.78	04/10/24 22:29	
1,2-Dibromoethane (EDB)	ug/L	<0.20	1.0	0.20	04/10/24 22:29	
1,2-Dichlorobenzene	ug/L	<0.12	1.0	0.12	04/10/24 22:29	
1,2-Dichloroethane	ug/L	<0.21	1.0	0.21	04/10/24 22:29	
1,2-Dichloroethene (Total)	ug/L	<0.22	1.0	0.22	04/10/24 22:29	
1,2-Dichloropropane	ug/L	<0.14	1.0	0.14	04/10/24 22:29	
1,3,5-Trimethylbenzene	ug/L	<0.090	1.0	0.090	04/10/24 22:29	
1,3-Dichlorobenzene	ug/L	<0.13	1.0	0.13	04/10/24 22:29	
1,3-Dichloropropane	ug/L	<0.10	1.0	0.10	04/10/24 22:29	
1,4-Dichlorobenzene	ug/L	<0.13	1.0	0.13	04/10/24 22:29	
2,2-Dichloropropane	ug/L	<0.16	1.0	0.16	04/10/24 22:29	
2-Butanone (MEK)	ug/L	<0.98	10.0	0.98	04/10/24 22:29	
2-Chlorotoluene	ug/L	<0.11	1.0	0.11	04/10/24 22:29	
2-Hexanone	ug/L	<1.1	10.0	1.1	04/10/24 22:29	
4-Chlorotoluene	ug/L	<0.15	1.0	0.15	04/10/24 22:29	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.74	10.0	0.74	04/10/24 22:29	
Acetone	ug/L	<2.5	10.0	2.5	04/10/24 22:29	
Benzene	ug/L	<0.14	1.0	0.14	04/10/24 22:29	
Bromobenzene	ug/L	<0.088	1.0	0.088	04/10/24 22:29	
Bromochloromethane	ug/L	<0.20	1.0	0.20	04/10/24 22:29	
Bromodichloromethane	ug/L	<0.16	1.0	0.16	04/10/24 22:29	
Bromoform	ug/L	<0.68	1.0	0.68	04/10/24 22:29	
Bromomethane	ug/L	<0.46	5.0	0.46	04/10/24 22:29	
Carbon disulfide	ug/L	<0.98	5.0	0.98	04/10/24 22:29	
Carbon tetrachloride	ug/L	<0.17	1.0	0.17	04/10/24 22:29	
Chlorobenzene	ug/L	<0.089	1.0	0.089	04/10/24 22:29	
Chloroethane	ug/L	<0.37	1.0	0.37	04/10/24 22:29	
Chloroform	ug/L	<0.22	1.0	0.22	04/10/24 22:29	
Chloromethane	ug/L	<0.28	1.0	0.28	04/10/24 22:29	

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## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

METHOD BLANK: 3522643

Matrix: Water

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	<0.13	1.0	0.13	04/10/24 22:29	
cis-1,3-Dichloropropene	ug/L	<0.078	1.0	0.078	04/10/24 22:29	
Dibromochloromethane	ug/L	<0.30	1.0	0.30	04/10/24 22:29	
Dibromomethane	ug/L	<0.11	1.0	0.11	04/10/24 22:29	
Dichlorodifluoromethane	ug/L	<0.20	1.0	0.20	04/10/24 22:29	
Ethylbenzene	ug/L	<0.12	1.0	0.12	04/10/24 22:29	
Hexachloro-1,3-butadiene	ug/L	<0.42	1.0	0.42	04/10/24 22:29	
Isopropylbenzene (Cumene)	ug/L	<0.097	1.0	0.097	04/10/24 22:29	
Methyl-tert-butyl ether	ug/L	<0.13	1.0	0.13	04/10/24 22:29	
Methylene Chloride	ug/L	<0.39	1.0	0.39	04/10/24 22:29	
n-Butylbenzene	ug/L	<0.15	1.0	0.15	04/10/24 22:29	
n-Propylbenzene	ug/L	<0.12	1.0	0.12	04/10/24 22:29	
Naphthalene	ug/L	<0.82	10.0	0.82	04/10/24 22:29	
p-Isopropyltoluene	ug/L	<0.13	1.0	0.13	04/10/24 22:29	
sec-Butylbenzene	ug/L	<0.11	1.0	0.11	04/10/24 22:29	
Styrene	ug/L	<0.12	1.0	0.12	04/10/24 22:29	
tert-Butylbenzene	ug/L	<0.12	1.0	0.12	04/10/24 22:29	
Tetrachloroethene	ug/L	<0.33	1.0	0.33	04/10/24 22:29	
Toluene	ug/L	<0.25	1.0	0.25	04/10/24 22:29	
trans-1,2-Dichloroethene	ug/L	<0.10	1.0	0.10	04/10/24 22:29	
trans-1,3-Dichloropropene	ug/L	<0.18	1.0	0.18	04/10/24 22:29	
Trichloroethene	ug/L	<0.21	1.0	0.21	04/10/24 22:29	
Trichlorofluoromethane	ug/L	<0.16	1.0	0.16	04/10/24 22:29	
Vinyl chloride	ug/L	<0.17	1.0	0.17	04/10/24 22:29	
Xylene (Total)	ug/L	<0.28	3.0	0.28	04/10/24 22:29	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120		04/10/24 22:29	
4-Bromofluorobenzene (S)	%	103	80-120		04/10/24 22:29	
Toluene-d8 (S)	%	103	80-120		04/10/24 22:29	

LABORATORY CONTROL SAMPLE: 3522644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.6	93	80-120	
1,1,1-Trichloroethane	ug/L	20	16.8	84	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.0	95	70-130	
1,1,2-Trichloroethane	ug/L	20	19.3	96	75-125	
1,1-Dichloroethane	ug/L	20	17.2	86	75-120	
1,1-Dichloroethene	ug/L	20	17.0	85	75-120	
1,1-Dichloropropene	ug/L	20	17.7	89	75-125	
1,2,3-Trichlorobenzene	ug/L	20	19.3	97	70-125	
1,2,3-Trichloropropane	ug/L	20	20.5	103	75-125	
1,2,4-Trichlorobenzene	ug/L	20	18.5	92	75-120	
1,2,4-Trimethylbenzene	ug/L	20	19.7	99	75-120	
1,2-Dibromo-3-chloropropane	ug/L	20	19.1	96	65-125	

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## QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450589

LABORATORY CONTROL SAMPLE: 3522644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	19.4	97	80-120	
1,2-Dichlorobenzene	ug/L	20	19.8	99	80-120	
1,2-Dichloroethane	ug/L	20	17.9	90	80-120	
1,2-Dichloroethene (Total)	ug/L	40	32.6	81	80-120	
1,2-Dichloropropane	ug/L	20	16.7	84	80-120	
1,3,5-Trimethylbenzene	ug/L	20	19.5	97	75-120	
1,3-Dichlorobenzene	ug/L	20	19.9	100	80-120	
1,3-Dichloropropane	ug/L	20	19.1	96	80-120	
1,4-Dichlorobenzene	ug/L	20	19.8	99	80-120	
2,2-Dichloropropane	ug/L	20	14.5	73	60-130	
2-Butanone (MEK)	ug/L	100	79.6	80	60-140	
2-Chlorotoluene	ug/L	20	20.6	103	80-120	
2-Hexanone	ug/L	100	92.4	92	55-155	
4-Chlorotoluene	ug/L	20	19.4	97	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	85.1	85	70-135	
Acetone	ug/L	100	79.2	79	25-185	
Benzene	ug/L	20	17.3	86	80-120	
Bromobenzene	ug/L	20	20.4	102	80-120	
Bromochloromethane	ug/L	20	17.3	87	80-120	
Bromodichloromethane	ug/L	20	16.3	81	80-120	
Bromoform	ug/L	20	18.5	92	70-135	
Bromomethane	ug/L	20	13.9	69	50-145	
Carbon disulfide	ug/L	20	16.3	81	70-130	
Carbon tetrachloride	ug/L	20	17.1	85	80-130	
Chlorobenzene	ug/L	20	19.3	96	80-120	
Chloroethane	ug/L	20	18.0	90	60-135	
Chloroform	ug/L	20	17.5	87	75-125	
Chloromethane	ug/L	20	16.4	82	60-130	
cis-1,2-Dichloroethene	ug/L	20	16.0	80	80-120	
cis-1,3-Dichloropropene	ug/L	20	17.3	86	75-125	
Dibromochloromethane	ug/L	20	18.5	93	80-120	
Dibromomethane	ug/L	20	17.7	89	75-125	
Dichlorodifluoromethane	ug/L	20	17.3	87	40-170	
Ethylbenzene	ug/L	20	19.5	97	80-120	
Hexachloro-1,3-butadiene	ug/L	20	17.6	88	70-125	
Isopropylbenzene (Cumene)	ug/L	20	20.0	100	80-130	
Methyl-tert-butyl ether	ug/L	20	18.1	91	75-125	
Methylene Chloride	ug/L	20	19.5	98	70-130	
n-Butylbenzene	ug/L	20	18.9	95	70-120	
n-Propylbenzene	ug/L	20	19.9	100	80-120	
Naphthalene	ug/L	20	19.2	96	60-140	
p-Isopropyltoluene	ug/L	20	19.8	99	80-120	
sec-Butylbenzene	ug/L	20	20.4	102	80-125	
Styrene	ug/L	20	19.2	96	80-155	
tert-Butylbenzene	ug/L	20	19.3	97	75-125	
Tetrachloroethene	ug/L	20	18.8	94	80-125	
Toluene	ug/L	20	19.1	95	80-120	

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### QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450589

LABORATORY CONTROL SAMPLE: 3522644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	20	16.6	83	75-125	
trans-1,3-Dichloropropene	ug/L	20	18.5	92	70-125	
Trichloroethene	ug/L	20	17.7	88	80-125	
Trichlorofluoromethane	ug/L	20	17.6	88	65-140	
Vinyl chloride	ug/L	20	17.6	88	65-130	
Xylene (Total)	ug/L	60	57.5	96	80-120	
1,2-Dichlorobenzene-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			108	80-120	

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## QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch: 890449

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589005

METHOD BLANK: 3524324

Matrix: Water

Associated Lab Samples: 60450589005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.084	1.0	0.084	04/13/24 01:52	
1,1,1-Trichloroethane	ug/L	<0.11	1.0	0.11	04/13/24 01:52	
1,1,2,2-Tetrachloroethane	ug/L	<0.15	1.0	0.15	04/13/24 01:52	
1,1,2-Trichloroethane	ug/L	<0.14	1.0	0.14	04/13/24 01:52	
1,1-Dichloroethane	ug/L	<0.12	1.0	0.12	04/13/24 01:52	
1,1-Dichloroethene	ug/L	<0.22	1.0	0.22	04/13/24 01:52	
1,1-Dichloropropene	ug/L	<0.14	1.0	0.14	04/13/24 01:52	
1,2,3-Trichlorobenzene	ug/L	<0.93	1.0	0.93	04/13/24 01:52	
1,2,3-Trichloropropane	ug/L	<0.41	2.5	0.41	04/13/24 01:52	
1,2,4-Trimethylbenzene	ug/L	<0.32	1.0	0.32	04/13/24 01:52	
1,2-Dibromo-3-chloropropane	ug/L	<0.78	2.5	0.78	04/13/24 01:52	
1,2-Dibromoethane (EDB)	ug/L	<0.20	1.0	0.20	04/13/24 01:52	
1,2-Dichlorobenzene	ug/L	<0.12	1.0	0.12	04/13/24 01:52	
1,2-Dichloroethane	ug/L	<0.21	1.0	0.21	04/13/24 01:52	
1,2-Dichloroethene (Total)	ug/L	<0.22	1.0	0.22	04/13/24 01:52	
1,2-Dichloropropane	ug/L	<0.14	1.0	0.14	04/13/24 01:52	
1,3-Dichlorobenzene	ug/L	<0.13	1.0	0.13	04/13/24 01:52	
1,3-Dichloropropane	ug/L	<0.10	1.0	0.10	04/13/24 01:52	
1,4-Dichlorobenzene	ug/L	<0.13	1.0	0.13	04/13/24 01:52	
2,2-Dichloropropane	ug/L	<0.16	1.0	0.16	04/13/24 01:52	
2-Butanone (MEK)	ug/L	<0.98	10.0	0.98	04/13/24 01:52	
2-Chlorotoluene	ug/L	<0.11	1.0	0.11	04/13/24 01:52	
2-Hexanone	ug/L	<1.1	10.0	1.1	04/13/24 01:52	
4-Chlorotoluene	ug/L	<0.15	1.0	0.15	04/13/24 01:52	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.74	10.0	0.74	04/13/24 01:52	
Acetone	ug/L	<2.5	10.0	2.5	04/13/24 01:52	
Benzene	ug/L	<0.14	1.0	0.14	04/13/24 01:52	
Bromobenzene	ug/L	<0.088	1.0	0.088	04/13/24 01:52	
Bromochloromethane	ug/L	<0.20	1.0	0.20	04/13/24 01:52	
Bromodichloromethane	ug/L	<0.16	1.0	0.16	04/13/24 01:52	
Bromoform	ug/L	<0.68	1.0	0.68	04/13/24 01:52	
Bromomethane	ug/L	<0.46	5.0	0.46	04/13/24 01:52	
Carbon disulfide	ug/L	<0.98	5.0	0.98	04/13/24 01:52	
Carbon tetrachloride	ug/L	<0.17	1.0	0.17	04/13/24 01:52	
Chlorobenzene	ug/L	<0.089	1.0	0.089	04/13/24 01:52	
Chloroethane	ug/L	<0.37	1.0	0.37	04/13/24 01:52	
Chloroform	ug/L	<0.22	1.0	0.22	04/13/24 01:52	
Chloromethane	ug/L	<0.28	1.0	0.28	04/13/24 01:52	
cis-1,2-Dichloroethene	ug/L	<0.13	1.0	0.13	04/13/24 01:52	
cis-1,3-Dichloropropene	ug/L	<0.078	1.0	0.078	04/13/24 01:52	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

METHOD BLANK: 3524324

Matrix: Water

Associated Lab Samples: 60450589005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/L	<0.30	1.0	0.30	04/13/24 01:52	
Dibromomethane	ug/L	<0.11	1.0	0.11	04/13/24 01:52	
Ethylbenzene	ug/L	<0.12	1.0	0.12	04/13/24 01:52	
Isopropylbenzene (Cumene)	ug/L	<0.097	1.0	0.097	04/13/24 01:52	
Methylene Chloride	ug/L	<0.39	1.0	0.39	04/13/24 01:52	
n-Butylbenzene	ug/L	<0.15	1.0	0.15	04/13/24 01:52	
n-Propylbenzene	ug/L	<0.12	1.0	0.12	04/13/24 01:52	
Naphthalene	ug/L	<0.82	10.0	0.82	04/13/24 01:52	
p-Isopropyltoluene	ug/L	<0.13	1.0	0.13	04/13/24 01:52	
sec-Butylbenzene	ug/L	<0.11	1.0	0.11	04/13/24 01:52	
Styrene	ug/L	<0.12	1.0	0.12	04/13/24 01:52	
tert-Butylbenzene	ug/L	<0.12	1.0	0.12	04/13/24 01:52	
Tetrachloroethene	ug/L	<0.33	1.0	0.33	04/13/24 01:52	
Toluene	ug/L	<0.25	1.0	0.25	04/13/24 01:52	
trans-1,2-Dichloroethene	ug/L	<0.10	1.0	0.10	04/13/24 01:52	
trans-1,3-Dichloropropene	ug/L	<0.18	1.0	0.18	04/13/24 01:52	
Trichloroethene	ug/L	<0.21	1.0	0.21	04/13/24 01:52	
Trichlorofluoromethane	ug/L	<0.16	1.0	0.16	04/13/24 01:52	
1,2-Dichlorobenzene-d4 (S)	%	101	80-120		04/13/24 01:52	
4-Bromofluorobenzene (S)	%	100	80-120		04/13/24 01:52	
Toluene-d8 (S)	%	98	80-120		04/13/24 01:52	

LABORATORY CONTROL SAMPLE: 3524325

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.3	97	80-120	
1,1,1-Trichloroethane	ug/L	20	19.1	95	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.8	89	70-130	
1,1,2-Trichloroethane	ug/L	20	19.6	98	75-125	
1,1-Dichloroethane	ug/L	20	18.3	91	75-120	
1,1-Dichloroethene	ug/L	20	15.7	78	75-120	
1,1-Dichloropropene	ug/L	20	18.9	94	75-125	
1,2,3-Trichlorobenzene	ug/L	20	14.1	71	70-125	
1,2,3-Trichloropropane	ug/L	20	19.1	96	75-125	
1,2,4-Trimethylbenzene	ug/L	20	19.2	96	75-120	
1,2-Dibromo-3-chloropropane	ug/L	20	18.5	92	65-125	
1,2-Dibromoethane (EDB)	ug/L	20	19.1	95	80-120	
1,2-Dichlorobenzene	ug/L	20	18.6	93	80-120	
1,2-Dichloroethane	ug/L	20	20.0	100	80-120	
1,2-Dichloroethene (Total)	ug/L	40	35.2	88	80-120	
1,2-Dichloropropane	ug/L	20	18.9	95	80-120	
1,3-Dichlorobenzene	ug/L	20	18.4	92	80-120	
1,3-Dichloropropane	ug/L	20	19.5	97	80-120	
1,4-Dichlorobenzene	ug/L	20	18.2	91	80-120	

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**REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450589

LABORATORY CONTROL SAMPLE: 3524325

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,2-Dichloropropane	ug/L	20	15.9	80	60-130	
2-Butanone (MEK)	ug/L	100	82.0	82	60-140	
2-Chlorotoluene	ug/L	20	19.3	97	80-120	
2-Hexanone	ug/L	100	83.6	84	55-155	
4-Chlorotoluene	ug/L	20	18.5	93	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	94.5	95	70-135	
Acetone	ug/L	100	61.1	61	25-185	
Benzene	ug/L	20	18.3	92	80-120	
Bromobenzene	ug/L	20	18.0	90	80-120	
Bromochloromethane	ug/L	20	17.9	89	80-120	
Bromodichloromethane	ug/L	20	19.2	96	80-120	
Bromoform	ug/L	20	19.5	97	70-135	
Bromomethane	ug/L	20	16.3	82	50-145	
Carbon disulfide	ug/L	20	14.9	74	70-130	
Carbon tetrachloride	ug/L	20	19.6	98	80-130	
Chlorobenzene	ug/L	20	18.3	91	80-120	
Chloroethane	ug/L	20	17.5	87	60-135	
Chloroform	ug/L	20	18.4	92	75-125	
Chloromethane	ug/L	20	12.5	63	60-130	
cis-1,2-Dichloroethene	ug/L	20	18.0	90	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.8	94	75-125	
Dibromochloromethane	ug/L	20	19.6	98	80-120	
Dibromomethane	ug/L	20	18.8	94	75-125	
Ethylbenzene	ug/L	20	18.3	91	80-120	
Isopropylbenzene (Cumene)	ug/L	20	19.0	95	80-130	
Methylene Chloride	ug/L	20	20.0	100	70-130	
n-Butylbenzene	ug/L	20	16.0	80	70-120	
n-Propylbenzene	ug/L	20	17.6	88	80-120	
Naphthalene	ug/L	20	16.6	83	60-140	
p-Isopropyltoluene	ug/L	20	17.6	88	80-120	
sec-Butylbenzene	ug/L	20	17.9	89	80-125	
Styrene	ug/L	20	19.9	99	80-155	
tert-Butylbenzene	ug/L	20	15.8	79	75-125	
Tetrachloroethene	ug/L	20	17.1	85	80-125	
Toluene	ug/L	20	18.0	90	80-120	
trans-1,2-Dichloroethene	ug/L	20	17.3	86	75-125	
trans-1,3-Dichloropropene	ug/L	20	18.6	93	70-125	
Trichloroethene	ug/L	20	18.4	92	80-125	
Trichlorofluoromethane	ug/L	20	18.6	93	65-140	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			98	80-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3524326 3524327												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		60450599015 Result	Spike Conc.	Spike Conc.	MS Conc.							
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	17.9	19.0	90	95	80-120	6	15	
1,1,1-Trichloroethane	ug/L	0.25J	20	20	19.5	21.4	96	106	75-125	10	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	17.4	17.8	87	89	80-120	2	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.8	18.8	89	94	80-120	6	20	
1,1-Dichloroethane	ug/L	ND	20	20	17.8	19.1	89	95	75-120	7	15	
1,1-Dichloroethene	ug/L	ND	20	20	16.0	17.3	80	86	75-120	7	25	
1,1-Dichloropropene	ug/L	ND	20	20	19.4	21.2	97	106	75-125	9	20	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	13.3	14.3	67	72	60-135	7	25	
1,2,3-Trichloropropane	ug/L	ND	20	20	18.1	18.5	90	93	75-120	3	20	
1,2,4-Trimethylbenzene	ug/L	ND			18.2	20.1				10	20	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	17.5	17.1	88	85	65-130	3	25	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	17.5	18.1	88	90	80-120	3	20	
1,2-Dichlorobenzene	ug/L	2.4	20	20	19.1	20.4	84	90	80-120	6	20	
1,2-Dichloroethane	ug/L	ND	20	20	18.8	19.6	94	98	80-120	4	25	
1,2-Dichloroethene (Total)	ug/L	0.32J	40	40	34.6	37.1	86	92	80-120	7	20	
1,2-Dichloropropane	ug/L	ND	20	20	18.0	19.1	90	96	80-120	6	20	
1,3-Dichlorobenzene	ug/L	ND	20	20	17.1	18.4	85	92	80-120	7	20	
1,3-Dichloropropane	ug/L	ND	20	20	18.0	18.8	90	94	80-120	4	20	
1,4-Dichlorobenzene	ug/L	0.44J	20	20	16.8	18.5	82	90	80-120	9	20	
2,2-Dichloropropane	ug/L	ND	20	20	15.2	16.3	76	82	55-135	7	30	
2-Butanone (MEK)	ug/L	ND	100	100	70.6	71.7	71	72	50-155	2	25	
2-Chlorotoluene	ug/L	ND	20	20	18.3	19.9	91	100	80-120	9	20	
2-Hexanone	ug/L	ND	100	100	78.7	81.7	79	82	55-145	4	20	
4-Chlorotoluene	ug/L	ND	20	20	17.6	19.6	88	98	80-120	11	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	90.5	93.5	91	94	70-130	3	20	
Acetone	ug/L	ND	100	100	48.6	48.5	47	47	35-160	0	25	
Benzene	ug/L	ND	20	20	17.5	18.9	88	94	80-120	7	25	
Bromobenzene	ug/L	ND	20	20	17.1	18.6	86	93	80-120	8	15	
Bromochloromethane	ug/L	ND	20	20	16.6	17.8	83	89	80-120	7	20	
Bromodichloromethane	ug/L	ND	20	20	17.8	18.9	89	94	80-120	6	15	
Bromoform	ug/L	ND	20	20	17.9	18.6	89	93	60-130	4	20	
Bromomethane	ug/L	ND	20	20	11.8	14.1	59	71	50-140	18	45	
Carbon disulfide	ug/L	ND	20	20	14.7	16.1	73	80	75-125	9	25	
Carbon tetrachloride	ug/L	ND	20	20	20.1	21.7	101	109	70-130	8	20	
Chlorobenzene	ug/L	4.7	20	20	21.5	23.1	84	92	80-120	7	20	
Chloroethane	ug/L	ND	20	20	19.9	19.3	100	97	70-130	3	20	
Chloroform	ug/L	ND	20	20	17.4	19.4	87	97	75-120	10	20	
Chloromethane	ug/L	ND	20	20	11.9	13.0	59	65	45-145	9	30	
cis-1,2-Dichloroethene	ug/L	0.32J	20	20	17.3	18.5	85	91	80-120	7	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	17.3	18.3	87	91	75-125	5	20	
Dibromochloromethane	ug/L	ND	20	20	17.8	18.8	89	94	75-125	5	20	
Dibromomethane	ug/L	ND	20	20	17.0	17.8	85	89	80-120	4	20	
Ethylbenzene	ug/L	ND	20	20	17.6	18.7	88	93	80-120	6	25	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

Parameter	Units	3524326			3524327			% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		60450599015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Isopropylbenzene (Cumene)	ug/L	ND	20	20	18.6	20.3	93	101	80-125	9	20			
Methylene Chloride	ug/L	ND	20	20	18.0	19.2	90	96	70-140	6	25			
n-Butylbenzene	ug/L	ND	20	20	15.3	16.9	77	85	70-125	10	25			
n-Propylbenzene	ug/L	ND	20	20	17.2	19.0	86	95	80-120	10	20			
Naphthalene	ug/L	ND	20	20	15.6	16.6	77	82	60-140	6	25			
p-Isopropyltoluene	ug/L	ND	20	20	17.1	18.7	86	93	80-120	9	20			
sec-Butylbenzene	ug/L	ND	20	20	17.6	19.5	88	98	80-120	10	20			
Styrene	ug/L	ND	20	20	18.3	19.6	92	98	80-120	6	30			
tert-Butylbenzene	ug/L	ND	20	20	17.9	19.8	90	99	80-120	10	20			
Tetrachloroethene	ug/L	0.41J	20	20	17.7	19.0	86	93	80-125	7	25			
Toluene	ug/L	ND	20	20	17.1	18.4	86	92	80-120	7	25			
trans-1,2-Dichloroethene	ug/L	ND	20	20	17.3	18.6	86	93	80-120	7	20			
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.6	17.6	83	88	75-125	6	15			
Trichloroethene	ug/L	ND	20	20	17.7	19.3	88	96	80-125	9	20			
Trichlorofluoromethane	ug/L	ND	20	20	18.4	19.7	92	98	75-125	7	20			
1,2-Dichlorobenzene-d4 (S)	%						100	100	80-120					
4-Bromofluorobenzene (S)	%						100	101	80-120					
Toluene-d8 (S)	%						98	97	80-120					
Preservation pH		1.0			1.0	1.0					0			

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch:	890743	Analysis Method:	EPA 5030B/8260
QC Batch Method:	EPA 5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589005

METHOD BLANK: 3525454 Matrix: Water

Associated Lab Samples: 60450589005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	<0.73	1.0	0.73	04/16/24 19:28	
1,3,5-Trimethylbenzene	ug/L	<0.090	1.0	0.090	04/16/24 19:28	
Dichlorodifluoromethane	ug/L	<0.20	1.0	0.20	04/16/24 19:28	
Hexachloro-1,3-butadiene	ug/L	<0.42	1.0	0.42	04/16/24 19:28	
Methyl-tert-butyl ether	ug/L	<0.13	1.0	0.13	04/16/24 19:28	
Vinyl chloride	ug/L	<0.17	1.0	0.17	04/16/24 19:28	
Xylene (Total)	ug/L	<0.28	3.0	0.28	04/16/24 19:28	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		04/16/24 19:28	
4-Bromofluorobenzene (S)	%	98	80-120		04/16/24 19:28	
Toluene-d8 (S)	%	99	80-120		04/16/24 19:28	

LABORATORY CONTROL SAMPLE: 3525455

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	20	17.6	88	75-120	
1,3,5-Trimethylbenzene	ug/L	20	21.5	108	75-120	
Dichlorodifluoromethane	ug/L	20	15.7	78	40-170	
Hexachloro-1,3-butadiene	ug/L	20	17.0	85	70-125	
Methyl-tert-butyl ether	ug/L	20	18.5	92	75-125	
Vinyl chloride	ug/L	20	15.1	75	65-130	
Xylene (Total)	ug/L	60	68.6	114	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			101	80-120	

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### QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch: 890045

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV MO GRO Oxygenates

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589001, 60450589002

METHOD BLANK: 3522673

Matrix: Water

Associated Lab Samples: 60450589001, 60450589002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	ug/L	<62.6	500	62.6	04/10/24 11:59	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		04/10/24 11:59	
4-Bromofluorobenzene (S)	%	100	80-120		04/10/24 11:59	
Toluene-d8 (S)	%	99	80-120		04/10/24 11:59	

LABORATORY CONTROL SAMPLE: 3522674

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	ug/L	4000	3940	98	70-135	
1,2-Dichlorobenzene-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			100	80-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch:	890228	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV MO GRO Oxygenates
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589003, 60450589004

METHOD BLANK: 3523411 Matrix: Water

Associated Lab Samples: 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	ug/L	<62.6	500	62.6	04/11/24 12:11	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		04/11/24 12:11	
4-Bromofluorobenzene (S)	%	97	80-120		04/11/24 12:11	
Toluene-d8 (S)	%	98	80-120		04/11/24 12:11	

LABORATORY CONTROL SAMPLE: 3523412

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	ug/L	4000	3910	98	70-135	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3523413 3523414

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450682001	Spike Conc.	Spike Conc.	Result						
1,2-Dichlorobenzene-d4 (S)	%					101	100	80-120		10	
4-Bromofluorobenzene (S)	%					99	100	80-120		10	
Toluene-d8 (S)	%					100	102	80-120		10	
Preservation pH		11.0			11.0	11.0				0	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch:	890662	Analysis Method:	EPA 8082
QC Batch Method:	EPA 3510	Analysis Description:	8082 GCS PCB, LV
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

METHOD BLANK: 3525041 Matrix: Water  
 Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.15	1.0	0.15	04/17/24 11:42	
PCB-1221 (Aroclor 1221)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1232 (Aroclor 1232)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1242 (Aroclor 1242)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1248 (Aroclor 1248)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1254 (Aroclor 1254)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1260 (Aroclor 1260)	ug/L	<0.19	1.0	0.19	04/17/24 11:42	
Decachlorobiphenyl (S)	%	69	20-120		04/17/24 11:42	

LABORATORY CONTROL SAMPLE: 3525042

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	5	3.8	75	23-120	
PCB-1260 (Aroclor 1260)	ug/L	5	3.8	77	28-120	
Decachlorobiphenyl (S)	%			69	20-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525045 3525046

Parameter	Units	60450682001		3525046		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
PCB-1016 (Aroclor 1016)	ug/L	<0.15	5	5	3.5	3.5	70	69	23-120	1	30
PCB-1260 (Aroclor 1260)	ug/L	<0.19	5	5	3.7	3.5	75	71	28-120	6	30
Decachlorobiphenyl (S)	%						70	67	20-120		

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## QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch: 890658

Analysis Method: EPA 8270

QC Batch Method: EPA 3510

Analysis Description: 8270 Water MSSV, RV

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

METHOD BLANK: 3525033

Matrix: Water

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
1,2-Dichlorobenzene	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
1,3-Dichlorobenzene	ug/L	<1.5	10.0	1.5	04/18/24 18:08	
1,4-Dichlorobenzene	ug/L	<1.7	10.0	1.7	04/18/24 18:08	
2,4,5-Trichlorophenol	ug/L	<1.7	25.0	1.7	04/18/24 18:08	
2,4,6-Trichlorophenol	ug/L	<1.4	10.0	1.4	04/18/24 18:08	
2,4-Dichlorophenol	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
2,4-Dimethylphenol	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
2,4-Dinitrophenol	ug/L	<2.5	50.0	2.5	04/18/24 18:08	
2,4-Dinitrotoluene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
2,6-Dinitrotoluene	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
2-Chloronaphthalene	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
2-Chlorophenol	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
2-Methylnaphthalene	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
2-Methylphenol(o-Cresol)	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
2-Nitroaniline	ug/L	<1.9	50.0	1.9	04/18/24 18:08	
2-Nitrophenol	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
3&4-Methylphenol(m&p Cresol)	ug/L	<1.7	10.0	1.7	04/18/24 18:08	
3,3'-Dichlorobenzidine	ug/L	<3.9	20.0	3.9	04/18/24 18:08	
3-Nitroaniline	ug/L	<1.9	50.0	1.9	04/18/24 18:08	
4,6-Dinitro-2-methylphenol	ug/L	<2.2	50.0	2.2	04/18/24 18:08	
4-Bromophenylphenyl ether	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
4-Chloro-3-methylphenol	ug/L	<1.9	20.0	1.9	04/18/24 18:08	
4-Chloroaniline	ug/L	<2.0	20.0	2.0	04/18/24 18:08	
4-Chlorophenylphenyl ether	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
4-Nitroaniline	ug/L	<2.2	50.0	2.2	04/18/24 18:08	
4-Nitrophenol	ug/L	<0.37	50.0	0.37	04/18/24 18:08	
Acenaphthene	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
Acenaphthylene	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
Anthracene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Benzo(a)anthracene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Benzo(a)pyrene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Benzo(b)fluoranthene	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
Benzo(g,h,i)perylene	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
Benzo(k)fluoranthene	ug/L	<2.2	10.0	2.2	04/18/24 18:08	
Benzoic Acid	ug/L	<4.4	50.0	4.4	04/18/24 18:08	
Benzyl alcohol	ug/L	<1.6	20.0	1.6	04/18/24 18:08	
bis(2-Chloroethoxy)methane	ug/L	<2.2	10.0	2.2	04/18/24 18:08	
bis(2-Chloroethyl) ether	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
bis(2-Chloroisopropyl) ether	ug/L	<2.3	10.0	2.3	04/18/24 18:08	

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## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

METHOD BLANK: 3525033

Matrix: Water

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Ethylhexyl)phthalate	ug/L	<2.4	10.0	2.4	04/18/24 18:08	
Butylbenzylphthalate	ug/L	<2.4	10.0	2.4	04/18/24 18:08	
Carbazole	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Chrysene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Di-n-butylphthalate	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
Di-n-octylphthalate	ug/L	<2.2	10.0	2.2	04/18/24 18:08	
Dibenz(a,h)anthracene	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
Dibenzofuran	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Diethylphthalate	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
Dimethylphthalate	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
Fluoranthene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Fluorene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Hexachloro-1,3-butadiene	ug/L	<1.6	10.0	1.6	04/18/24 18:08	
Hexachlorobenzene	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
Hexachlorocyclopentadiene	ug/L	<1.6	10.0	1.6	04/18/24 18:08	
Hexachloroethane	ug/L	<1.4	10.0	1.4	04/18/24 18:08	
Indeno(1,2,3-cd)pyrene	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
Isophorone	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
N-Nitroso-di-n-propylamine	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
N-Nitrosodiphenylamine	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Naphthalene	ug/L	<2.3	10.0	2.3	04/18/24 18:08	
Nitrobenzene	ug/L	<2.4	10.0	2.4	04/18/24 18:08	
Pentachlorophenol	ug/L	<3.5	50.0	3.5	04/18/24 18:08	
Phenanthrene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Phenol	ug/L	<0.83	10.0	0.83	04/18/24 18:08	
Pyrene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Pyridine	ug/L	<1.1	10.0	1.1	04/18/24 18:08	
2,4,6-Tribromophenol (S)	%	71	25-120		04/18/24 18:08	
2-Fluorobiphenyl (S)	%	59	25-120		04/18/24 18:08	
2-Fluorophenol (S)	%	52	20-120		04/18/24 18:08	
Nitrobenzene-d5 (S)	%	67	30-120		04/18/24 18:08	
Phenol-d6 (S)	%	40	10-120		04/18/24 18:08	
Terphenyl-d14 (S)	%	72	35-125		04/18/24 18:08	

LABORATORY CONTROL SAMPLE: 3525034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	100	58.5	59	45-120	
1,2-Dichlorobenzene	ug/L	100	55.6	56	45-120	
1,3-Dichlorobenzene	ug/L	100	55.1	55	40-120	
1,4-Dichlorobenzene	ug/L	100	55.2	55	40-120	
2,4,5-Trichlorophenol	ug/L	100	63.4	63	55-120	
2,4,6-Trichlorophenol	ug/L	100	64.2	64	50-120	
2,4-Dichlorophenol	ug/L	100	62.8	63	50-120	

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## QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450589

LABORATORY CONTROL SAMPLE: 3525034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dimethylphenol	ug/L	100	62.0	62	50-120	
2,4-Dinitrophenol	ug/L	100	62.8	63	10-140	
2,4-Dinitrotoluene	ug/L	100	65.7	66	60-120	
2,6-Dinitrotoluene	ug/L	100	66.1	66	55-120	
2-Chloronaphthalene	ug/L	100	61.1	61	50-120	
2-Chlorophenol	ug/L	100	63.8	64	45-120	
2-Methylnaphthalene	ug/L	100	60.1	60	45-120	
2-Methylphenol(o-Cresol)	ug/L	100	62.6	63	40-120	
2-Nitroaniline	ug/L	100	71.7	72	55-120	
2-Nitrophenol	ug/L	100	65.7	66	50-120	
3&4-Methylphenol(m&p Cresol)	ug/L	100	60.9	61	35-120	
3,3'-Dichlorobenzidine	ug/L	100	86.0	86	50-130	
3-Nitroaniline	ug/L	100	74.3	74	65-125	
4,6-Dinitro-2-methylphenol	ug/L	100	67.9	68	35-130	
4-Bromophenylphenyl ether	ug/L	100	66.0	66	58-120	
4-Chloro-3-methylphenol	ug/L	100	67.6	68	55-120	
4-Chloroaniline	ug/L	100	75.6	76	55-125	
4-Chlorophenylphenyl ether	ug/L	100	63.0	63	55-120	
4-Nitroaniline	ug/L	100	69.0	69	60-120	
4-Nitrophenol	ug/L	100	42.3J	42	15-120	
Acenaphthene	ug/L	100	61.7	62	55-120	
Acenaphthylene	ug/L	100	61.0	61	55-120	
Anthracene	ug/L	100	65.3	65	60-120	
Benzo(a)anthracene	ug/L	100	67.8	68	60-120	
Benzo(a)pyrene	ug/L	100	66.1	66	60-120	
Benzo(b)fluoranthene	ug/L	100	66.3	66	60-120	
Benzo(g,h,i)perylene	ug/L	100	69.4	69	60-120	
Benzo(k)fluoranthene	ug/L	100	65.6	66	55-120	
Benzoic Acid	ug/L	100	37.9J	38	10-120	
Benzyl alcohol	ug/L	100	65.2	65	45-120	
bis(2-Chloroethoxy)methane	ug/L	100	67.6	68	50-120	
bis(2-Chloroethyl) ether	ug/L	100	67.5	68	50-120	
bis(2-Chloroisopropyl) ether	ug/L	100	67.1	67	45-120	
bis(2-Ethylhexyl)phthalate	ug/L	100	71.3	71	60-120	
Butylbenzylphthalate	ug/L	100	72.5	72	60-120	
Carbazole	ug/L	100	64.3	64	60-120	
Chrysene	ug/L	100	67.3	67	60-120	
Di-n-butylphthalate	ug/L	100	70.3	70	60-120	
Di-n-octylphthalate	ug/L	100	71.8	72	60-120	
Dibenz(a,h)anthracene	ug/L	100	68.1	68	60-120	
Dibenzofuran	ug/L	100	60.9	61	60-120	
Diethylphthalate	ug/L	100	66.5	67	60-120	
Dimethylphthalate	ug/L	100	64.1	64	55-120	
Fluoranthene	ug/L	100	66.3	66	60-120	
Fluorene	ug/L	100	63.2	63	60-120	
Hexachloro-1,3-butadiene	ug/L	100	56.8	57	35-120	
Hexachlorobenzene	ug/L	100	68.9	69	55-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

LABORATORY CONTROL SAMPLE: 3525034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachlorocyclopentadiene	ug/L	100	47.9	48	20-120	
Hexachloroethane	ug/L	100	55.7	56	30-120	
Indeno(1,2,3-cd)pyrene	ug/L	100	68.3	68	55-120	
Isophorone	ug/L	100	68.5	68	55-120	
N-Nitroso-di-n-propylamine	ug/L	100	69.7	70	50-120	
N-Nitrosodiphenylamine	ug/L	100	63.6	64	60-120	
Naphthalene	ug/L	100	60.1	60	45-120	
Nitrobenzene	ug/L	100	68.3	68	45-120	
Pentachlorophenol	ug/L	100	64.7	65	20-145	
Phenanthrene	ug/L	100	64.0	64	60-120	
Phenol	ug/L	100	41.5	41	10-120	
Pyrene	ug/L	100	65.0	65	60-120	
Pyridine	ug/L	100	48.0	48	10-120	
2,4,6-Tribromophenol (S)	%			70	25-120	
2-Fluorobiphenyl (S)	%			59	25-120	
2-Fluorophenol (S)	%			53	20-120	
Nitrobenzene-d5 (S)	%			69	30-120	
Phenol-d6 (S)	%			40	10-120	
Terphenyl-d14 (S)	%			66	35-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525035 3525036

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450682001	Spike Conc.	Spike Conc.	Result								
1,2,4-Trichlorobenzene	ug/L	<2.0	99	100	65.3	55.0	66	55	45-120	17	30		
1,2-Dichlorobenzene	ug/L	<1.8	99	100	64.3	54.4	65	54	45-120	17	30		
1,3-Dichlorobenzene	ug/L	<1.5	99	100	64.5	54.3	65	54	40-120	17	30		
1,4-Dichlorobenzene	ug/L	<1.7	99	100	64.2	54.0	65	54	40-120	17	30		
2,4,5-Trichlorophenol	ug/L	<1.7	99	100	68.2	57.8	69	58	25-135	17	30		
2,4,6-Trichlorophenol	ug/L	<1.4	99	100	68.5	56.8	69	57	50-120	19	30		
2,4-Dichlorophenol	ug/L	<1.8	99	100	66.4	54.8	67	55	45-120	19	25		
2,4-Dimethylphenol	ug/L	<1.9	99	100	63.6	52.3	64	52	35-120	19	30		
2,4-Dinitrophenol	ug/L	<2.5	99	100	65.2	52.8	66	53	10-140	21	35		
2,4-Dinitrotoluene	ug/L	<2.0	99	100	71.1	60.3	72	60	55-120	16	35		
2,6-Dinitrotoluene	ug/L	<1.9	99	100	69.9	60.9	71	61	55-120	14	35		
2-Chloronaphthalene	ug/L	<2.1	99	100	66.3	56.2	67	56	45-120	16	35		
2-Chlorophenol	ug/L	<1.8	99	100	66.8	55.4	67	55	45-120	19	25		
2-Methylnaphthalene	ug/L	<2.1	99	100	66.3	56.4	67	56	45-120	16	30		
2-Methylphenol(o-Cresol)	ug/L	<1.8	99	100	64.5	52.0	65	52	40-120	21	30		
2-Nitroaniline	ug/L	<1.9	99	100	76.5	65.9	77	66	55-120	15	30		
2-Nitrophenol	ug/L	<2.0	99	100	69.2	59.0	70	59	50-120	16	30		
3&4-Methylphenol(m&p Cresol)	ug/L	<1.7	99	100	62.2	51.2	63	51	30-120	19	35		
3,3'-Dichlorobenzidine	ug/L	<3.9	99	100	78.1	67.8	79	68	10-155	14	35		
3-Nitroaniline	ug/L	<1.9	99	100	80.5	64.0	81	64	65-125	23	30 M1		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525035 3525036											
Parameter	Units	MS		MSD		MS	MSD	MS	MSD	% Rec	Max
		60450682001	Spike	Spike	Result						
4,6-Dinitro-2-methylphenol	ug/L	<2.2	99	100	68.5	56.1	69	56	10-155	20	30
4-Bromophenylphenyl ether	ug/L	<2.0	99	100	69.7	58.2	70	58	50-120	18	35
4-Chloro-3-methylphenol	ug/L	<1.9	99	100	70.5	59.5	71	59	50-120	17	25
4-Chloroaniline	ug/L	<2.0	99	100	76.2	56.1	77	56	15-135	30	30
4-Chlorophenylphenyl ether	ug/L	<1.9	99	100	67.7	58.6	68	59	50-120	15	35
4-Nitroaniline	ug/L	<2.2	99	100	71.1	59.7	72	60	50-120	17	30
4-Nitrophenol	ug/L	<0.37	99	100	46.0J	39.6J	46	40	10-120		30
Acenaphthene	ug/L	<2.1	99	100	67.6	56.6	68	57	55-120	18	30
Acenaphthylene	ug/L	<1.9	99	100	66.4	56.2	67	56	50-120	17	30
Anthracene	ug/L	<2.0	99	100	69.8	57.7	71	58	55-120	19	30
Benzo(a)anthracene	ug/L	<2.0	99	100	70.2	59.3	71	59	55-120	17	25
Benzo(a)pyrene	ug/L	<2.0	99	100	70.4	59.0	71	59	55-120	18	30
Benzo(b)fluoranthene	ug/L	<1.9	99	100	69.8	60.8	70	61	55-120	14	30
Benzo(g,h,i)perylene	ug/L	<1.8	99	100	74.2	60.5	75	61	50-120	20	30
Benzo(k)fluoranthene	ug/L	<2.2	99	100	70.1	56.4	71	56	50-120	22	30
Benzoic Acid	ug/L	<4.4	99	100	33.7J	24.0J	34	24	10-120		30
Benzyl alcohol	ug/L	<1.6	99	100	70.9	58.7	72	59	35-120	19	30
bis(2-Chloroethoxy)methane	ug/L	<2.2	99	100	70.9	59.9	72	60	50-120	17	30
bis(2-Chloroethyl) ether	ug/L	<2.1	99	100	71.9	59.8	73	60	45-120	19	30
bis(2-Chloroisopropyl) ether	ug/L	<2.3	99	100	72.1	60.4	73	60	45-120	18	30
bis(2-Ethylhexyl)phthalate	ug/L	<2.4	99	100	73.0	62.8	74	63	55-120	15	35
Butylbenzylphthalate	ug/L	<2.4	99	100	75.4	64.9	76	65	55-120	15	35
Carbazole	ug/L	<2.0	99	100	67.7	56.0	68	56	55-120	19	35
Chrysene	ug/L	<2.0	99	100	69.4	58.7	70	59	55-120	17	30
Di-n-butylphthalate	ug/L	<2.1	99	100	74.5	63.5	75	64	55-120	16	35
Di-n-octylphthalate	ug/L	<2.2	99	100	76.2	64.3	77	64	60-120	17	35
Dibenz(a,h)anthracene	ug/L	<1.8	99	100	72.5	61.3	73	61	50-120	17	30
Dibenzofuran	ug/L	<2.0	99	100	67.9	57.6	69	58	50-120	16	30
Diethylphthalate	ug/L	<2.1	99	100	72.0	61.2	73	61	55-120	16	35
Dimethylphthalate	ug/L	<1.9	99	100	68.7	58.3	69	58	50-120	16	35
Fluoranthene	ug/L	<2.0	99	100	71.1	59.3	72	59	55-120	18	30
Fluorene	ug/L	<2.0	99	100	68.8	58.1	69	58	55-120	17	30
Hexachloro-1,3-butadiene	ug/L	<1.6	99	100	64.3	54.4	65	54	35-120	17	35
Hexachlorobenzene	ug/L	<2.1	99	100	71.4	59.5	72	59	50-120	18	35
Hexachlorocyclopentadiene	ug/L	<1.6	99	100	49.3	43.0	50	43	15-120	14	40
Hexachloroethane	ug/L	<1.4	99	100	64.8	55.7	65	56	30-120	15	35
Indeno(1,2,3-cd)pyrene	ug/L	<1.8	99	100	72.8	60.0	74	60	50-120	19	30
Isophorone	ug/L	<2.1	99	100	72.2	61.4	73	61	50-120	16	30
N-Nitroso-di-n-propylamine	ug/L	<2.0	99	100	75.9	62.6	77	63	50-120	19	35
N-Nitrosodiphenylamine	ug/L	<2.0	99	100	65.2	55.6	66	56	50-120	16	35
Naphthalene	ug/L	<2.3	99	100	66.3	56.0	67	56	25-120	17	25
Nitrobenzene	ug/L	<2.4	99	100	72.0	60.8	73	61	45-120	17	35
Pentachlorophenol	ug/L	<3.5	99	100	67.1	57.3	68	57	20-145	16	40
Phenanthrene	ug/L	<2.0	99	100	68.1	57.4	69	57	55-120	17	30
Phenol	ug/L	<0.83	99	100	42.0	35.0	42	35	10-120	18	30

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525035		3525036		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450682001 Result	MS Spike Conc.	MSD Spike Conc.									
Pyrene	ug/L	<2.0	99	100	66.9	57.3	68	57	60-120	15	30	M1	
Pyridine	ug/L	<1.1	99	100	60.8	41.5	61	42	10-120	38	35	R1	
2,4,6-Tribromophenol (S)	%						74	62	25-120				
2-Fluorobiphenyl (S)	%						65	54	25-120				
2-Fluorophenol (S)	%						54	44	20-120				
Nitrobenzene-d5 (S)	%						73	62	30-120				
Phenol-d6 (S)	%						41	34	10-120				
Terphenyl-d14 (S)	%						70	58	35-125				

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch:	890118	Analysis Method:	EPA 8270
QC Batch Method:	EPA 3511	Analysis Description:	8270 MSSV TPH ORO
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

METHOD BLANK: 3522887 Matrix: Water

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-DRO	mg/L	0.50J	1.0	0.31	04/18/24 12:13	
TPH-ORO	mg/L	0.69J	1.0	0.31	04/18/24 12:13	
2-Fluorobiphenyl (S)	%	99	30-145		04/18/24 12:13	
Nitrobenzene-d5 (S)	%	106	40-140		04/18/24 12:13	
Terphenyl-d14 (S)	%	100	35-150		04/18/24 12:13	

LABORATORY CONTROL SAMPLE: 3522888

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/L	25	25.4	102	45-135	
2-Fluorobiphenyl (S)	%			97	30-145	
Nitrobenzene-d5 (S)	%			110	40-140	
Terphenyl-d14 (S)	%			100	35-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3523057 3523058

Parameter	Units	60450682001		3523057		3523058		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec						
TPH-DRO	mg/L	0.50J	25	25	20.3	26.6	79	104	45-135	27	27		
2-Fluorobiphenyl (S)	%						92	94	30-145				
Nitrobenzene-d5 (S)	%						97	95	40-140				
Terphenyl-d14 (S)	%						83	91	35-150				

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### QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch: 890157

Analysis Method: SM 2320B

QC Batch Method: SM 2320B

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589001, 60450589002, 60450589003

METHOD BLANK: 3523029

Matrix: Water

Associated Lab Samples: 60450589001, 60450589002, 60450589003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	04/11/24 11:14	

LABORATORY CONTROL SAMPLE: 3523030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	497	99	90-110	

SAMPLE DUPLICATE: 3523032

Parameter	Units	60450617001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	340	339	0	10	

SAMPLE DUPLICATE: 3523033

Parameter	Units	60450300004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	443	445	0	10	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch: 890624

Analysis Method: SM 4500-O G

QC Batch Method: SM 4500-O G

Analysis Description: 4500OG Oxygen, Dissolved

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589001, 60450589002, 60450589003

SAMPLE DUPLICATE: 3524961

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Oxygen, Dissolved	mg/L	10.2	11.3	10	10	H6

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch:	890144	Analysis Method:	SM 4500-S-2 D
QC Batch Method:	SM 4500-S-2 D	Analysis Description:	4500S2D Sulfide, Total
		Laboratory:	Pace Analytical Services - Kansas City
Associated Lab Samples:	60450589001, 60450589002, 60450589003		

METHOD BLANK: 3522980 Matrix: Water  
 Associated Lab Samples: 60450589001, 60450589002, 60450589003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	<0.016	0.050	0.016	04/11/24 09:13	

LABORATORY CONTROL SAMPLE: 3522981

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.49	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3522982 3522983

Parameter	Units	60450589001		60450589002		60450589003		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.				
Sulfide, Total	mg/L	<0.016	0.5	0.5	0.5	0.27	0.27	53	52	75-125	2 20 M1

SAMPLE DUPLICATE: 3522984

Parameter	Units	60450589002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.042J	0.034J		20	

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### QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch: 891166

Analysis Method: EPA 9040

QC Batch Method: EPA 9040

Analysis Description: 9040 pH

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589001, 60450589002, 60450589003

SAMPLE DUPLICATE: 3527196

Parameter	Units	60450461001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	6.1	6.2	3	10	H6

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch:	890096	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589001, 60450589002, 60450589003

METHOD BLANK: 3522767 Matrix: Water  
 Associated Lab Samples: 60450589001, 60450589002, 60450589003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	<0.12	0.20	0.12	04/12/24 11:58	
Sulfate	mg/L	<0.55	1.0	0.55	04/12/24 11:58	

LABORATORY CONTROL SAMPLE: 3522768

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.6	105	90-110	
Sulfate	mg/L	5	4.5	90	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3522769 3522770

Parameter	Units	60450382001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	125	125	165	161	132	129	80-120	3	15	M1
Sulfate	mg/L	1440	1000	1000	2280	2210	84	77	80-120	3	15	M1

MATRIX SPIKE SAMPLE: 3522771

Parameter	Units	60450589002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	0.14J	2.5	2.3	87	80-120	
Sulfate	mg/L	431	250	616	74	80-120	M1

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch:	891080	Analysis Method:	EPA 350.1
QC Batch Method:	EPA 350.1	Analysis Description:	350.1 Ammonia
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

METHOD BLANK: 3526766 Matrix: Water  
 Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.069	0.10	0.069	04/18/24 13:16	

LABORATORY CONTROL SAMPLE: 3526767

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	4.8	95	90-110	

MATRIX SPIKE SAMPLE: 3526768

Parameter	Units	60450551001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	9.5	5	13.8	86	90-110	M1

MATRIX SPIKE SAMPLE: 3526770

Parameter	Units	60450589002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.48	5	4.9	89	90-110	M1

SAMPLE DUPLICATE: 3526769

Parameter	Units	60450551002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	4.9	4.7	6	18	

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QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch:	890111	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, Unpres.
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589001, 60450589002

METHOD BLANK: 3522870 Matrix: Water

Associated Lab Samples: 60450589001, 60450589002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	<0.069	0.10	0.069	04/10/24 20:37	
Nitrogen, Nitrite	mg/L	<0.069	0.10	0.069	04/10/24 20:37	
Nitrogen, NO2 plus NO3	mg/L	<0.069	0.10	0.069	04/10/24 20:37	

LABORATORY CONTROL SAMPLE: 3522871

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1	1.1	105	70-130	
Nitrogen, Nitrite	mg/L	1	1.1	113	90-110 L1	
Nitrogen, NO2 plus NO3	mg/L	2	2.2	109	90-110	

MATRIX SPIKE SAMPLE: 3522874

Parameter	Units	60450614001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	0.44	1	1.3	90	70-130	
Nitrogen, Nitrite	mg/L	ND	1	1.3	129	90-110 M0	
Nitrogen, NO2 plus NO3	mg/L	0.44	2	2.6	110	90-110	

SAMPLE DUPLICATE: 3522873

Parameter	Units	60450572003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	11.6	11.9	3	20	
Nitrogen, Nitrite	mg/L	ND	<0.35		20	
Nitrogen, NO2 plus NO3	mg/L	11.6	11.9	3	20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch:	890187	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, Unpres.
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589003

METHOD BLANK: 3523179 Matrix: Water

Associated Lab Samples: 60450589003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	<0.069	0.10	0.069	04/11/24 14:15	
Nitrogen, Nitrite	mg/L	<0.069	0.10	0.069	04/11/24 14:15	
Nitrogen, NO2 plus NO3	mg/L	<0.069	0.10	0.069	04/11/24 14:15	

LABORATORY CONTROL SAMPLE: 3523180

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1	1.0	103	70-130	
Nitrogen, Nitrite	mg/L	1	1.1	112	90-110 L1	
Nitrogen, NO2 plus NO3	mg/L	2	2.2	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3523181 3523183

Parameter	Units	60450682001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Nitrate	mg/L	<0.069	1	1	0.86	1.1	86	106	70-130	21	20	
Nitrogen, Nitrite	mg/L	<0.069	1	1	0.79	1.2	79	116	90-110	38	20	M0, R1
Nitrogen, NO2 plus NO3	mg/L	<0.069	2	2	1.6	2.2	82	111	90-110	30	20	M1, R1

SAMPLE DUPLICATE: 3523182

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	<0.069	<0.069		20	
Nitrogen, Nitrite	mg/L	<0.069	<0.069		20	
Nitrogen, NO2 plus NO3	mg/L	<0.069	<0.069		20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch:	890188	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, preserved
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

METHOD BLANK: 3523188 Matrix: Water  
 Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.069	0.10	0.069	04/11/24 14:38	

LABORATORY CONTROL SAMPLE: 3523189

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.2	108	90-110	

MATRIX SPIKE SAMPLE: 3523190

Parameter	Units	20311867001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	1.2	2	2.2	50	90-110	M1

MATRIX SPIKE SAMPLE: 3523192

Parameter	Units	60450551001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	1.4	2	2.7	66	90-110	M1

SAMPLE DUPLICATE: 3523191

Parameter	Units	60450670032 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	6.8	6.0	12	20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450589

QC Batch:	890793	Analysis Method:	SM 4500-CN-E
QC Batch Method:	SM 4500-CN-E	Analysis Description:	4500CNE Cyanide, Total
		Laboratory:	Pace Analytical Services - Kansas City
Associated Lab Samples:	60450589001, 60450589002, 60450589003, 60450589004		

METHOD BLANK: 3525599 Matrix: Water  
 Associated Lab Samples: 60450589001, 60450589002, 60450589003, 60450589004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cyanide	mg/L	<0.0038	0.0050	0.0038	04/18/24 11:04	

LABORATORY CONTROL SAMPLE: 3525600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.1	0.099	99	69-126	

MATRIX SPIKE SAMPLE: 3525601

Parameter	Units	60450787009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.189	0.1	0.19	4	55-124	M1

SAMPLE DUPLICATE: 3525602

Parameter	Units	60450766002 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	ND	<0.0038		46	

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### QUALIFIERS

Project: KC Water Treatment WT

Pace Project No.: 60450589

#### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

#### BATCH QUALIFIERS

Batch: 890032

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

#### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

H6 Analysis initiated outside of the 15 minute EPA required holding time.

J Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.

L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

P9 RPD between the primary and confirmatory analysis exceeded 40%.

R1 RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KC Water Treatment WT

Pace Project No.: 60450589

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450589001	SW10/SW-1	3510C	2266296	EPA 8081B	2266296
60450589002	SW09/SW-1	3510C	2266296	EPA 8081B	2266296
60450589003	SW08/SW-1	3510C	2266296	EPA 8081B	2266296
60450589004	Rinsate-24-04-09	3510C	2266296	EPA 8081B	2266296
60450589001	SW10/SW-1	8151A	2265070	EPA 8151A	2265070
60450589002	SW09/SW-1	8151A	2265070	EPA 8151A	2265070
60450589003	SW08/SW-1	8151A	2265070	EPA 8151A	2265070
60450589004	Rinsate-24-04-09	8151A	2265070	EPA 8151A	2265070
60450589001	SW10/SW-1	EPA 3510	890662	EPA 8082	890882
60450589002	SW09/SW-1	EPA 3510	890662	EPA 8082	890882
60450589003	SW08/SW-1	EPA 3510	890662	EPA 8082	890882
60450589004	Rinsate-24-04-09	EPA 3510	890662	EPA 8082	890882
60450589001	SW10/SW-1	3015	2265598	EPA 6020B	2265598
60450589001	SW10/SW-1	3015	2271497	EPA 6020B	2271497
60450589002	SW09/SW-1	3015	2265598	EPA 6020B	2265598
60450589002	SW09/SW-1	3015	2271497	EPA 6020B	2271497
60450589003	SW08/SW-1	3015	2266907	EPA 6020B	2266907
60450589004	Rinsate-24-04-09	3015	2266907	EPA 6020B	2266907
60450589001	SW10/SW-1	7470A	2265186	EPA 7470A	2265186
60450589002	SW09/SW-1	7470A	2265186	EPA 7470A	2265186
60450589003	SW08/SW-1	7470A	2265186	EPA 7470A	2265186
60450589004	Rinsate-24-04-09	7470A	2265186	EPA 7470A	2265186
60450589001	SW10/SW-1	EPA 3510	890658	EPA 8270	891183
60450589002	SW09/SW-1	EPA 3510	890658	EPA 8270	891183
60450589003	SW08/SW-1	EPA 3510	890658	EPA 8270	891183
60450589004	Rinsate-24-04-09	EPA 3510	890658	EPA 8270	891183
60450589001	SW10/SW-1	EPA 3511	890118	EPA 8270	890695
60450589002	SW09/SW-1	EPA 3511	890118	EPA 8270	890695
60450589003	SW08/SW-1	EPA 3511	890118	EPA 8270	890695
60450589004	Rinsate-24-04-09	EPA 3511	890118	EPA 8270	890695
60450589001	SW10/SW-1	EPA 5030B/8260	890032		
60450589002	SW09/SW-1	EPA 5030B/8260	890032		
60450589003	SW08/SW-1	EPA 5030B/8260	890032		
60450589004	Rinsate-24-04-09	EPA 5030B/8260	890032		
60450589005	Trip Blank	EPA 5030B/8260	890449		
60450589005	Trip Blank	EPA 5030B/8260	890743		
60450589001	SW10/SW-1	EPA 8260	890045		
60450589002	SW09/SW-1	EPA 8260	890045		
60450589003	SW08/SW-1	EPA 8260	890228		
60450589004	Rinsate-24-04-09	EPA 8260	890228		
60450589001	SW10/SW-1	SM 2320B	890157		

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KC Water Treatment WT

Pace Project No.: 60450589

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450589002	SW09/SW-1	SM 2320B	890157		
60450589003	SW08/SW-1	SM 2320B	890157		
60450589001	SW10/SW-1	SM 4500-O G	890624		
60450589002	SW09/SW-1	SM 4500-O G	890624		
60450589003	SW08/SW-1	SM 4500-O G	890624		
60450589001	SW10/SW-1	SM 4500-S-2 D	890144		
60450589002	SW09/SW-1	SM 4500-S-2 D	890144		
60450589003	SW08/SW-1	SM 4500-S-2 D	890144		
60450589001	SW10/SW-1	EPA 9040	891166		
60450589002	SW09/SW-1	EPA 9040	891166		
60450589003	SW08/SW-1	EPA 9040	891166		
60450589001	SW10/SW-1	EPA 300.0	890096		
60450589002	SW09/SW-1	EPA 300.0	890096		
60450589003	SW08/SW-1	EPA 300.0	890096		
60450589001	SW10/SW-1	EPA 350.1	891080		
60450589002	SW09/SW-1	EPA 350.1	891080		
60450589003	SW08/SW-1	EPA 350.1	891080		
60450589004	Rinsate-24-04-09	EPA 350.1	891080		
60450589001	SW10/SW-1	EPA 353.2	890111		
60450589002	SW09/SW-1	EPA 353.2	890111		
60450589003	SW08/SW-1	EPA 353.2	890187		
60450589001	SW10/SW-1	EPA 353.2	890188		
60450589002	SW09/SW-1	EPA 353.2	890188		
60450589003	SW08/SW-1	EPA 353.2	890188		
60450589004	Rinsate-24-04-09	EPA 353.2	890188		
60450589001	SW10/SW-1	SM 4500-CN-E	890793	SM 4500-CN-E	891323
60450589002	SW09/SW-1	SM 4500-CN-E	890793	SM 4500-CN-E	891323
60450589003	SW08/SW-1	SM 4500-CN-E	890793	SM 4500-CN-E	891323
60450589004	Rinsate-24-04-09	SM 4500-CN-E	890793	SM 4500-CN-E	891323

### REPORT OF LABORATORY ANALYSIS

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WO#: 60450589



DC#\_Title: ENV-FRM-LENE-0009\_Sample

Revision: 2

Effective Date: 01/12/2022

Client Name: Burns & McDonnell

Courier: FedEx [ ] UPS [ ] VIA [ ] Clay [ ] PEX [ ] ECI [ ] Pace [ ] Xroads [ ] Client [x] Other [ ]

Tracking #: \_\_\_\_\_ Pace Shipping Label Used? Yes [ ] No [x]

Custody Seal on Cooler/Box Present: Yes [ ] No [x] Seals intact: Yes [ ] No [ ]

Packing Material: Bubble Wrap [ ] Bubble Bags [x] Foam [ ] None [ ] Other [x] ZPLC

Thermometer Used: T298 Type of Ice: Ice [x] Blue [ ] None [ ]

Cooler Temperature (°C): As-read 3-3 Corr. Factor -0.3 Corrected 3-0

Date and initials of person examining contents: 4/9/24 JN

Temperature should be above freezing to 6°C 1-9, 1-3, 1-8 1-6, 1-0, 1-5

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	NOX
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: WT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

Pace® Location Requested (City/State):  
Pace Analytical Kansas  
9608 Lorret Blvd., Lenexa, KS 66219

Company Name: BURNS & MCDONNELL  
Street Address: 9400 Ward Parkway, Kansas City, MO 64114

Customer Project #: KC Water Treatment WT

Site Collection Info/Facility ID (as applicable):

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET

Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other

Date Results Requested: [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

County / State origin of sample(s): Missouri

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis: DW PWSID # or WW Permit # as applicable:

Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CA), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID

Matrix \* SW

SW10/SW-1

SW09/SW-1

SW08/SW-1

Rinseate-24-04-09

ERB

Composite Start Date Time

4/9/24 1200

1340

1420

1100

Collected or Composite End Date Time

Res. Chlorine Results Units

Collected By: (Printed Name) Eric Brown

Signature: *Eric Brown*

Received by/Company: (Signature) *Eric Brown*

Date/Time: 4/9/24 1630

Relinquished by/Company: (Signature) *Eric Brown*

Relinquished by/Company: (Signature) *B/MCD*

Relinquished by/Company: (Signature)

Relinquished by/Company: (Signature)

Relinquished by/Company: (Signature)

Relinquished by/Company: (Signature)

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Contact/Report To: Justin Carter  
Phone #: 816-333-9400  
E-Mail: jcarter@burnsmcd.com  
Ct E-Mail:

Invoice To: Accounts Payable  
Invoice E-Mail: accountspayable@burnsmcd.com  
Purchase Order # (if applicable): TBD  
Quote #:

Specify Container Size \*\*

Identify Container Preservative Type \*\*\*

Analysis Requested

4500 OG Oxygen, Dissolved

4500 NE Cyanide, Total

4500SD Sulfide, Total

6020/7470 Metals \*\* see list

8081 Pesticides

8082 GCS PCB, LV

8260 MSV

8260 MSV GRO

8270 MSSV DRO/RO

Proj. Mgr: Alice Spiller

AcctNum / Client ID:

Table #:

Profile / Template: 10409

Prelog / Bottle Ord. ID: EZ 3093861

Sample Comment

Short hold

48 hour

nitrate /

nitrite

Preservation non-conformance identified for sample.



Scan QR Code for instructions

\*\* Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) Encore, (8) Terracore, (9) 90mL, (10) Other

\*\*\* Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Remarks / Special Conditions / Possible Hazards: Short Hold

# Coolers: Thermometer ID: T298 Correction Factor (°C): -0.3 Obs. Temp. (°C): 3.3 Corrected Temp. (°C): 3.0 On Ice:

Date/Time: 4/9/24 Tracking Number: 1635

Date/Time: Delivered by: [ ] In-Person [ ] Courier

Date/Time: [ ] FedEx [ ] UPS [ ] Other

Date/Time: Page: 1 of 4

Pace® Location Requested (City/State):  
Pace Analytical Kansas  
9608 Loiret Blvd., Lenexa, KS 66219

Company Name: BURNS & MCDONNELL  
Street Address: 9400 Ward Parkway, Kansas City, MO 64114

Customer Project #: KC Water Treatment WT  
Project Name: KC Water Treatment WT

Time Zone Collected: [ ] AK [ ] PT [ ] MT [X] CT [ ] ET

Data Deliverables:  
[ ] Level II [ ] Level III [ ] Level IV  
[ ] EQUIS

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No  
Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other

Date Results Requested:  
[ ] Other  
Field Filtered (if applicable): [ ] Yes [ ] No  
Analysis:

Matrix \*  
SW  
↓  
ERD

Composite Start  
Date Time  
4/9/24 1200  
↓  
1340  
↓  
1420  
↓  
1100

Collected or Composite End  
Date Time

# Res. Chlorine  
Results Units

Customer Sample ID  
SW10/SW-1  
SW99/SW-1  
SW08/SW-1  
Rinsate-24-04-09 ERD

8270 MSSV Semivolatile Organic  
821 Herbicides  
Ammonia, NO2/NO3 pres  
NO2/NO3 unpreserved  
NO2/NO3, sulfate, fluoride, pH

Proj. Mgr:  
Alice Spiller  
AcctNum / Client ID:  
Table #:  
Profile / Template:  
10409  
Prelog / Bottle Ord. ID:  
EZ 3093861

Sample Comment  
Short hold  
48 hour  
nitrate/  
nitrite

Preservation non-conformance identified for sample

### CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields  
Contact/Report To: Justin Carter  
Phone #: 816-333-9400  
E-Mail: jcarter@burnsmcd.com  
Cc E-Mail:

Invoice To: Accounts Payable  
Invoice E-Mail: accountspayable@burnsmcd.com  
Purchase Order # (if applicable): TBD  
Quote #:

County / State origin of sample(s): Missouri

DW PWSID # or WW Permit # as applicable:

Matrix Codes (insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

LAB USE ONLY - Affix Workorder/Login Label Here  
00450589

Specify Container Size \*\*  
Identify Container Preservative Type \*\*\*  
Analysis Requested

\*\* Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other  
\*\*\* Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) Mech, (11) Other

Scan QR Code for instructions

Customer Remarks / Special Conditions / Possible Hazards:  
Short Hold

# Coolers: 3-3  
Thermometer ID: TAG  
Correction Factor (°C): -0.3  
Obs. Temp. (°C): 3.3  
Corrected Temp. (°C): 3.0  
On Ice:

Tracking Number:  
Date/Time: 4/9/24 1635  
Date/Time:

Delivered by: [ ] In-Person [ ] Courier  
[ ] FedEx [ ] UPS [ ] Other  
Page: 3 of 4

ENV-FRM-CORQ-0019\_v02\_110123 ©

Internal Transfer Chain of Custody

E177



Rush Multiplier  X
Samples Pre-Logged into eCOC

State Of Origin: MO
Cert. Needed:  Yes  No

Workorder: 60450589 Workorder Name: KC Water Treatment WT Owner Received Date: 4/9/2024 Results Requested By: 4/24/2024

Report To: Alice Spiller, Pace Analytical Kansas
Subcontract To: Pace National, 12065 Lebanon Rd, Mt. Juliet, TN 37122
Requested Analysis: 6020/7470 Metals TAL metals+Mo, 8081 Pesticides, 8321 or 8151 Herbicides

Table with columns: Item, Sample ID, Sample Type, Collect Date/Time, Lab ID, Matrix, HNO3, Unpreserved, and analysis columns for metals, pesticides, and herbicides.

L1724650
LAB USE ONLY
-01
02
03
04

Transfers table with columns: Transfers, Released By, Date/Time, Received By, Date/Time, Comments.

Cooler Temperature on Receipt, Custody Seal Y or N, Received on Ice Y or N, Samples Intact Y or N

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

PH-10BDH5021 TRC-2352752
CR6-20221V

Sample Receipt Checklist
COC Seal Present/Intact: Y
COC Signed/Accurate: Y
Bottles Airtight/Intact: Y
Correct bottles used: Y
Sufficient volume sent: Y
PA Screen <0.5 mR/hr: Y



April 25, 2024

Justin Carter  
Burns & McDonnell  
9400 Ward Parkway  
Kansas City, MO 64114

RE: Project: KC Water Treatment WT  
Pace Project No.: 60450682

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on April 10, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller  
alice.spiller@pacelabs.com  
(913)599-5665  
PM Lab Management

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL  
Jacquelin Lee, Burns & McDonnell



## REPORT OF LABORATORY ANALYSIS

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### CERTIFICATIONS

Project: KC Water Treatment WT

Pace Project No.: 60450682

#### Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219  
 Arkansas Inorganic Drinking Water Certification  
 Arkansas Certification #: 88-00679  
 Colorado Division of Oil and Public Safety  
 Illinois Certification #: 2000302023-6  
 Iowa Certification #: 118  
 Kansas Field Laboratory Certification #: E-92587

Kansas/NELAP Certification #: E-10116  
 Louisiana Certification #: 03055  
 Missouri Inorganic Drinking Water Certification  
 Nevada Certification #: KS000212024-1  
 Oklahoma Certification #: 2023-073  
 Texas Certification #: T104704407-23-17  
 Utah Certification #: KS000212022-13

#### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122  
 Alabama Certification #: 40660  
 Alaska Certification 17-026  
 Arizona Certification #: AZ0612  
 Arkansas Certification #: 88-0469  
 California Certification #: 2932  
 Canada Certification #: 1461.01  
 Colorado Certification #: TN00003  
 Connecticut Certification #: PH-0197  
 DOD Certification: #1461.01  
 EPA# TN00003  
 Florida Certification #: E87487  
 Georgia DW Certification #: 923  
 Georgia Certification: NELAP  
 Idaho Certification #: TN00003  
 Illinois Certification #: 200008  
 Indiana Certification #: C-TN-01  
 Iowa Certification #: 364  
 Kansas Certification #: E-10277  
 Kentucky UST Certification #: 16  
 Kentucky Certification #: 90010  
 Louisiana Certification #: AI30792  
 Louisiana DW Certification #: LA180010  
 Maine Certification #: TN0002  
 Maryland Certification #: 324  
 Massachusetts Certification #: M-TN003  
 Michigan Certification #: 9958  
 Minnesota Certification #: 047-999-395  
 Mississippi Certification #: TN00003  
 Missouri Certification #: 340  
 Montana Certification #: CERT0086  
 Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34  
 New Hampshire Certification #: 2975  
 New Jersey Certification #: TN002  
 New Mexico DW Certification  
 New York Certification #: 11742  
 North Carolina Aquatic Toxicity Certification #: 41  
 North Carolina Drinking Water Certification #: 21704  
 North Carolina Environmental Certificate #: 375  
 North Dakota Certification #: R-140  
 Ohio VAP Certification #: CL0069  
 Oklahoma Certification #: 9915  
 Oregon Certification #: TN200002  
 Pennsylvania Certification #: 68-02979  
 Rhode Island Certification #: LAO00356  
 South Carolina Certification #: 84004  
 South Dakota Certification  
 Tennessee DW/Chem/Micro Certification #: 2006  
 Texas Mold Certification #: LAB0152  
 Texas Certification #: T 104704245-17-14  
 USDA Soil Permit #: P330-15-00234  
 Utah Certification #: TN00003  
 Virginia Certification #: VT2006  
 Vermont Dept. of Health: ID# VT-2006  
 Virginia Certification #: 460132  
 Washington Certification #: C847  
 West Virginia Certification #: 233  
 Wisconsin Certification #: 998093910  
 Wyoming UST Certification #: via A2LA 2926.01  
 A2LA-ISO 17025 Certification #: 1461.01  
 A2LA-ISO 17025 Certification #: 1461.02  
 AIHA-LAP/LLC EMLAP Certification #:100789

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: KC Water Treatment WT

Pace Project No.: 60450682

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60450682001	SW07/SW-1	Water	04/10/24 08:20	04/10/24 16:35
60450682002	SW06/SW-1	Water	04/10/24 10:20	04/10/24 16:35
60450682003	RINSATE-24-04-10	Water	04/10/24 10:30	04/10/24 16:35
60450682004	SW05/SW-1	Water	04/10/24 11:15	04/10/24 16:35
60450682005	SW04/SW-1	Water	04/10/24 13:10	04/10/24 16:35
60450682006	DUP-02	Water	04/10/24 00:00	04/10/24 16:35
60450682007	SW03/SW-1	Water	04/10/24 13:50	04/10/24 16:35
60450682008	TRIP BLANK	Water	04/10/24 08:00	04/10/24 16:35
60450682009	TRIP BLANK	Water	04/10/24 08:00	04/10/24 16:35

### REPORT OF LABORATORY ANALYSIS

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**SAMPLE ANALYTE COUNT**

Project: KC Water Treatment WT

Pace Project No.: 60450682

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60450682001	SW07/SW-1	EPA 8081B	MFM	23	PAN
		EPA 8151A	LJD	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN
		EPA 7470A	AKB	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	2	PASI-K
		EPA 5030B/8260	PGH	69	PASI-K
		EPA 8260	BA	5	PASI-K
		SM 2320B	SR1	1	PASI-K
		SM 4500-O G	ECF	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 9040	SR1	1	PASI-K
		EPA 300.0	PL	2	PASI-K
		EPA 350.1	RKA	1	PASI-K
		EPA 353.2	RKA	3	PASI-K
		EPA 353.2	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		60450682002	SW06/SW-1	EPA 8081B	MFM
EPA 8151A	LJD			11	PAN
EPA 8082	JDS			8	PASI-K
EPA 6020B	JPD			23	PAN
EPA 7470A	AKB			1	PAN
EPA 8270	WFG			73	PASI-K
EPA 8270	WDC			5	PASI-K
EPA 5030B/8260	PGH			69	PASI-K
EPA 8260	BA			5	PASI-K
SM 2320B	SR1			1	PASI-K
SM 4500-O G	ECF			1	PASI-K
SM 4500-S-2 D	DLJ			1	PASI-K
EPA 9040	SR1			1	PASI-K
EPA 300.0	PL			2	PASI-K
EPA 350.1	RKA			1	PASI-K
EPA 353.2	RKA			3	PASI-K
EPA 353.2	RKA			1	PASI-K
SM 4500-CN-E	ECF			1	PASI-K
60450682003	RINSATE-24-04-10			EPA 8081B	MFM

**REPORT OF LABORATORY ANALYSIS**

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**SAMPLE ANALYTE COUNT**

Project: KC Water Treatment WT

Pace Project No.: 60450682

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8151A	LJD	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN
		EPA 7470A	AKB	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 5030B/8260	PGH	69	PASI-K
		EPA 8260	BA	5	PASI-K
		EPA 350.1	RKA	1	PASI-K
		EPA 353.2	RKA	3	PASI-K
		EPA 353.2	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
60450682004	SW05/SW-1	EPA 8081B	MFM	23	PAN
		EPA 8151A	LJD	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN
		EPA 7470A	AKB	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 5030B/8260	PGH	69	PASI-K
		EPA 8260	BA	5	PASI-K
		SM 2320B	SR1	1	PASI-K
		SM 4500-O G	ECF	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 9040	SR1	1	PASI-K
		EPA 300.0	PL	2	PASI-K
		EPA 350.1	RKA	1	PASI-K
		EPA 353.2	RKA	3	PASI-K
		EPA 353.2	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
60450682005	SW04/SW-1	EPA 8081B	MFM	23	PAN
		EPA 8151A	LJD	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN
		EPA 7470A	AKB	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K

**REPORT OF LABORATORY ANALYSIS**

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**SAMPLE ANALYTE COUNT**

Project: KC Water Treatment WT

Pace Project No.: 60450682

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 5030B/8260	PGH	69	PASI-K
		EPA 8260	BA	5	PASI-K
		SM 2320B	SR1	1	PASI-K
		SM 4500-O G	ECF	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 9040	SR1	1	PASI-K
		EPA 300.0	PL	2	PASI-K
		EPA 350.1	RKA	1	PASI-K
		EPA 353.2	RKA	3	PASI-K
		EPA 353.2	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
60450682006	DUP-02	EPA 8081B	MFM	23	PAN
		EPA 8151A	LJD	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN
		EPA 7470A	AKB	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 5030B/8260	PGH	69	PASI-K
		EPA 8260	BA	5	PASI-K
		SM 2320B	SR1	1	PASI-K
		SM 4500-O G	ECF	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 9040	SR1	1	PASI-K
		EPA 300.0	PL	2	PASI-K
		EPA 350.1	RKA	1	PASI-K
		EPA 353.2	RKA	3	PASI-K
		EPA 353.2	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
60450682007	SW03/SW-1	EPA 8081B	MFM	23	PAN
		EPA 8151A	LJD	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN
		EPA 7470A	AKB	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 5030B/8260	PGH	69	PASI-K

**REPORT OF LABORATORY ANALYSIS**

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### SAMPLE ANALYTE COUNT

Project: KC Water Treatment WT

Pace Project No.: 60450682

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8260	BA	5	PASI-K
		SM 2320B	SR1	1	PASI-K
		SM 4500-O G	ECF	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 9040	SR1	1	PASI-K
		EPA 300.0	PL	2	PASI-K
		EPA 350.1	RKA	1	PASI-K
		EPA 353.2	RKA	3	PASI-K
		EPA 353.2	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
60450682008	TRIP BLANK	EPA 5030B/8260	PGH	69	PASI-K
		EPA 8260	BA, JLO	5	PASI-K
60450682009	TRIP BLANK	EPA 5030B/8260	PGH	69	PASI-K

PAN = Pace National - Mt. Juliet

PASI-K = Pace Analytical Services - Kansas City

### REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 8081B

**Description:** Pesticides (GC) 8081B

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

7 samples were analyzed for EPA 8081B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 8151A

**Description:** Chlorinated Herb. (GC) 8151A

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

7 samples were analyzed for EPA 8151A by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 2266267

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450682001

R1: RPD value was outside control limits.

- MSD (Lab ID: R4059572-4)
  - 2,4,5-T
  - 2,4,5-TP (Silvex)
  - 2,4-D
  - 2,4-DB
  - Dicamba
  - Dichlorprop

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 8082

**Description:** 8082 GCS PCB, LV

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

7 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 6020B

**Description:** Metals (ICPMS) 6020B

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

7 samples were analyzed for EPA 6020B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 7470A

**Description:** Mercury 7470A

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

7 samples were analyzed for EPA 7470A by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 8270

**Description:** 8270 MSSV Semivolatile Organic

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

7 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890658

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450682001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 3525036)

- 3-Nitroaniline

- Pyrene

R1: RPD value was outside control limits.

- MSD (Lab ID: 3525036)

- Pyridine

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 8270

**Description:** 8270 MSSV DRO/ORO

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

7 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3511 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 890118

B: Analyte was detected in the associated method blank.

- BLANK for HBN 890118 [OEXT/954 (Lab ID: 3522887)]
  - TPH-DRO
  - TPH-ORO

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 5030B/8260

**Description:** 8260 MSV

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

9 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 8260

**Description:** 8260 MSV GRO and Oxygenates

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

8 samples were analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** SM 2320B

**Description:** 2320B Alkalinity

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

6 samples were analyzed for SM 2320B by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** SM 4500-O G

**Description:** 4500 OG Oxygen, Dissolved

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

### General Information:

6 samples were analyzed for SM 4500-O G by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA required holding time.

- DUP-02 (Lab ID: 60450682006)
- SW03/SW-1 (Lab ID: 60450682007)
- SW04/SW-1 (Lab ID: 60450682005)
- SW05/SW-1 (Lab ID: 60450682004)
- SW06/SW-1 (Lab ID: 60450682002)
- SW07/SW-1 (Lab ID: 60450682001)

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** SM 4500-S-2 D

**Description:** 4500S2D Sulfide, Total

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

6 samples were analyzed for SM 4500-S-2 D by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890502

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450682001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3524498)
- Sulfide, Total

R1: RPD value was outside control limits.

- MSD (Lab ID: 3524499)
- Sulfide, Total

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 9040

**Description:** 9040 pH

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

### General Information:

6 samples were analyzed for EPA 9040 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA required holding time.

- DUP-02 (Lab ID: 60450682006)
- SW03/SW-1 (Lab ID: 60450682007)
- SW04/SW-1 (Lab ID: 60450682005)
- SW05/SW-1 (Lab ID: 60450682004)
- SW06/SW-1 (Lab ID: 60450682002)
- SW07/SW-1 (Lab ID: 60450682001)

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 300.0

**Description:** 300.0 IC Anions 28 Days

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

### General Information:

6 samples were analyzed for EPA 300.0 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

Analyte Comments:

QC Batch: 890644

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 3525007)
  - Fluoride
- DUP (Lab ID: 3525012)
  - Fluoride
- DUP-02 (Lab ID: 60450682006)
  - Fluoride
- LCS (Lab ID: 3525008)
  - Fluoride
- MS (Lab ID: 3525009)
  - Fluoride
- MS (Lab ID: 3525011)
  - Fluoride
- MSD (Lab ID: 3525010)
  - Fluoride
- SW03/SW-1 (Lab ID: 60450682007)
  - Fluoride
- SW04/SW-1 (Lab ID: 60450682005)
  - Fluoride

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 300.0

**Description:** 300.0 IC Anions 28 Days

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

Analyte Comments:

QC Batch: 890644

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- SW05/SW-1 (Lab ID: 60450682004)
  - Fluoride
- SW06/SW-1 (Lab ID: 60450682002)
  - Fluoride
- SW07/SW-1 (Lab ID: 60450682001)
  - Fluoride

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 350.1

**Description:** 350.1 Ammonia

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

7 samples were analyzed for EPA 350.1 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 891280

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450682001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 3527743)
- Nitrogen, Ammonia

QC Batch: 891282

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450676001,60450682006

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3527747)
- Nitrogen, Ammonia
- MS (Lab ID: 3527749)
- Nitrogen, Ammonia

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

---

**Method:** EPA 353.2

**Description:** 353.2 Nitrogen, NO2/NO3 unpres

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

7 samples were analyzed for EPA 353.2 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 890187

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 3523180)
- Nitrogen, Nitrite

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890187

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450682001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 3523181)
  - Nitrogen, Nitrite
- MSD (Lab ID: 3523183)
  - Nitrogen, Nitrite

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3523181)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 3523183)
  - Nitrogen, NO2 plus NO3

R1: RPD value was outside control limits.

- MSD (Lab ID: 3523183)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrite

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

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**Method:** EPA 353.2

**Description:** 353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> pres.

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

7 samples were analyzed for EPA 353.2 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890370

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450682001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 3523861)
- Nitrogen, NO<sub>2</sub> plus NO<sub>3</sub>

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment WT

Pace Project No.: 60450682

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**Method:** SM 4500-CN-E

**Description:** 4500CNE Cyanide, Total

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

7 samples were analyzed for SM 4500-CN-E by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with SM 4500-CN-E with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW07/SW-1 Lab ID: 60450682001 Collected: 04/10/24 08:20 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3510C									
Pace National - Mt. Juliet									
Aldrin	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/14/24 17:13	04/14/24 21:38	309-00-2	
alpha-BHC	<0.000017 2	mg/L	0.000050 0	0.000017 2	1	04/14/24 17:13	04/14/24 21:38	319-84-6	
beta-BHC	<0.000020 8	mg/L	0.000050 0	0.000020 8	1	04/14/24 17:13	04/14/24 21:38	319-85-7	
delta-BHC	<0.000015 0	mg/L	0.000050 0	0.000015 0	1	04/14/24 17:13	04/14/24 21:38	319-86-8	
gamma-BHC (Lindane)	<0.000020 9	mg/L	0.000050 0	0.000020 9	1	04/14/24 17:13	04/14/24 21:38	58-89-9	
Chlordane (Technical)	<0.000019 8	mg/L	0.00500 0	0.000019 8	1	04/14/24 17:13	04/14/24 21:38	57-74-9	
4,4'-DDD	<0.000017 7	mg/L	0.000050 0	0.000017 7	1	04/14/24 17:13	04/14/24 21:38	72-54-8	
4,4'-DDE	<0.000015 4	mg/L	0.000050 0	0.000015 4	1	04/14/24 17:13	04/14/24 21:38	72-55-9	
4,4'-DDT	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/14/24 17:13	04/14/24 21:38	50-29-3	
Dieldrin	<0.000016 2	mg/L	0.000050 0	0.000016 2	1	04/14/24 17:13	04/14/24 21:38	60-57-1	
Endosulfan I	<0.000016 0	mg/L	0.000050 0	0.000016 0	1	04/14/24 17:13	04/14/24 21:38	959-98-8	
Endosulfan II	<0.000016 4	mg/L	0.000050 0	0.000016 4	1	04/14/24 17:13	04/14/24 21:38	33213-65-9	
Endosulfan sulfate	<0.000021 7	mg/L	0.000050 0	0.000021 7	1	04/14/24 17:13	04/14/24 21:38	1031-07-8	
Endrin	<0.000016 1	mg/L	0.000050 0	0.000016 1	1	04/14/24 17:13	04/14/24 21:38	72-20-8	
Endrin aldehyde	<0.000023 7	mg/L	0.000050 0	0.000023 7	1	04/14/24 17:13	04/14/24 21:38	7421-93-4	
Endrin ketone	<0.000021 9	mg/L	0.000050 0	0.000021 9	1	04/14/24 17:13	04/14/24 21:38	53494-70-5	
Hexachlorobenzene	<0.000017 6	mg/L	0.000050 0	0.000017 6	1	04/14/24 17:13	04/14/24 21:38	118-74-1	
Heptachlor	<0.000014 8	mg/L	0.000050 0	0.000014 8	1	04/14/24 17:13	04/14/24 21:38	76-44-8	
Heptachlor epoxide	<0.000018 3	mg/L	0.000050 0	0.000018 3	1	04/14/24 17:13	04/14/24 21:38	1024-57-3	
Methoxychlor	<0.000019 3	mg/L	0.000050 0	0.000019 3	1	04/14/24 17:13	04/14/24 21:38	72-43-5	
Toxaphene	<0.000168	mg/L	0.000500	0.000168	1	04/14/24 17:13	04/14/24 21:38	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	51.0	%	10.0-128		1	04/14/24 17:13	04/14/24 21:38	2051-24-3	
Tetrachloro-m-xylene (S)	58.9	%	10.0-127		1	04/14/24 17:13	04/14/24 21:38	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.000574	mg/L	0.00210	0.000574	1.05	04/16/24 14:37	04/19/24 02:53	94-75-7	R1
Dalapon	<0.000361	mg/L	0.00210	0.000361	1.05	04/16/24 14:37	04/19/24 02:53	127-20-8	
2,4-DB	<0.000317	mg/L	0.00210	0.000317	1.05	04/16/24 14:37	04/20/24 00:55	94-82-6	
Dicamba	<0.000257	mg/L	0.00210	0.000257	1.05	04/16/24 14:37	04/19/24 02:53	1918-00-9	R1

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW07/SW-1 Lab ID: 60450682001 Collected: 04/10/24 08:20 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
Dichlorprop	<0.00109	mg/L	0.00210	0.00109	1.05	04/16/24 14:37	04/19/24 02:53	120-36-5	R1
Dinoseb	<0.000263	mg/L	0.00210	0.000263	1.05	04/16/24 14:37	04/20/24 00:55	88-85-7	
MCPA	<0.0138	mg/L	0.105	0.0138	1.05	04/16/24 14:37	04/19/24 02:53	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.0693	mg/L	0.105	0.0693	1.05	04/16/24 14:37	04/19/24 02:53	93-65-2	
2,4,5-T	<0.000271	mg/L	0.00210	0.000271	1.05	04/16/24 14:37	04/19/24 02:53	93-76-5	R1
2,4,5-TP (Silvex)	<0.000352	mg/L	0.00210	0.000352	1.05	04/16/24 14:37	04/19/24 02:53	93-72-1	R1
<b>Surrogates</b>									
2,4-DCAA (S)	71.6	%	14.0-158		1.05	04/16/24 14:37	04/19/24 02:53	19719-28-9	
2,4-DCAA (S)	79.8	%	14.0-158		1.05	04/16/24 14:37	04/20/24 00:55	19719-28-9	
<b>8082 GCS PCB, LV</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<0.15	ug/L	1.0	0.15	1	04/16/24 12:05	04/17/24 13:18	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:18	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:18	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:18	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:18	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:18	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.19	ug/L	1.0	0.19	1	04/16/24 12:05	04/17/24 13:18	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	69	%	20-120		1	04/16/24 12:05	04/17/24 13:18	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Aluminum	0.0854J	mg/L	0.100	0.0185	1	04/17/24 12:19	04/23/24 00:00	7429-90-5	J
Antimony	<0.00103	mg/L	0.00400	0.00103	1	04/17/24 12:19	04/23/24 00:00	7440-36-0	
Arsenic	0.000884J	mg/L	0.00200	0.000180	1	04/17/24 12:19	04/23/24 00:00	7440-38-2	J
Barium	0.0572	mg/L	0.00200	0.000381	1	04/17/24 12:19	04/23/24 00:00	7440-39-3	
Beryllium	<0.000190	mg/L	0.00200	0.000190	1	04/17/24 12:19	04/23/24 00:00	7440-41-7	
Cadmium	<0.000150	mg/L	0.00100	0.000150	1	04/17/24 12:19	04/23/24 00:00	7440-43-9	
Calcium	134	mg/L	10.0	0.936	10	04/17/24 12:19	04/23/24 13:21	7440-70-2	
Chromium	<0.00124	mg/L	0.00200	0.00124	1	04/17/24 12:19	04/23/24 00:00	7440-47-3	
Copper	0.00202J	mg/L	0.00500	0.00151	1	04/17/24 12:19	04/23/24 00:00	7440-50-8	J
Cobalt	0.000389J	mg/L	0.00200	0.000059	1	04/17/24 12:19	04/23/24 00:00	7440-48-4	J
Iron	0.399	mg/L	0.100	0.0281	1	04/17/24 12:19	04/23/24 00:00	7439-89-6	
Lead	<0.000849	mg/L	0.00200	0.000849	1	04/17/24 12:19	04/23/24 00:00	7439-92-1	
Magnesium	66.4	mg/L	10.0	0.735	10	04/17/24 12:19	04/23/24 13:21	7439-95-4	
Manganese	0.426	mg/L	0.00500	0.000704	1	04/17/24 12:19	04/23/24 00:00	7439-96-5	
Molybdenum	0.00228J	mg/L	0.00500	0.000348	1	04/17/24 12:19	04/23/24 00:00	7439-98-7	J
Nickel	0.00214	mg/L	0.00200	0.000816	1	04/17/24 12:19	04/23/24 00:00	7440-02-0	
Potassium	5.48	mg/L	2.00	0.108	1	04/17/24 12:19	04/23/24 00:00	7440-09-7	
Selenium	0.000770J	mg/L	0.00200	0.000300	1	04/17/24 12:19	04/23/24 00:00	7782-49-2	J
Silver	<0.000070	mg/L	0.00200	0.000070	1	04/17/24 12:19	04/23/24 00:00	7440-22-4	
Sodium	84.5	mg/L	20.0	3.76	10	04/17/24 12:19	04/23/24 13:21	7440-23-5	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW07/SW-1 Lab ID: 60450682001 Collected: 04/10/24 08:20 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Thallium	<0.000121	mg/L	0.00200	0.000121	1	04/17/24 12:19	04/23/24 00:00	7440-28-0	
Vanadium	<0.000664	mg/L	0.00500	0.000664	1	04/17/24 12:19	04/23/24 00:00	7440-62-2	
Zinc	0.00349J	mg/L	0.0250	0.00302	1	04/17/24 12:19	04/23/24 00:00	7440-66-6	J
<b>Mercury 7470A</b>									
Analytical Method: EPA 7470A Preparation Method: 7470A									
Pace National - Mt. Juliet									
Mercury	<0.000100	mg/L	0.000200	0.000100	1	04/13/24 15:16	04/14/24 14:01	7439-97-6	
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
Acenaphthene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:44	83-32-9	
Acenaphthylene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:44	208-96-8	
Anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	120-12-7	
Benzo(a)anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	56-55-3	
Benzo(a)pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	50-32-8	
Benzo(b)fluoranthene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:44	205-99-2	
Benzo(g,h,i)perylene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:44	191-24-2	
Benzo(k)fluoranthene	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 01:44	207-08-9	
Benzoic Acid	<4.4	ug/L	50.0	4.4	1	04/16/24 18:23	04/19/24 01:44	65-85-0	
Benzyl alcohol	<1.6	ug/L	20.0	1.6	1	04/16/24 18:23	04/19/24 01:44	100-51-6	
4-Bromophenylphenyl ether	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	101-55-3	
Butylbenzylphthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 01:44	85-68-7	
Carbazole	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	86-74-8	
4-Chloro-3-methylphenol	<1.9	ug/L	20.0	1.9	1	04/16/24 18:23	04/19/24 01:44	59-50-7	
4-Chloroaniline	<2.0	ug/L	20.0	2.0	1	04/16/24 18:23	04/19/24 01:44	106-47-8	
bis(2-Chloroethoxy)methane	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 01:44	111-91-1	
bis(2-Chloroethyl) ether	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:44	111-44-4	
bis(2-Chloroisopropyl) ether	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 01:44	108-60-1	
2-Chloronaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:44	91-58-7	
2-Chlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:44	95-57-8	
4-Chlorophenylphenyl ether	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:44	7005-72-3	
Chrysene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:44	53-70-3	
Dibenzofuran	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	132-64-9	
1,2-Dichlorobenzene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:44	95-50-1	
1,3-Dichlorobenzene	<1.5	ug/L	10.0	1.5	1	04/16/24 18:23	04/19/24 01:44	541-73-1	
1,4-Dichlorobenzene	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 01:44	106-46-7	
3,3'-Dichlorobenzidine	<3.9	ug/L	20.0	3.9	1	04/16/24 18:23	04/19/24 01:44	91-94-1	
2,4-Dichlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:44	120-83-2	
Diethylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:44	84-66-2	
2,4-Dimethylphenol	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:44	105-67-9	
Dimethylphthalate	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:44	131-11-3	
Di-n-butylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:44	84-74-2	
4,6-Dinitro-2-methylphenol	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 01:44	534-52-1	
2,4-Dinitrophenol	<2.5	ug/L	50.0	2.5	1	04/16/24 18:23	04/19/24 01:44	51-28-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

**Sample:** SW07/SW-1      **Lab ID:** 60450682001      Collected: 04/10/24 08:20      Received: 04/10/24 16:35      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270    Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
2,4-Dinitrotoluene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	121-14-2	
2,6-Dinitrotoluene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 01:44	606-20-2	
Di-n-octylphthalate	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 01:44	117-84-0	
bis(2-Ethylhexyl)phthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 01:44	117-81-7	
Fluoranthene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	206-44-0	
Fluorene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	86-73-7	
Hexachloro-1,3-butadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 01:44	87-68-3	
Hexachlorobenzene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:44	118-74-1	
Hexachlorocyclopentadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 01:44	77-47-4	
Hexachloroethane	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 01:44	67-72-1	
Indeno(1,2,3-cd)pyrene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:44	193-39-5	
Isophorone	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:44	78-59-1	
2-Methylnaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 01:44	91-57-6	
2-Methylphenol(o-Cresol)	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 01:44	95-48-7	
3&4-Methylphenol(m&p Cresol)	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 01:44	15831-10-4	
Naphthalene	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 01:44	91-20-3	
2-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 01:44	88-74-4	
3-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 01:44	99-09-2	M1
4-Nitroaniline	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 01:44	100-01-6	
Nitrobenzene	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 01:44	98-95-3	
2-Nitrophenol	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	88-75-5	
4-Nitrophenol	<0.37	ug/L	50.0	0.37	1	04/16/24 18:23	04/19/24 01:44	100-02-7	
N-Nitroso-di-n-propylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	621-64-7	
N-Nitrosodiphenylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	86-30-6	
Pentachlorophenol	<3.5	ug/L	50.0	3.5	1	04/16/24 18:23	04/19/24 01:44	87-86-5	
Phenanthrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	85-01-8	
Phenol	<0.83	ug/L	10.0	0.83	1	04/16/24 18:23	04/19/24 01:44	108-95-2	
Pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	129-00-0	M1
Pyridine	<1.1	ug/L	10.0	1.1	1	04/16/24 18:23	04/19/24 01:44	110-86-1	R1
1,2,4-Trichlorobenzene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 01:44	120-82-1	
2,4,5-Trichlorophenol	<1.7	ug/L	25.0	1.7	1	04/16/24 18:23	04/19/24 01:44	95-95-4	
2,4,6-Trichlorophenol	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 01:44	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	57	%	30-120		1	04/16/24 18:23	04/19/24 01:44	4165-60-0	
2-Fluorobiphenyl (S)	50	%	25-120		1	04/16/24 18:23	04/19/24 01:44	321-60-8	
Terphenyl-d14 (S)	57	%	35-125		1	04/16/24 18:23	04/19/24 01:44	1718-51-0	
Phenol-d6 (S)	32	%	10-120		1	04/16/24 18:23	04/19/24 01:44	13127-88-3	
2-Fluorophenol (S)	43	%	20-120		1	04/16/24 18:23	04/19/24 01:44	367-12-4	
2,4,6-Tribromophenol (S)	56	%	25-120		1	04/16/24 18:23	04/19/24 01:44	118-79-6	

**8270 MSSV DRO/ORO**

Analytical Method: EPA 8270    Preparation Method: EPA 3511

Pace Analytical Services - Kansas City

TPH-ORO	<b>0.56J</b>	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 13:50		B
TPH-DRO	<b>0.50J</b>	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 13:50		B

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW07/SW-1 Lab ID: 60450682001 Collected: 04/10/24 08:20 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/17/24 10:51	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/17/24 10:51	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/17/24 10:51	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 10:51	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 10:51	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/17/24 10:51	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/17/24 10:51	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/17/24 10:51	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/17/24 10:51	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/17/24 10:51	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:51	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/17/24 10:51	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/17/24 10:51	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/17/24 10:51	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/17/24 10:51	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/17/24 10:51	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/17/24 10:51	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/17/24 10:51	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/17/24 10:51	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/17/24 10:51	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/17/24 10:51	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/17/24 10:51	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/17/24 10:51	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:51	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:51	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:51	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 10:51	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/17/24 10:51	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/17/24 10:51	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/17/24 10:51	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/17/24 10:51	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:51	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/17/24 10:51	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/17/24 10:51	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/17/24 10:51	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/17/24 10:51	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/17/24 10:51	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/17/24 10:51	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/17/24 10:51	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:51	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/17/24 10:51	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/17/24 10:51	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/17/24 10:51	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:51	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/17/24 10:51	75-09-2	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

**Sample: SW07/SW-1**      **Lab ID: 60450682001**      Collected: 04/10/24 08:20      Received: 04/10/24 16:35      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/17/24 10:51	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/17/24 10:51	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/17/24 10:51	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:51	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:51	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/17/24 10:51	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/17/24 10:51	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/17/24 10:51	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/17/24 10:51	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/17/24 10:51	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/17/24 10:51	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/17/24 10:51	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/17/24 10:51	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/17/24 10:51	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 10:51	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/17/24 10:51	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/17/24 10:51	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/17/24 10:51	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/17/24 10:51	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/17/24 10:51	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	102	%	80-120		1		04/17/24 10:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		04/17/24 10:51	2199-69-1	
Toluene-d8 (S)	103	%	80-120		1		04/17/24 10:51	2037-26-5	
Preservation pH	1.0		0.10		1		04/17/24 10:51		
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Kansas City									
TPH-GRO	<62.6	ug/L	500	62.6	1		04/11/24 14:01		
<b>Surrogates</b>									
Toluene-d8 (S)	99	%	80-120		1		04/11/24 14:01	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120		1		04/11/24 14:01	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/11/24 14:01	2199-69-1	
Preservation pH	11.0		0.10		1		04/11/24 14:01		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B									
Pace Analytical Services - Kansas City									
Alkalinity, Total as CaCO3	349	mg/L	20.0	10.5	1		04/12/24 11:17		
<b>4500 OG Oxygen, Dissolved</b>									
Analytical Method: SM 4500-O G									
Pace Analytical Services - Kansas City									
Oxygen, Dissolved	10.2	mg/L	0.10	0.10	1		04/15/24 16:10	7782-44-7	H6

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**ANALYTICAL RESULTS**

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW07/SW-1 Lab ID: 60450682001 Collected: 04/10/24 08:20 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide, Total</b>	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	<b>0.045J</b>	mg/L	0.050	0.016	1		04/15/24 09:13	18496-25-8	M1,R1
<b>9040 pH</b>	Analytical Method: EPA 9040 Pace Analytical Services - Kansas City								
pH at 25 Degrees C	<b>7.9</b>	Std. Units	0.10	0.10	1		04/23/24 14:08		H6
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Fluoride	<b>&lt;0.12</b>	mg/L	0.20	0.12	1		04/16/24 16:56	16984-48-8	N2
Sulfate	<b>324</b>	mg/L	50.0	27.5	50		04/16/24 17:56	14808-79-8	
<b>350.1 Ammonia</b>	Analytical Method: EPA 350.1 Pace Analytical Services - Kansas City								
Nitrogen, Ammonia	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/19/24 13:15	7664-41-7	M1
<b>353.2 Nitrogen, NO2/NO3 unpres</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/11/24 14:25		M1,R1
Nitrogen, Nitrate	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/11/24 14:25	14797-55-8	
Nitrogen, Nitrite	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/11/24 14:25	14797-65-0	L1,M0, R1
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/12/24 17:13		M1
<b>4500CNE Cyanide, Total</b>	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City								
Cyanide	<b>&lt;0.0038</b>	mg/L	0.0050	0.0038	1	04/22/24 17:00	04/23/24 13:49	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW06/SW-1 Lab ID: 60450682002 Collected: 04/10/24 10:20 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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#### Pesticides (GC) 8081B

Analytical Method: EPA 8081B Preparation Method: 3510C  
Pace National - Mt. Juliet

Aldrin	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:05	309-00-2	
alpha-BHC	0.0000187 J	mg/L	0.000050 0	0.000017 2	1	04/14/24 17:13	04/14/24 22:05	319-84-6	J
beta-BHC	<0.000020 8	mg/L	0.000050 0	0.000020 8	1	04/14/24 17:13	04/14/24 22:05	319-85-7	
delta-BHC	<0.000015 0	mg/L	0.000050 0	0.000015 0	1	04/14/24 17:13	04/14/24 22:05	319-86-8	
gamma-BHC (Lindane)	<0.000020 9	mg/L	0.000050 0	0.000020 9	1	04/14/24 17:13	04/14/24 22:05	58-89-9	
Chlordane (Technical)	<0.000019 8	mg/L	0.00500 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:05	57-74-9	
4,4'-DDD	<0.000017 7	mg/L	0.000050 0	0.000017 7	1	04/14/24 17:13	04/14/24 22:05	72-54-8	
4,4'-DDE	<0.000015 4	mg/L	0.000050 0	0.000015 4	1	04/14/24 17:13	04/14/24 22:05	72-55-9	
4,4'-DDT	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:05	50-29-3	
Dieldrin	<0.000016 2	mg/L	0.000050 0	0.000016 2	1	04/14/24 17:13	04/14/24 22:05	60-57-1	
Endosulfan I	<0.000016 0	mg/L	0.000050 0	0.000016 0	1	04/14/24 17:13	04/14/24 22:05	959-98-8	
Endosulfan II	<0.000016 4	mg/L	0.000050 0	0.000016 4	1	04/14/24 17:13	04/14/24 22:05	33213-65-9	
Endosulfan sulfate	<0.000021 7	mg/L	0.000050 0	0.000021 7	1	04/14/24 17:13	04/14/24 22:05	1031-07-8	
Endrin	<0.000016 1	mg/L	0.000050 0	0.000016 1	1	04/14/24 17:13	04/14/24 22:05	72-20-8	
Endrin aldehyde	<0.000023 7	mg/L	0.000050 0	0.000023 7	1	04/14/24 17:13	04/14/24 22:05	7421-93-4	
Endrin ketone	<0.000021 9	mg/L	0.000050 0	0.000021 9	1	04/14/24 17:13	04/14/24 22:05	53494-70-5	
Hexachlorobenzene	<0.000017 6	mg/L	0.000050 0	0.000017 6	1	04/14/24 17:13	04/14/24 22:05	118-74-1	
Heptachlor	<0.000014 8	mg/L	0.000050 0	0.000014 8	1	04/14/24 17:13	04/14/24 22:05	76-44-8	
Heptachlor epoxide	<0.000018 3	mg/L	0.000050 0	0.000018 3	1	04/14/24 17:13	04/14/24 22:05	1024-57-3	
Methoxychlor	<0.000019 3	mg/L	0.000050 0	0.000019 3	1	04/14/24 17:13	04/14/24 22:05	72-43-5	
Toxaphene	<0.000168	mg/L	0.000500	0.000168	1	04/14/24 17:13	04/14/24 22:05	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	47.1	%	10.0-128		1	04/14/24 17:13	04/14/24 22:05	2051-24-3	
Tetrachloro-m-xylene (S)	58.9	%	10.0-127		1	04/14/24 17:13	04/14/24 22:05	877-09-8	

#### Chlorinated Herb. (GC) 8151A

Analytical Method: EPA 8151A Preparation Method: 8151A  
Pace National - Mt. Juliet

2,4-D	<0.000591	mg/L	0.00216	0.000591	1.08	04/16/24 14:37	04/19/24 03:27	94-75-7	
Dalapon	<0.000372	mg/L	0.00216	0.000372	1.08	04/16/24 14:37	04/19/24 03:27	127-20-8	
2,4-DB	<0.000326	mg/L	0.00216	0.000326	1.08	04/16/24 14:37	04/20/24 01:06	94-82-6	
Dicamba	<0.000265	mg/L	0.00216	0.000265	1.08	04/16/24 14:37	04/19/24 03:27	1918-00-9	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW06/SW-1 Lab ID: 60450682002 Collected: 04/10/24 10:20 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
Dichlorprop	<0.00112	mg/L	0.00216	0.00112	1.08	04/16/24 14:37	04/19/24 03:27	120-36-5	
Dinoseb	<0.000270	mg/L	0.00216	0.000270	1.08	04/16/24 14:37	04/20/24 01:06	88-85-7	
MCPA	<0.0141	mg/L	0.108	0.0141	1.08	04/16/24 14:37	04/19/24 03:27	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.0713	mg/L	0.108	0.0713	1.08	04/16/24 14:37	04/19/24 03:27	93-65-2	
2,4,5-T	<0.000279	mg/L	0.00216	0.000279	1.08	04/16/24 14:37	04/19/24 03:27	93-76-5	
2,4,5-TP (Silvex)	<0.000362	mg/L	0.00216	0.000362	1.08	04/16/24 14:37	04/19/24 03:27	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	75.2	%	14.0-158		1.08	04/16/24 14:37	04/19/24 03:27	19719-28-9	
2,4-DCAA (S)	83.7	%	14.0-158		1.08	04/16/24 14:37	04/20/24 01:06	19719-28-9	
<b>8082 GCS PCB, LV</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<0.15	ug/L	1.0	0.15	1	04/16/24 12:05	04/17/24 13:40	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:40	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:40	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:40	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:40	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:40	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.19	ug/L	1.0	0.19	1	04/16/24 12:05	04/17/24 13:40	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	65	%	20-120		1	04/16/24 12:05	04/17/24 13:40	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Aluminum	0.236	mg/L	0.100	0.0185	1	04/17/24 12:19	04/23/24 00:35	7429-90-5	
Antimony	0.00168J	mg/L	0.00400	0.00103	1	04/17/24 12:19	04/23/24 00:35	7440-36-0	J
Arsenic	0.00100J	mg/L	0.00200	0.000180	1	04/17/24 12:19	04/23/24 00:35	7440-38-2	J
Barium	0.0599	mg/L	0.00200	0.000381	1	04/17/24 12:19	04/23/24 00:35	7440-39-3	
Beryllium	<0.000190	mg/L	0.00200	0.000190	1	04/17/24 12:19	04/23/24 00:35	7440-41-7	
Cadmium	<0.000150	mg/L	0.00100	0.000150	1	04/17/24 12:19	04/23/24 00:35	7440-43-9	
Calcium	128	mg/L	10.0	0.936	10	04/17/24 12:19	04/23/24 13:27	7440-70-2	
Chromium	<0.00124	mg/L	0.00200	0.00124	1	04/17/24 12:19	04/23/24 00:35	7440-47-3	
Copper	0.00232J	mg/L	0.00500	0.00151	1	04/17/24 12:19	04/23/24 00:35	7440-50-8	J
Cobalt	0.000614J	mg/L	0.00200	0.000059	1	04/17/24 12:19	04/23/24 00:35	7440-48-4	J
Iron	0.767	mg/L	0.100	0.0281	1	04/17/24 12:19	04/23/24 00:35	7439-89-6	
Lead	<0.000849	mg/L	0.00200	0.000849	1	04/17/24 12:19	04/23/24 00:35	7439-92-1	
Magnesium	60.8	mg/L	10.0	0.735	10	04/17/24 12:19	04/23/24 13:27	7439-95-4	
Manganese	0.428	mg/L	0.0500	0.00704	10	04/17/24 12:19	04/23/24 13:27	7439-96-5	
Molybdenum	0.00216J	mg/L	0.00500	0.000348	1	04/17/24 12:19	04/23/24 00:35	7439-98-7	J
Nickel	0.00288	mg/L	0.00200	0.000816	1	04/17/24 12:19	04/23/24 00:35	7440-02-0	
Potassium	5.68	mg/L	2.00	0.108	1	04/17/24 12:19	04/23/24 00:35	7440-09-7	
Selenium	0.000759J	mg/L	0.00200	0.000300	1	04/17/24 12:19	04/23/24 00:35	7782-49-2	J
Silver	<0.000070	mg/L	0.00200	0.000070	1	04/17/24 12:19	04/23/24 00:35	7440-22-4	
Sodium	82.3	mg/L	20.0	3.76	10	04/17/24 12:19	04/23/24 13:27	7440-23-5	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW06/SW-1 Lab ID: 60450682002 Collected: 04/10/24 10:20 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Thallium	<0.000121	mg/L	0.00200	0.000121	1	04/17/24 12:19	04/23/24 00:35	7440-28-0	
Vanadium	0.00101J	mg/L	0.00500	0.000664	1	04/17/24 12:19	04/23/24 00:35	7440-62-2	J
Zinc	0.00581J	mg/L	0.0250	0.00302	1	04/17/24 12:19	04/23/24 00:35	7440-66-6	J
<b>Mercury 7470A</b>									
Analytical Method: EPA 7470A Preparation Method: 7470A									
Pace National - Mt. Juliet									
Mercury	<0.000100	mg/L	0.000200	0.000100	1	04/13/24 15:16	04/14/24 14:33	7439-97-6	
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
Acenaphthene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 02:49	83-32-9	
Acenaphthylene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 02:49	208-96-8	
Anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	120-12-7	
Benzo(a)anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	56-55-3	
Benzo(a)pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	50-32-8	
Benzo(b)fluoranthene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 02:49	205-99-2	
Benzo(g,h,i)perylene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 02:49	191-24-2	
Benzo(k)fluoranthene	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 02:49	207-08-9	
Benzoic Acid	<4.4	ug/L	50.0	4.4	1	04/16/24 18:23	04/19/24 02:49	65-85-0	
Benzyl alcohol	<1.6	ug/L	20.0	1.6	1	04/16/24 18:23	04/19/24 02:49	100-51-6	
4-Bromophenylphenyl ether	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	101-55-3	
Butylbenzylphthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 02:49	85-68-7	
Carbazole	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	86-74-8	
4-Chloro-3-methylphenol	<1.9	ug/L	20.0	1.9	1	04/16/24 18:23	04/19/24 02:49	59-50-7	
4-Chloroaniline	<2.0	ug/L	20.0	2.0	1	04/16/24 18:23	04/19/24 02:49	106-47-8	
bis(2-Chloroethoxy)methane	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 02:49	111-91-1	
bis(2-Chloroethyl) ether	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 02:49	111-44-4	
bis(2-Chloroisopropyl) ether	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 02:49	108-60-1	
2-Chloronaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 02:49	91-58-7	
2-Chlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 02:49	95-57-8	
4-Chlorophenylphenyl ether	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 02:49	7005-72-3	
Chrysene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 02:49	53-70-3	
Dibenzofuran	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	132-64-9	
1,2-Dichlorobenzene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 02:49	95-50-1	
1,3-Dichlorobenzene	<1.5	ug/L	10.0	1.5	1	04/16/24 18:23	04/19/24 02:49	541-73-1	
1,4-Dichlorobenzene	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 02:49	106-46-7	
3,3'-Dichlorobenzidine	<3.9	ug/L	20.0	3.9	1	04/16/24 18:23	04/19/24 02:49	91-94-1	
2,4-Dichlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 02:49	120-83-2	
Diethylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 02:49	84-66-2	
2,4-Dimethylphenol	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 02:49	105-67-9	
Dimethylphthalate	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 02:49	131-11-3	
Di-n-butylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 02:49	84-74-2	
4,6-Dinitro-2-methylphenol	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 02:49	534-52-1	
2,4-Dinitrophenol	<2.5	ug/L	50.0	2.5	1	04/16/24 18:23	04/19/24 02:49	51-28-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW06/SW-1 Lab ID: 60450682002 Collected: 04/10/24 10:20 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
2,4-Dinitrotoluene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	121-14-2	
2,6-Dinitrotoluene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 02:49	606-20-2	
Di-n-octylphthalate	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 02:49	117-84-0	
bis(2-Ethylhexyl)phthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 02:49	117-81-7	
Fluoranthene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	206-44-0	
Fluorene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	86-73-7	
Hexachloro-1,3-butadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 02:49	87-68-3	
Hexachlorobenzene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 02:49	118-74-1	
Hexachlorocyclopentadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 02:49	77-47-4	
Hexachloroethane	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 02:49	67-72-1	
Indeno(1,2,3-cd)pyrene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 02:49	193-39-5	
Isophorone	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 02:49	78-59-1	
2-Methylnaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 02:49	91-57-6	
2-Methylphenol(o-Cresol)	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 02:49	95-48-7	
3&4-Methylphenol(m&p Cresol)	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 02:49	15831-10-4	
Naphthalene	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 02:49	91-20-3	
2-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 02:49	88-74-4	
3-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 02:49	99-09-2	
4-Nitroaniline	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 02:49	100-01-6	
Nitrobenzene	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 02:49	98-95-3	
2-Nitrophenol	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	88-75-5	
4-Nitrophenol	<0.37	ug/L	50.0	0.37	1	04/16/24 18:23	04/19/24 02:49	100-02-7	
N-Nitroso-di-n-propylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	621-64-7	
N-Nitrosodiphenylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	86-30-6	
Pentachlorophenol	<3.5	ug/L	50.0	3.5	1	04/16/24 18:23	04/19/24 02:49	87-86-5	
Phenanthrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	85-01-8	
Phenol	<0.83	ug/L	10.0	0.83	1	04/16/24 18:23	04/19/24 02:49	108-95-2	
Pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	129-00-0	
Pyridine	<1.1	ug/L	10.0	1.1	1	04/16/24 18:23	04/19/24 02:49	110-86-1	
1,2,4-Trichlorobenzene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 02:49	120-82-1	
2,4,5-Trichlorophenol	<1.7	ug/L	25.0	1.7	1	04/16/24 18:23	04/19/24 02:49	95-95-4	
2,4,6-Trichlorophenol	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 02:49	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	67	%	30-120		1	04/16/24 18:23	04/19/24 02:49	4165-60-0	
2-Fluorobiphenyl (S)	60	%	25-120		1	04/16/24 18:23	04/19/24 02:49	321-60-8	
Terphenyl-d14 (S)	67	%	35-125		1	04/16/24 18:23	04/19/24 02:49	1718-51-0	
Phenol-d6 (S)	34	%	10-120		1	04/16/24 18:23	04/19/24 02:49	13127-88-3	
2-Fluorophenol (S)	46	%	20-120		1	04/16/24 18:23	04/19/24 02:49	367-12-4	
2,4,6-Tribromophenol (S)	68	%	25-120		1	04/16/24 18:23	04/19/24 02:49	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
TPH-ORO	0.66J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 14:48		B
TPH-DRO	0.51J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 14:48		B

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW06/SW-1 Lab ID: 60450682002 Collected: 04/10/24 10:20 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	101	%	40-140		1	04/11/24 12:40	04/18/24 14:48	4165-60-0	
2-Fluorobiphenyl (S)	99	%	30-145		1	04/11/24 12:40	04/18/24 14:48	321-60-8	
Terphenyl-d14 (S)	94	%	35-150		1	04/11/24 12:40	04/18/24 14:48	1718-51-0	
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/17/24 11:05	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/17/24 11:05	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/17/24 11:05	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 11:05	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 11:05	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/17/24 11:05	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/17/24 11:05	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/17/24 11:05	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/17/24 11:05	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/17/24 11:05	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:05	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/17/24 11:05	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/17/24 11:05	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/17/24 11:05	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/17/24 11:05	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/17/24 11:05	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/17/24 11:05	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/17/24 11:05	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/17/24 11:05	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/17/24 11:05	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/17/24 11:05	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/17/24 11:05	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/17/24 11:05	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:05	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:05	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:05	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 11:05	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/17/24 11:05	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/17/24 11:05	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/17/24 11:05	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/17/24 11:05	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:05	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/17/24 11:05	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/17/24 11:05	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/17/24 11:05	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/17/24 11:05	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/17/24 11:05	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/17/24 11:05	10061-01-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

**Sample: SW06/SW-1**      **Lab ID: 60450682002**      Collected: 04/10/24 10:20      Received: 04/10/24 16:35      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/17/24 11:05	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:05	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/17/24 11:05	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/17/24 11:05	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/17/24 11:05	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:05	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/17/24 11:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/17/24 11:05	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/17/24 11:05	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/17/24 11:05	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:05	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:05	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/17/24 11:05	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/17/24 11:05	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/17/24 11:05	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/17/24 11:05	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/17/24 11:05	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/17/24 11:05	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/17/24 11:05	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/17/24 11:05	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/17/24 11:05	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 11:05	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/17/24 11:05	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/17/24 11:05	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/17/24 11:05	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/17/24 11:05	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/17/24 11:05	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/17/24 11:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		04/17/24 11:05	2199-69-1	
Toluene-d8 (S)	106	%	80-120		1		04/17/24 11:05	2037-26-5	
Preservation pH	1.0		0.10		1		04/17/24 11:05		
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Kansas City									
TPH-GRO	<62.6	ug/L	500	62.6	1		04/11/24 14:16		
<b>Surrogates</b>									
Toluene-d8 (S)	98	%	80-120		1		04/11/24 14:16	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120		1		04/11/24 14:16	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		04/11/24 14:16	2199-69-1	
Preservation pH	11.0		0.10		1		04/11/24 14:16		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B									
Pace Analytical Services - Kansas City									
Alkalinity, Total as CaCO3	342	mg/L	20.0	10.5	1		04/12/24 11:29		

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW06/SW-1 Lab ID: 60450682002 Collected: 04/10/24 10:20 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500 OG Oxygen, Dissolved</b>	Analytical Method: SM 4500-O G Pace Analytical Services - Kansas City								
Oxygen, Dissolved	10.0	mg/L	0.10	0.10	1		04/15/24 16:10	7782-44-7	H6
<b>4500S2D Sulfide, Total</b>	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	<0.016	mg/L	0.050	0.016	1		04/15/24 09:13	18496-25-8	
<b>9040 pH</b>	Analytical Method: EPA 9040 Pace Analytical Services - Kansas City								
pH at 25 Degrees C	7.9	Std. Units	0.10	0.10	1		04/19/24 12:32		H6
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Fluoride	<0.12	mg/L	0.20	0.12	1		04/17/24 08:53	16984-48-8	N2
Sulfate	331	mg/L	50.0	27.5	50		04/17/24 09:08	14808-79-8	
<b>350.1 Ammonia</b>	Analytical Method: EPA 350.1 Pace Analytical Services - Kansas City								
Nitrogen, Ammonia	<0.069	mg/L	0.10	0.069	1		04/19/24 13:21	7664-41-7	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/11/24 14:32		
Nitrogen, Nitrate	<0.069	mg/L	0.10	0.069	1		04/11/24 14:32	14797-55-8	
Nitrogen, Nitrite	<0.069	mg/L	0.10	0.069	1		04/11/24 14:32	14797-65-0	L1
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/12/24 17:18		
<b>4500CNE Cyanide, Total</b>	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City								
Cyanide	<0.0038	mg/L	0.0050	0.0038	1	04/22/24 17:00	04/23/24 13:55	57-12-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: RINSATE-24-04-10 Lab ID: 60450682003 Collected: 04/10/24 10:30 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3510C									
Pace National - Mt. Juliet									
Aldrin	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:14	309-00-2	
alpha-BHC	<0.000017 2	mg/L	0.000050 0	0.000017 2	1	04/14/24 17:13	04/14/24 22:14	319-84-6	
beta-BHC	<0.000020 8	mg/L	0.000050 0	0.000020 8	1	04/14/24 17:13	04/14/24 22:14	319-85-7	
delta-BHC	<0.000015 0	mg/L	0.000050 0	0.000015 0	1	04/14/24 17:13	04/14/24 22:14	319-86-8	
gamma-BHC (Lindane)	<0.000020 9	mg/L	0.000050 0	0.000020 9	1	04/14/24 17:13	04/14/24 22:14	58-89-9	
Chlordane (Technical)	<0.000019 8	mg/L	0.00500 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:14	57-74-9	
4,4'-DDD	<0.000017 7	mg/L	0.000050 0	0.000017 7	1	04/14/24 17:13	04/14/24 22:14	72-54-8	
4,4'-DDE	<0.000015 4	mg/L	0.000050 0	0.000015 4	1	04/14/24 17:13	04/14/24 22:14	72-55-9	
4,4'-DDT	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:14	50-29-3	
Dieldrin	<0.000016 2	mg/L	0.000050 0	0.000016 2	1	04/14/24 17:13	04/14/24 22:14	60-57-1	
Endosulfan I	<0.000016 0	mg/L	0.000050 0	0.000016 0	1	04/14/24 17:13	04/14/24 22:14	959-98-8	
Endosulfan II	<0.000016 4	mg/L	0.000050 0	0.000016 4	1	04/14/24 17:13	04/14/24 22:14	33213-65-9	
Endosulfan sulfate	<0.000021 7	mg/L	0.000050 0	0.000021 7	1	04/14/24 17:13	04/14/24 22:14	1031-07-8	
Endrin	<0.000016 1	mg/L	0.000050 0	0.000016 1	1	04/14/24 17:13	04/14/24 22:14	72-20-8	
Endrin aldehyde	<0.000023 7	mg/L	0.000050 0	0.000023 7	1	04/14/24 17:13	04/14/24 22:14	7421-93-4	
Endrin ketone	<0.000021 9	mg/L	0.000050 0	0.000021 9	1	04/14/24 17:13	04/14/24 22:14	53494-70-5	
Hexachlorobenzene	<0.000017 6	mg/L	0.000050 0	0.000017 6	1	04/14/24 17:13	04/14/24 22:14	118-74-1	
Heptachlor	<0.000014 8	mg/L	0.000050 0	0.000014 8	1	04/14/24 17:13	04/14/24 22:14	76-44-8	
Heptachlor epoxide	<0.000018 3	mg/L	0.000050 0	0.000018 3	1	04/14/24 17:13	04/14/24 22:14	1024-57-3	
Methoxychlor	<0.000019 3	mg/L	0.000050 0	0.000019 3	1	04/14/24 17:13	04/14/24 22:14	72-43-5	
Toxaphene	<0.000168	mg/L	0.000500	0.000168	1	04/14/24 17:13	04/14/24 22:14	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	38.2	%	10.0-128		1	04/14/24 17:13	04/14/24 22:14	2051-24-3	
Tetrachloro-m-xylene (S)	61.2	%	10.0-127		1	04/14/24 17:13	04/14/24 22:14	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.000624	mg/L	0.00228	0.000624	1.14	04/16/24 14:37	04/19/24 03:38	94-75-7	
Dalapon	<0.000392	mg/L	0.00228	0.000392	1.14	04/16/24 14:37	04/19/24 03:38	127-20-8	
2,4-DB	<0.000344	mg/L	0.00228	0.000344	1.14	04/16/24 14:37	04/20/24 01:18	94-82-6	
Dicamba	<0.000279	mg/L	0.00228	0.000279	1.14	04/16/24 14:37	04/19/24 03:38	1918-00-9	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: RINSATE-24-04-10 Lab ID: 60450682003 Collected: 04/10/24 10:30 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
Dichlorprop	<0.00119	mg/L	0.00228	0.00119	1.14	04/16/24 14:37	04/19/24 03:38	120-36-5	
Dinoseb	<0.000285	mg/L	0.00228	0.000285	1.14	04/16/24 14:37	04/20/24 01:18	88-85-7	
MCPA	<0.0149	mg/L	0.114	0.0149	1.14	04/16/24 14:37	04/19/24 03:38	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.0752	mg/L	0.114	0.0752	1.14	04/16/24 14:37	04/19/24 03:38	93-65-2	
2,4,5-T	<0.000294	mg/L	0.00228	0.000294	1.14	04/16/24 14:37	04/19/24 03:38	93-76-5	
2,4,5-TP (Silvex)	<0.000382	mg/L	0.00228	0.000382	1.14	04/16/24 14:37	04/19/24 03:38	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	74.4	%	14.0-158		1.14	04/16/24 14:37	04/19/24 03:38	19719-28-9	
2,4-DCAA (S)	77.9	%	14.0-158		1.14	04/16/24 14:37	04/20/24 01:18	19719-28-9	
<b>8082 GCS PCB, LV</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<0.15	ug/L	1.0	0.15	1	04/16/24 12:05	04/17/24 13:48	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:48	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:48	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:48	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:48	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 13:48	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.19	ug/L	1.0	0.19	1	04/16/24 12:05	04/17/24 13:48	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	58	%	20-120		1	04/16/24 12:05	04/17/24 13:48	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Aluminum	<0.0185	mg/L	0.100	0.0185	1	04/17/24 12:16	04/23/24 00:38	7429-90-5	
Antimony	<0.00103	mg/L	0.00400	0.00103	1	04/17/24 12:16	04/23/24 00:38	7440-36-0	
Arsenic	<0.000180	mg/L	0.00200	0.000180	1	04/17/24 12:16	04/23/24 00:38	7440-38-2	
Barium	0.00114J	mg/L	0.00200	0.000381	1	04/17/24 12:16	04/23/24 00:38	7440-39-3	J
Beryllium	<0.000190	mg/L	0.00200	0.000190	1	04/17/24 12:16	04/23/24 00:38	7440-41-7	
Cadmium	<0.000150	mg/L	0.00100	0.000150	1	04/17/24 12:16	04/23/24 00:38	7440-43-9	
Calcium	<0.0936	mg/L	1.00	0.0936	1	04/17/24 12:16	04/23/24 00:38	7440-70-2	
Chromium	<0.00124	mg/L	0.00200	0.00124	1	04/17/24 12:16	04/23/24 00:38	7440-47-3	
Copper	<0.00151	mg/L	0.00500	0.00151	1	04/17/24 12:16	04/23/24 00:38	7440-50-8	
Cobalt	<0.000059	mg/L	0.00200	0.000059	1	04/17/24 12:16	04/23/24 00:38	7440-48-4	
	6				6				
Iron	<0.0281	mg/L	0.100	0.0281	1	04/17/24 12:16	04/23/24 00:38	7439-89-6	
Lead	<0.000849	mg/L	0.00200	0.000849	1	04/17/24 12:16	04/23/24 00:38	7439-92-1	
Magnesium	<0.0735	mg/L	1.00	0.0735	1	04/17/24 12:16	04/23/24 00:38	7439-95-4	
Manganese	<0.000704	mg/L	0.00500	0.000704	1	04/17/24 12:16	04/23/24 00:38	7439-96-5	
Molybdenum	<0.000348	mg/L	0.00500	0.000348	1	04/17/24 12:16	04/23/24 00:38	7439-98-7	
Nickel	<0.000816	mg/L	0.00200	0.000816	1	04/17/24 12:16	04/23/24 00:38	7440-02-0	
Potassium	<0.108	mg/L	2.00	0.108	1	04/17/24 12:16	04/23/24 00:38	7440-09-7	
Selenium	<0.000300	mg/L	0.00200	0.000300	1	04/17/24 12:16	04/23/24 00:38	7782-49-2	
Silver	<0.000070	mg/L	0.00200	0.000070	1	04/17/24 12:16	04/23/24 00:38	7440-22-4	
	0				0				
Sodium	<0.376	mg/L	2.00	0.376	1	04/17/24 12:16	04/23/24 00:38	7440-23-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: RINSATE-24-04-10 Lab ID: 60450682003 Collected: 04/10/24 10:30 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Thallium	<0.000121	mg/L	0.00200	0.000121	1	04/17/24 12:16	04/23/24 00:38	7440-28-0	
Vanadium	<0.000664	mg/L	0.00500	0.000664	1	04/17/24 12:16	04/23/24 00:38	7440-62-2	
Zinc	<0.00302	mg/L	0.0250	0.00302	1	04/17/24 12:16	04/23/24 00:38	7440-66-6	
<b>Mercury 7470A</b>									
Analytical Method: EPA 7470A Preparation Method: 7470A									
Pace National - Mt. Juliet									
Mercury	<0.000100	mg/L	0.000200	0.000100	1	04/13/24 15:16	04/14/24 14:35	7439-97-6	
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
Acenaphthene	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 03:11	83-32-9	
Acenaphthylene	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 03:11	208-96-8	
Anthracene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	120-12-7	
Benzo(a)anthracene	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 03:11	56-55-3	
Benzo(a)pyrene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	50-32-8	
Benzo(b)fluoranthene	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 03:11	205-99-2	
Benzo(g,h,i)perylene	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 03:11	191-24-2	
Benzo(k)fluoranthene	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 03:11	207-08-9	
Benzoic Acid	<4.4	ug/L	49.5	4.4	1	04/16/24 18:23	04/19/24 03:11	65-85-0	
Benzyl alcohol	<1.6	ug/L	19.8	1.6	1	04/16/24 18:23	04/19/24 03:11	100-51-6	
4-Bromophenylphenyl ether	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	101-55-3	
Butylbenzylphthalate	<2.4	ug/L	9.9	2.4	1	04/16/24 18:23	04/19/24 03:11	85-68-7	
Carbazole	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	86-74-8	
4-Chloro-3-methylphenol	<1.9	ug/L	19.8	1.9	1	04/16/24 18:23	04/19/24 03:11	59-50-7	
4-Chloroaniline	<2.0	ug/L	19.8	2.0	1	04/16/24 18:23	04/19/24 03:11	106-47-8	
bis(2-Chloroethoxy)methane	<2.2	ug/L	9.9	2.2	1	04/16/24 18:23	04/19/24 03:11	111-91-1	
bis(2-Chloroethyl) ether	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 03:11	111-44-4	
bis(2-Chloroisopropyl) ether	<2.2	ug/L	9.9	2.2	1	04/16/24 18:23	04/19/24 03:11	108-60-1	
2-Chloronaphthalene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	91-58-7	
2-Chlorophenol	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 03:11	95-57-8	
4-Chlorophenylphenyl ether	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 03:11	7005-72-3	
Chrysene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 03:11	53-70-3	
Dibenzofuran	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	132-64-9	
1,2-Dichlorobenzene	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 03:11	95-50-1	
1,3-Dichlorobenzene	<1.5	ug/L	9.9	1.5	1	04/16/24 18:23	04/19/24 03:11	541-73-1	
1,4-Dichlorobenzene	<1.7	ug/L	9.9	1.7	1	04/16/24 18:23	04/19/24 03:11	106-46-7	
3,3'-Dichlorobenzidine	<3.9	ug/L	19.8	3.9	1	04/16/24 18:23	04/19/24 03:11	91-94-1	
2,4-Dichlorophenol	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 03:11	120-83-2	
Diethylphthalate	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 03:11	84-66-2	
2,4-Dimethylphenol	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 03:11	105-67-9	
Dimethylphthalate	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 03:11	131-11-3	
Di-n-butylphthalate	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 03:11	84-74-2	
4,6-Dinitro-2-methylphenol	<2.1	ug/L	49.5	2.1	1	04/16/24 18:23	04/19/24 03:11	534-52-1	
2,4-Dinitrophenol	<2.5	ug/L	49.5	2.5	1	04/16/24 18:23	04/19/24 03:11	51-28-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: RINSATE-24-04-10 Lab ID: 60450682003 Collected: 04/10/24 10:30 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
2,4-Dinitrotoluene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	121-14-2	
2,6-Dinitrotoluene	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 03:11	606-20-2	
Di-n-octylphthalate	<2.2	ug/L	9.9	2.2	1	04/16/24 18:23	04/19/24 03:11	117-84-0	
bis(2-Ethylhexyl)phthalate	<2.3	ug/L	9.9	2.3	1	04/16/24 18:23	04/19/24 03:11	117-81-7	
Fluoranthene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	206-44-0	
Fluorene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	86-73-7	
Hexachloro-1,3-butadiene	<1.6	ug/L	9.9	1.6	1	04/16/24 18:23	04/19/24 03:11	87-68-3	
Hexachlorobenzene	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 03:11	118-74-1	
Hexachlorocyclopentadiene	<1.6	ug/L	9.9	1.6	1	04/16/24 18:23	04/19/24 03:11	77-47-4	
Hexachloroethane	<1.4	ug/L	9.9	1.4	1	04/16/24 18:23	04/19/24 03:11	67-72-1	
Indeno(1,2,3-cd)pyrene	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 03:11	193-39-5	
Isophorone	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 03:11	78-59-1	
2-Methylnaphthalene	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 03:11	91-57-6	
2-Methylphenol(o-Cresol)	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 03:11	95-48-7	
3&4-Methylphenol(m&p Cresol)	<1.6	ug/L	9.9	1.6	1	04/16/24 18:23	04/19/24 03:11	15831-10-4	
Naphthalene	<2.3	ug/L	9.9	2.3	1	04/16/24 18:23	04/19/24 03:11	91-20-3	
2-Nitroaniline	<1.9	ug/L	49.5	1.9	1	04/16/24 18:23	04/19/24 03:11	88-74-4	
3-Nitroaniline	<1.8	ug/L	49.5	1.8	1	04/16/24 18:23	04/19/24 03:11	99-09-2	
4-Nitroaniline	<2.2	ug/L	49.5	2.2	1	04/16/24 18:23	04/19/24 03:11	100-01-6	
Nitrobenzene	<2.3	ug/L	9.9	2.3	1	04/16/24 18:23	04/19/24 03:11	98-95-3	
2-Nitrophenol	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 03:11	88-75-5	
4-Nitrophenol	<0.37	ug/L	49.5	0.37	1	04/16/24 18:23	04/19/24 03:11	100-02-7	
N-Nitroso-di-n-propylamine	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	621-64-7	
N-Nitrosodiphenylamine	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	86-30-6	
Pentachlorophenol	<3.5	ug/L	49.5	3.5	1	04/16/24 18:23	04/19/24 03:11	87-86-5	
Phenanthrene	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 03:11	85-01-8	
Phenol	<0.82	ug/L	9.9	0.82	1	04/16/24 18:23	04/19/24 03:11	108-95-2	
Pyrene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	129-00-0	
Pyridine	<1.1	ug/L	9.9	1.1	1	04/16/24 18:23	04/19/24 03:11	110-86-1	
1,2,4-Trichlorobenzene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 03:11	120-82-1	
2,4,5-Trichlorophenol	<1.7	ug/L	24.8	1.7	1	04/16/24 18:23	04/19/24 03:11	95-95-4	
2,4,6-Trichlorophenol	<1.4	ug/L	9.9	1.4	1	04/16/24 18:23	04/19/24 03:11	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	80	%	30-120		1	04/16/24 18:23	04/19/24 03:11	4165-60-0	
2-Fluorobiphenyl (S)	71	%	25-120		1	04/16/24 18:23	04/19/24 03:11	321-60-8	
Terphenyl-d14 (S)	82	%	35-125		1	04/16/24 18:23	04/19/24 03:11	1718-51-0	
Phenol-d6 (S)	42	%	10-120		1	04/16/24 18:23	04/19/24 03:11	13127-88-3	
2-Fluorophenol (S)	57	%	20-120		1	04/16/24 18:23	04/19/24 03:11	367-12-4	
2,4,6-Tribromophenol (S)	85	%	25-120		1	04/16/24 18:23	04/19/24 03:11	118-79-6	

**8270 MSSV DRO/ORO**

Analytical Method: EPA 8270 Preparation Method: EPA 3511

Pace Analytical Services - Kansas City

TPH-ORO	0.50J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 15:08		B
TPH-DRO	0.57J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 15:08		B

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: RINSATE-24-04-10 Lab ID: 60450682003 Collected: 04/10/24 10:30 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	101	%	40-140		1	04/11/24 12:40	04/18/24 15:08	4165-60-0	
2-Fluorobiphenyl (S)	98	%	30-145		1	04/11/24 12:40	04/18/24 15:08	321-60-8	
Terphenyl-d14 (S)	99	%	35-150		1	04/11/24 12:40	04/18/24 15:08	1718-51-0	
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/17/24 10:37	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/17/24 10:37	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/17/24 10:37	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 10:37	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 10:37	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/17/24 10:37	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/17/24 10:37	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/17/24 10:37	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/17/24 10:37	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/17/24 10:37	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:37	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/17/24 10:37	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/17/24 10:37	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/17/24 10:37	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/17/24 10:37	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/17/24 10:37	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/17/24 10:37	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/17/24 10:37	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/17/24 10:37	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/17/24 10:37	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/17/24 10:37	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/17/24 10:37	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/17/24 10:37	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:37	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:37	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:37	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 10:37	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/17/24 10:37	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/17/24 10:37	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/17/24 10:37	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/17/24 10:37	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:37	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/17/24 10:37	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/17/24 10:37	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/17/24 10:37	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/17/24 10:37	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/17/24 10:37	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/17/24 10:37	10061-01-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

**Sample: RINSATE-24-04-10**      **Lab ID: 60450682003**      Collected: 04/10/24 10:30      Received: 04/10/24 16:35      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/17/24 10:37	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:37	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/17/24 10:37	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/17/24 10:37	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/17/24 10:37	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:37	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/17/24 10:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/17/24 10:37	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/17/24 10:37	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/17/24 10:37	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:37	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:37	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/17/24 10:37	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/17/24 10:37	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/17/24 10:37	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/17/24 10:37	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/17/24 10:37	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/17/24 10:37	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/17/24 10:37	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/17/24 10:37	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/17/24 10:37	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 10:37	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/17/24 10:37	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/17/24 10:37	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/17/24 10:37	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/17/24 10:37	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/17/24 10:37	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	80-120		1		04/17/24 10:37	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1		04/17/24 10:37	2199-69-1	
Toluene-d8 (S)	106	%	80-120		1		04/17/24 10:37	2037-26-5	
Preservation pH	1.0		0.10		1		04/17/24 10:37		
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Kansas City									
TPH-GRO	<62.6	ug/L	500	62.6	1		04/11/24 14:30		
<b>Surrogates</b>									
Toluene-d8 (S)	99	%	80-120		1		04/11/24 14:30	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120		1		04/11/24 14:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/11/24 14:30	2199-69-1	
Preservation pH	11.0		0.10		1		04/11/24 14:30		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<0.069	mg/L	0.10	0.069	1		04/19/24 13:22	7664-41-7	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: RINSATE-24-04-10 Lab ID: 60450682003 Collected: 04/10/24 10:30 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>353.2 Nitrogen, NO2/NO3 unpres</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/11/24 14:34		
Nitrogen, Nitrate	<0.069	mg/L	0.10	0.069	1		04/11/24 14:34	14797-55-8	
Nitrogen, Nitrite	<0.069	mg/L	0.10	0.069	1		04/11/24 14:34	14797-65-0	L1
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/12/24 17:20		
<b>4500CNE Cyanide, Total</b>	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City								
Cyanide	<0.0038	mg/L	0.0050	0.0038	1	04/22/24 17:00	04/23/24 13:56	57-12-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW05/SW-1 Lab ID: 60450682004 Collected: 04/10/24 11:15 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3510C									
Pace National - Mt. Juliet									
Aldrin	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:23	309-00-2	
alpha-BHC	<0.000017 2	mg/L	0.000050 0	0.000017 2	1	04/14/24 17:13	04/14/24 22:23	319-84-6	
beta-BHC	<0.000020 8	mg/L	0.000050 0	0.000020 8	1	04/14/24 17:13	04/14/24 22:23	319-85-7	
delta-BHC	<0.000015 0	mg/L	0.000050 0	0.000015 0	1	04/14/24 17:13	04/14/24 22:23	319-86-8	
gamma-BHC (Lindane)	<0.000020 9	mg/L	0.000050 0	0.000020 9	1	04/14/24 17:13	04/14/24 22:23	58-89-9	
Chlordane (Technical)	<0.000019 8	mg/L	0.00500 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:23	57-74-9	
4,4'-DDD	<0.000017 7	mg/L	0.000050 0	0.000017 7	1	04/14/24 17:13	04/14/24 22:23	72-54-8	
4,4'-DDE	<0.000015 4	mg/L	0.000050 0	0.000015 4	1	04/14/24 17:13	04/14/24 22:23	72-55-9	
4,4'-DDT	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:23	50-29-3	
Dieldrin	<0.000016 2	mg/L	0.000050 0	0.000016 2	1	04/14/24 17:13	04/14/24 22:23	60-57-1	
Endosulfan I	<0.000016 0	mg/L	0.000050 0	0.000016 0	1	04/14/24 17:13	04/14/24 22:23	959-98-8	
Endosulfan II	<0.000016 4	mg/L	0.000050 0	0.000016 4	1	04/14/24 17:13	04/14/24 22:23	33213-65-9	
Endosulfan sulfate	<0.000021 7	mg/L	0.000050 0	0.000021 7	1	04/14/24 17:13	04/14/24 22:23	1031-07-8	
Endrin	<0.000016 1	mg/L	0.000050 0	0.000016 1	1	04/14/24 17:13	04/14/24 22:23	72-20-8	
Endrin aldehyde	<0.000023 7	mg/L	0.000050 0	0.000023 7	1	04/14/24 17:13	04/14/24 22:23	7421-93-4	
Endrin ketone	<0.000021 9	mg/L	0.000050 0	0.000021 9	1	04/14/24 17:13	04/14/24 22:23	53494-70-5	
Hexachlorobenzene	<0.000017 6	mg/L	0.000050 0	0.000017 6	1	04/14/24 17:13	04/14/24 22:23	118-74-1	
Heptachlor	<0.000014 8	mg/L	0.000050 0	0.000014 8	1	04/14/24 17:13	04/14/24 22:23	76-44-8	
Heptachlor epoxide	<0.000018 3	mg/L	0.000050 0	0.000018 3	1	04/14/24 17:13	04/14/24 22:23	1024-57-3	
Methoxychlor	<0.000019 3	mg/L	0.000050 0	0.000019 3	1	04/14/24 17:13	04/14/24 22:23	72-43-5	
Toxaphene	<0.000168	mg/L	0.000500	0.000168	1	04/14/24 17:13	04/14/24 22:23	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	53.4	%	10.0-128		1	04/14/24 17:13	04/14/24 22:23	2051-24-3	
Tetrachloro-m-xylene (S)	65.1	%	10.0-127		1	04/14/24 17:13	04/14/24 22:23	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.000624	mg/L	0.00228	0.000624	1.14	04/16/24 14:37	04/19/24 03:50	94-75-7	
Dalapon	<0.000392	mg/L	0.00228	0.000392	1.14	04/16/24 14:37	04/19/24 03:50	127-20-8	
2,4-DB	<0.000344	mg/L	0.00228	0.000344	1.14	04/16/24 14:37	04/20/24 01:29	94-82-6	
Dicamba	<0.000279	mg/L	0.00228	0.000279	1.14	04/16/24 14:37	04/19/24 03:50	1918-00-9	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW05/SW-1 Lab ID: 60450682004 Collected: 04/10/24 11:15 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
Dichlorprop	<0.00119	mg/L	0.00228	0.00119	1.14	04/16/24 14:37	04/19/24 03:50	120-36-5	
Dinoseb	<0.000285	mg/L	0.00228	0.000285	1.14	04/16/24 14:37	04/20/24 01:29	88-85-7	
MCPA	<0.0149	mg/L	0.114	0.0149	1.14	04/16/24 14:37	04/19/24 03:50	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.0752	mg/L	0.114	0.0752	1.14	04/16/24 14:37	04/19/24 03:50	93-65-2	
2,4,5-T	<0.000294	mg/L	0.00228	0.000294	1.14	04/16/24 14:37	04/19/24 03:50	93-76-5	
2,4,5-TP (Silvex)	<0.000382	mg/L	0.00228	0.000382	1.14	04/16/24 14:37	04/19/24 03:50	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	71.4	%	14.0-158		1.14	04/16/24 14:37	04/19/24 03:50	19719-28-9	
2,4-DCAA (S)	73.0	%	14.0-158		1.14	04/16/24 14:37	04/20/24 01:29	19719-28-9	
<b>8082 GCS PCB, LV</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<0.15	ug/L	1.0	0.15	1	04/16/24 12:05	04/17/24 14:10	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:10	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:10	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:10	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:10	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:10	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.19	ug/L	1.0	0.19	1	04/16/24 12:05	04/17/24 14:10	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	64	%	20-120		1	04/16/24 12:05	04/17/24 14:10	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Aluminum	0.0363J	mg/L	0.100	0.0185	1	04/17/24 12:16	04/23/24 00:42	7429-90-5	J
Antimony	<0.00103	mg/L	0.00400	0.00103	1	04/17/24 12:16	04/23/24 00:42	7440-36-0	
Arsenic	0.000590J	mg/L	0.00200	0.000180	1	04/17/24 12:16	04/23/24 00:42	7440-38-2	J
Barium	0.0556	mg/L	0.00200	0.000381	1	04/17/24 12:16	04/23/24 00:42	7440-39-3	
Beryllium	<0.000190	mg/L	0.00200	0.000190	1	04/17/24 12:16	04/23/24 00:42	7440-41-7	
Cadmium	<0.000150	mg/L	0.00100	0.000150	1	04/17/24 12:16	04/23/24 00:42	7440-43-9	
Calcium	111	mg/L	10.0	0.936	10	04/17/24 12:16	04/23/24 13:30	7440-70-2	
Chromium	<0.00124	mg/L	0.00200	0.00124	1	04/17/24 12:16	04/23/24 00:42	7440-47-3	
Copper	<0.00151	mg/L	0.00500	0.00151	1	04/17/24 12:16	04/23/24 00:42	7440-50-8	
Cobalt	0.000130J	mg/L	0.00200	0.000059	1	04/17/24 12:16	04/23/24 00:42	7440-48-4	J
Iron	0.0912J	mg/L	0.100	0.0281	1	04/17/24 12:16	04/23/24 00:42	7439-89-6	J
Lead	<0.000849	mg/L	0.00200	0.000849	1	04/17/24 12:16	04/23/24 00:42	7439-92-1	
Magnesium	48.9	mg/L	10.0	0.735	10	04/17/24 12:16	04/23/24 13:30	7439-95-4	
Manganese	0.0375	mg/L	0.00500	0.000704	1	04/17/24 12:16	04/23/24 00:42	7439-96-5	
Molybdenum	0.00274J	mg/L	0.00500	0.000348	1	04/17/24 12:16	04/23/24 00:42	7439-98-7	J
Nickel	0.00138J	mg/L	0.00200	0.000816	1	04/17/24 12:16	04/23/24 00:42	7440-02-0	J
Potassium	4.62	mg/L	2.00	0.108	1	04/17/24 12:16	04/23/24 00:42	7440-09-7	
Selenium	<0.000300	mg/L	0.00200	0.000300	1	04/17/24 12:16	04/23/24 00:42	7782-49-2	
Silver	<0.000070	mg/L	0.00200	0.000070	1	04/17/24 12:16	04/23/24 00:42	7440-22-4	
Sodium	53.0	mg/L	20.0	3.76	10	04/17/24 12:16	04/23/24 13:30	7440-23-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW05/SW-1 Lab ID: 60450682004 Collected: 04/10/24 11:15 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Thallium	<0.000121	mg/L	0.00200	0.000121	1	04/17/24 12:16	04/23/24 00:42	7440-28-0	
Vanadium	<0.000664	mg/L	0.00500	0.000664	1	04/17/24 12:16	04/23/24 00:42	7440-62-2	
Zinc	0.00317J	mg/L	0.0250	0.00302	1	04/17/24 12:16	04/23/24 00:42	7440-66-6	J
<b>Mercury 7470A</b>									
Analytical Method: EPA 7470A Preparation Method: 7470A									
Pace National - Mt. Juliet									
Mercury	<0.000100	mg/L	0.000200	0.000100	1	04/13/24 15:16	04/14/24 14:38	7439-97-6	
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
Acenaphthene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:32	83-32-9	
Acenaphthylene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 03:32	208-96-8	
Anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	120-12-7	
Benzo(a)anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	56-55-3	
Benzo(a)pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	50-32-8	
Benzo(b)fluoranthene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 03:32	205-99-2	
Benzo(g,h,i)perylene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:32	191-24-2	
Benzo(k)fluoranthene	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 03:32	207-08-9	
Benzoic Acid	<4.4	ug/L	50.0	4.4	1	04/16/24 18:23	04/19/24 03:32	65-85-0	
Benzyl alcohol	<1.6	ug/L	20.0	1.6	1	04/16/24 18:23	04/19/24 03:32	100-51-6	
4-Bromophenylphenyl ether	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	101-55-3	
Butylbenzylphthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 03:32	85-68-7	
Carbazole	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	86-74-8	
4-Chloro-3-methylphenol	<1.9	ug/L	20.0	1.9	1	04/16/24 18:23	04/19/24 03:32	59-50-7	
4-Chloroaniline	<2.0	ug/L	20.0	2.0	1	04/16/24 18:23	04/19/24 03:32	106-47-8	
bis(2-Chloroethoxy)methane	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 03:32	111-91-1	
bis(2-Chloroethyl) ether	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:32	111-44-4	
bis(2-Chloroisopropyl) ether	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 03:32	108-60-1	
2-Chloronaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:32	91-58-7	
2-Chlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:32	95-57-8	
4-Chlorophenylphenyl ether	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 03:32	7005-72-3	
Chrysene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:32	53-70-3	
Dibenzofuran	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	132-64-9	
1,2-Dichlorobenzene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:32	95-50-1	
1,3-Dichlorobenzene	<1.5	ug/L	10.0	1.5	1	04/16/24 18:23	04/19/24 03:32	541-73-1	
1,4-Dichlorobenzene	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 03:32	106-46-7	
3,3'-Dichlorobenzidine	<3.9	ug/L	20.0	3.9	1	04/16/24 18:23	04/19/24 03:32	91-94-1	
2,4-Dichlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:32	120-83-2	
Diethylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:32	84-66-2	
2,4-Dimethylphenol	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 03:32	105-67-9	
Dimethylphthalate	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 03:32	131-11-3	
Di-n-butylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:32	84-74-2	
4,6-Dinitro-2-methylphenol	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 03:32	534-52-1	
2,4-Dinitrophenol	<2.5	ug/L	50.0	2.5	1	04/16/24 18:23	04/19/24 03:32	51-28-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW05/SW-1 Lab ID: 60450682004 Collected: 04/10/24 11:15 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
2,4-Dinitrotoluene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	121-14-2	
2,6-Dinitrotoluene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 03:32	606-20-2	
Di-n-octylphthalate	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 03:32	117-84-0	
bis(2-Ethylhexyl)phthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 03:32	117-81-7	
Fluoranthene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	206-44-0	
Fluorene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	86-73-7	
Hexachloro-1,3-butadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 03:32	87-68-3	
Hexachlorobenzene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:32	118-74-1	
Hexachlorocyclopentadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 03:32	77-47-4	
Hexachloroethane	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 03:32	67-72-1	
Indeno(1,2,3-cd)pyrene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:32	193-39-5	
Isophorone	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:32	78-59-1	
2-Methylnaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:32	91-57-6	
2-Methylphenol(o-Cresol)	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:32	95-48-7	
3&4-Methylphenol(m&p Cresol)	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 03:32	15831-10-4	
Naphthalene	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 03:32	91-20-3	
2-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 03:32	88-74-4	
3-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 03:32	99-09-2	
4-Nitroaniline	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 03:32	100-01-6	
Nitrobenzene	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 03:32	98-95-3	
2-Nitrophenol	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	88-75-5	
4-Nitrophenol	<0.37	ug/L	50.0	0.37	1	04/16/24 18:23	04/19/24 03:32	100-02-7	
N-Nitroso-di-n-propylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	621-64-7	
N-Nitrosodiphenylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	86-30-6	
Pentachlorophenol	<3.5	ug/L	50.0	3.5	1	04/16/24 18:23	04/19/24 03:32	87-86-5	
Phenanthrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	85-01-8	
Phenol	<0.83	ug/L	10.0	0.83	1	04/16/24 18:23	04/19/24 03:32	108-95-2	
Pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	129-00-0	
Pyridine	<1.1	ug/L	10.0	1.1	1	04/16/24 18:23	04/19/24 03:32	110-86-1	
1,2,4-Trichlorobenzene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:32	120-82-1	
2,4,5-Trichlorophenol	<1.7	ug/L	25.0	1.7	1	04/16/24 18:23	04/19/24 03:32	95-95-4	
2,4,6-Trichlorophenol	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 03:32	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	63	%	30-120		1	04/16/24 18:23	04/19/24 03:32	4165-60-0	
2-Fluorobiphenyl (S)	56	%	25-120		1	04/16/24 18:23	04/19/24 03:32	321-60-8	
Terphenyl-d14 (S)	63	%	35-125		1	04/16/24 18:23	04/19/24 03:32	1718-51-0	
Phenol-d6 (S)	35	%	10-120		1	04/16/24 18:23	04/19/24 03:32	13127-88-3	
2-Fluorophenol (S)	46	%	20-120		1	04/16/24 18:23	04/19/24 03:32	367-12-4	
2,4,6-Tribromophenol (S)	65	%	25-120		1	04/16/24 18:23	04/19/24 03:32	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
TPH-ORO	0.69J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 15:27		B
TPH-DRO	0.60J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 15:27		B

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW05/SW-1 Lab ID: 60450682004 Collected: 04/10/24 11:15 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	95	%	40-140		1	04/11/24 12:40	04/18/24 15:27	4165-60-0	
2-Fluorobiphenyl (S)	100	%	30-145		1	04/11/24 12:40	04/18/24 15:27	321-60-8	
Terphenyl-d14 (S)	93	%	35-150		1	04/11/24 12:40	04/18/24 15:27	1718-51-0	
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/17/24 11:19	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/17/24 11:19	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/17/24 11:19	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 11:19	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 11:19	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/17/24 11:19	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/17/24 11:19	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/17/24 11:19	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/17/24 11:19	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/17/24 11:19	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:19	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/17/24 11:19	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/17/24 11:19	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/17/24 11:19	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/17/24 11:19	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/17/24 11:19	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/17/24 11:19	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/17/24 11:19	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/17/24 11:19	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/17/24 11:19	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/17/24 11:19	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/17/24 11:19	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/17/24 11:19	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:19	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:19	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:19	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 11:19	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/17/24 11:19	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/17/24 11:19	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/17/24 11:19	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/17/24 11:19	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:19	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/17/24 11:19	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/17/24 11:19	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/17/24 11:19	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/17/24 11:19	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/17/24 11:19	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/17/24 11:19	10061-01-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

**Sample: SW05/SW-1**      **Lab ID: 60450682004**      Collected: 04/10/24 11:15      Received: 04/10/24 16:35      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/17/24 11:19	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:19	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/17/24 11:19	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/17/24 11:19	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/17/24 11:19	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:19	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/17/24 11:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/17/24 11:19	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/17/24 11:19	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/17/24 11:19	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:19	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:19	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/17/24 11:19	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/17/24 11:19	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/17/24 11:19	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/17/24 11:19	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/17/24 11:19	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/17/24 11:19	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/17/24 11:19	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/17/24 11:19	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/17/24 11:19	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 11:19	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/17/24 11:19	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/17/24 11:19	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/17/24 11:19	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/17/24 11:19	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/17/24 11:19	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	80-120		1		04/17/24 11:19	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		04/17/24 11:19	2199-69-1	
Toluene-d8 (S)	104	%	80-120		1		04/17/24 11:19	2037-26-5	
Preservation pH	1.0		0.10		1		04/17/24 11:19		
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Kansas City									
TPH-GRO	<62.6	ug/L	500	62.6	1		04/11/24 14:45		
<b>Surrogates</b>									
Toluene-d8 (S)	99	%	80-120		1		04/11/24 14:45	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120		1		04/11/24 14:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		04/11/24 14:45	2199-69-1	
Preservation pH	11.0		0.10		1		04/11/24 14:45		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B									
Pace Analytical Services - Kansas City									
Alkalinity, Total as CaCO3	364	mg/L	20.0	10.5	1		04/12/24 11:35		

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW05/SW-1 Lab ID: 60450682004 Collected: 04/10/24 11:15 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500 OG Oxygen, Dissolved</b>	Analytical Method: SM 4500-O G Pace Analytical Services - Kansas City								
Oxygen, Dissolved	10.7	mg/L	0.10	0.10	1		04/15/24 16:10	7782-44-7	H6
<b>4500S2D Sulfide, Total</b>	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	0.021J	mg/L	0.050	0.016	1		04/15/24 09:13	18496-25-8	
<b>9040 pH</b>	Analytical Method: EPA 9040 Pace Analytical Services - Kansas City								
pH at 25 Degrees C	8.0	Std. Units	0.10	0.10	1		04/19/24 12:35		H6
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Fluoride	0.13J	mg/L	0.20	0.12	1		04/17/24 09:22	16984-48-8	N2
Sulfate	154	mg/L	50.0	27.5	50		04/17/24 09:37	14808-79-8	
<b>350.1 Ammonia</b>	Analytical Method: EPA 350.1 Pace Analytical Services - Kansas City								
Nitrogen, Ammonia	<0.069	mg/L	0.10	0.069	1		04/19/24 13:24	7664-41-7	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/11/24 14:35		
Nitrogen, Nitrate	<0.069	mg/L	0.10	0.069	1		04/11/24 14:35	14797-55-8	
Nitrogen, Nitrite	<0.069	mg/L	0.10	0.069	1		04/11/24 14:35	14797-65-0	L1
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/12/24 17:22		
<b>4500CNE Cyanide, Total</b>	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City								
Cyanide	<0.0038	mg/L	0.0050	0.0038	1	04/22/24 17:00	04/23/24 13:57	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW04/SW-1 Lab ID: 60450682005 Collected: 04/10/24 13:10 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3510C									
Pace National - Mt. Juliet									
Aldrin	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:31	309-00-2	
alpha-BHC	<0.000017 2	mg/L	0.000050 0	0.000017 2	1	04/14/24 17:13	04/14/24 22:31	319-84-6	
beta-BHC	<0.000020 8	mg/L	0.000050 0	0.000020 8	1	04/14/24 17:13	04/14/24 22:31	319-85-7	
delta-BHC	<0.000015 0	mg/L	0.000050 0	0.000015 0	1	04/14/24 17:13	04/14/24 22:31	319-86-8	
gamma-BHC (Lindane)	<0.000020 9	mg/L	0.000050 0	0.000020 9	1	04/14/24 17:13	04/14/24 22:31	58-89-9	
Chlordane (Technical)	<0.000019 8	mg/L	0.00500 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:31	57-74-9	
4,4'-DDD	<0.000017 7	mg/L	0.000050 0	0.000017 7	1	04/14/24 17:13	04/14/24 22:31	72-54-8	
4,4'-DDE	<0.000015 4	mg/L	0.000050 0	0.000015 4	1	04/14/24 17:13	04/14/24 22:31	72-55-9	
4,4'-DDT	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:31	50-29-3	
Dieldrin	<0.000016 2	mg/L	0.000050 0	0.000016 2	1	04/14/24 17:13	04/14/24 22:31	60-57-1	
Endosulfan I	<0.000016 0	mg/L	0.000050 0	0.000016 0	1	04/14/24 17:13	04/14/24 22:31	959-98-8	
Endosulfan II	<0.000016 4	mg/L	0.000050 0	0.000016 4	1	04/14/24 17:13	04/14/24 22:31	33213-65-9	
Endosulfan sulfate	<0.000021 7	mg/L	0.000050 0	0.000021 7	1	04/14/24 17:13	04/14/24 22:31	1031-07-8	
Endrin	<0.000016 1	mg/L	0.000050 0	0.000016 1	1	04/14/24 17:13	04/14/24 22:31	72-20-8	
Endrin aldehyde	<0.000023 7	mg/L	0.000050 0	0.000023 7	1	04/14/24 17:13	04/14/24 22:31	7421-93-4	
Endrin ketone	<0.000021 9	mg/L	0.000050 0	0.000021 9	1	04/14/24 17:13	04/14/24 22:31	53494-70-5	
Hexachlorobenzene	<0.000017 6	mg/L	0.000050 0	0.000017 6	1	04/14/24 17:13	04/14/24 22:31	118-74-1	
Heptachlor	<0.000014 8	mg/L	0.000050 0	0.000014 8	1	04/14/24 17:13	04/14/24 22:31	76-44-8	
Heptachlor epoxide	<0.000018 3	mg/L	0.000050 0	0.000018 3	1	04/14/24 17:13	04/14/24 22:31	1024-57-3	
Methoxychlor	<0.000019 3	mg/L	0.000050 0	0.000019 3	1	04/14/24 17:13	04/14/24 22:31	72-43-5	
Toxaphene	<0.000168	mg/L	0.000500	0.000168	1	04/14/24 17:13	04/14/24 22:31	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	29.3	%	10.0-128		1	04/14/24 17:13	04/14/24 22:31	2051-24-3	
Tetrachloro-m-xylene (S)	49.1	%	10.0-127		1	04/14/24 17:13	04/14/24 22:31	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.000574	mg/L	0.00210	0.000574	1.05	04/16/24 14:37	04/19/24 04:01	94-75-7	
Dalapon	<0.000361	mg/L	0.00210	0.000361	1.05	04/16/24 14:37	04/19/24 04:01	127-20-8	
2,4-DB	<0.000317	mg/L	0.00210	0.000317	1.05	04/16/24 14:37	04/20/24 01:40	94-82-6	
Dicamba	<0.000257	mg/L	0.00210	0.000257	1.05	04/16/24 14:37	04/19/24 04:01	1918-00-9	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

**Sample: SW04/SW-1**      **Lab ID: 60450682005**      Collected: 04/10/24 13:10      Received: 04/10/24 16:35      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A    Preparation Method: 8151A									
Pace National - Mt. Juliet									
Dichlorprop	<0.00109	mg/L	0.00210	0.00109	1.05	04/16/24 14:37	04/19/24 04:01	120-36-5	
Dinoseb	<0.000263	mg/L	0.00210	0.000263	1.05	04/16/24 14:37	04/20/24 01:40	88-85-7	
MCPA	<0.0138	mg/L	0.105	0.0138	1.05	04/16/24 14:37	04/19/24 04:01	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.0693	mg/L	0.105	0.0693	1.05	04/16/24 14:37	04/19/24 04:01	93-65-2	
2,4,5-T	<0.000271	mg/L	0.00210	0.000271	1.05	04/16/24 14:37	04/19/24 04:01	93-76-5	
2,4,5-TP (Silvex)	<0.000352	mg/L	0.00210	0.000352	1.05	04/16/24 14:37	04/19/24 04:01	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	74.3	%	14.0-158		1.05	04/16/24 14:37	04/19/24 04:01	19719-28-9	
2,4-DCAA (S)	78.5	%	14.0-158		1.05	04/16/24 14:37	04/20/24 01:40	19719-28-9	
<b>8082 GCS PCB, LV</b>									
Analytical Method: EPA 8082    Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<0.15	ug/L	1.0	0.15	1	04/16/24 12:05	04/17/24 14:17	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:17	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:17	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:17	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:17	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:17	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.19	ug/L	1.0	0.19	1	04/16/24 12:05	04/17/24 14:17	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	67	%	20-120		1	04/16/24 12:05	04/17/24 14:17	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B    Preparation Method: 3015									
Pace National - Mt. Juliet									
Aluminum	0.566	mg/L	0.100	0.0185	1	04/17/24 12:16	04/23/24 00:45	7429-90-5	
Antimony	0.00112J	mg/L	0.00400	0.00103	1	04/17/24 12:16	04/23/24 00:45	7440-36-0	J
Arsenic	0.00211	mg/L	0.00200	0.000180	1	04/17/24 12:16	04/23/24 00:45	7440-38-2	
Barium	0.108	mg/L	0.00200	0.000381	1	04/17/24 12:16	04/23/24 00:45	7440-39-3	
Beryllium	<0.000190	mg/L	0.00200	0.000190	1	04/17/24 12:16	04/23/24 00:45	7440-41-7	
Cadmium	<0.000150	mg/L	0.00100	0.000150	1	04/17/24 12:16	04/23/24 00:45	7440-43-9	
Calcium	118	mg/L	10.0	0.936	10	04/17/24 12:16	04/23/24 13:34	7440-70-2	
Chromium	0.00146J	mg/L	0.00200	0.00124	1	04/17/24 12:16	04/23/24 00:45	7440-47-3	J
Copper	0.00749	mg/L	0.00500	0.00151	1	04/17/24 12:16	04/23/24 00:45	7440-50-8	
Cobalt	0.00406	mg/L	0.00200	0.000059	1	04/17/24 12:16	04/23/24 00:45	7440-48-4	
Iron	3.02	mg/L	0.100	0.0281	1	04/17/24 12:16	04/23/24 00:45	7439-89-6	
Lead	0.00244	mg/L	0.00200	0.000849	1	04/17/24 12:16	04/23/24 00:45	7439-92-1	
Magnesium	47.0	mg/L	10.0	0.735	10	04/17/24 12:16	04/23/24 13:34	7439-95-4	
Manganese	0.469	mg/L	0.0500	0.00704	10	04/17/24 12:16	04/23/24 13:34	7439-96-5	
Molybdenum	0.00211J	mg/L	0.00500	0.000348	1	04/17/24 12:16	04/23/24 00:45	7439-98-7	J
Nickel	0.00572	mg/L	0.00200	0.000816	1	04/17/24 12:16	04/23/24 00:45	7440-02-0	
Potassium	4.46	mg/L	2.00	0.108	1	04/17/24 12:16	04/23/24 00:45	7440-09-7	
Selenium	0.00755	mg/L	0.00200	0.000300	1	04/17/24 12:16	04/23/24 00:45	7782-49-2	
Silver	0.00277	mg/L	0.00200	0.000070	1	04/17/24 12:16	04/23/24 00:45	7440-22-4	
Sodium	53.2	mg/L	20.0	3.76	10	04/17/24 12:16	04/23/24 13:34	7440-23-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW04/SW-1 Lab ID: 60450682005 Collected: 04/10/24 13:10 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Thallium	<0.000121	mg/L	0.00200	0.000121	1	04/17/24 12:16	04/23/24 00:45	7440-28-0	
Vanadium	0.00187J	mg/L	0.00500	0.000664	1	04/17/24 12:16	04/23/24 00:45	7440-62-2	J
Zinc	0.0158J	mg/L	0.0250	0.00302	1	04/17/24 12:16	04/23/24 00:45	7440-66-6	J
<b>Mercury 7470A</b>									
Analytical Method: EPA 7470A Preparation Method: 7470A									
Pace National - Mt. Juliet									
Mercury	<0.000100	mg/L	0.000200	0.000100	1	04/13/24 15:16	04/14/24 14:40	7439-97-6	
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
Acenaphthene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:54	83-32-9	
Acenaphthylene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 03:54	208-96-8	
Anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	120-12-7	
Benzo(a)anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	56-55-3	
Benzo(a)pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	50-32-8	
Benzo(b)fluoranthene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 03:54	205-99-2	
Benzo(g,h,i)perylene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:54	191-24-2	
Benzo(k)fluoranthene	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 03:54	207-08-9	
Benzoic Acid	<4.4	ug/L	50.0	4.4	1	04/16/24 18:23	04/19/24 03:54	65-85-0	
Benzyl alcohol	<1.6	ug/L	20.0	1.6	1	04/16/24 18:23	04/19/24 03:54	100-51-6	
4-Bromophenylphenyl ether	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	101-55-3	
Butylbenzylphthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 03:54	85-68-7	
Carbazole	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	86-74-8	
4-Chloro-3-methylphenol	<1.9	ug/L	20.0	1.9	1	04/16/24 18:23	04/19/24 03:54	59-50-7	
4-Chloroaniline	<2.0	ug/L	20.0	2.0	1	04/16/24 18:23	04/19/24 03:54	106-47-8	
bis(2-Chloroethoxy)methane	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 03:54	111-91-1	
bis(2-Chloroethyl) ether	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:54	111-44-4	
bis(2-Chloroisopropyl) ether	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 03:54	108-60-1	
2-Chloronaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:54	91-58-7	
2-Chlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:54	95-57-8	
4-Chlorophenylphenyl ether	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 03:54	7005-72-3	
Chrysene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:54	53-70-3	
Dibenzofuran	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	132-64-9	
1,2-Dichlorobenzene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:54	95-50-1	
1,3-Dichlorobenzene	<1.5	ug/L	10.0	1.5	1	04/16/24 18:23	04/19/24 03:54	541-73-1	
1,4-Dichlorobenzene	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 03:54	106-46-7	
3,3'-Dichlorobenzidine	<3.9	ug/L	20.0	3.9	1	04/16/24 18:23	04/19/24 03:54	91-94-1	
2,4-Dichlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:54	120-83-2	
Diethylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:54	84-66-2	
2,4-Dimethylphenol	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 03:54	105-67-9	
Dimethylphthalate	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 03:54	131-11-3	
Di-n-butylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:54	84-74-2	
4,6-Dinitro-2-methylphenol	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 03:54	534-52-1	
2,4-Dinitrophenol	<2.5	ug/L	50.0	2.5	1	04/16/24 18:23	04/19/24 03:54	51-28-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW04/SW-1 Lab ID: 60450682005 Collected: 04/10/24 13:10 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
2,4-Dinitrotoluene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	121-14-2	
2,6-Dinitrotoluene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 03:54	606-20-2	
Di-n-octylphthalate	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 03:54	117-84-0	
bis(2-Ethylhexyl)phthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 03:54	117-81-7	
Fluoranthene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	206-44-0	
Fluorene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	86-73-7	
Hexachloro-1,3-butadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 03:54	87-68-3	
Hexachlorobenzene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:54	118-74-1	
Hexachlorocyclopentadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 03:54	77-47-4	
Hexachloroethane	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 03:54	67-72-1	
Indeno(1,2,3-cd)pyrene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:54	193-39-5	
Isophorone	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:54	78-59-1	
2-Methylnaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 03:54	91-57-6	
2-Methylphenol(o-Cresol)	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 03:54	95-48-7	
3&4-Methylphenol(m&p Cresol)	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 03:54	15831-10-4	
Naphthalene	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 03:54	91-20-3	
2-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 03:54	88-74-4	
3-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 03:54	99-09-2	
4-Nitroaniline	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 03:54	100-01-6	
Nitrobenzene	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 03:54	98-95-3	
2-Nitrophenol	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	88-75-5	
4-Nitrophenol	<0.37	ug/L	50.0	0.37	1	04/16/24 18:23	04/19/24 03:54	100-02-7	
N-Nitroso-di-n-propylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	621-64-7	
N-Nitrosodiphenylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	86-30-6	
Pentachlorophenol	<3.5	ug/L	50.0	3.5	1	04/16/24 18:23	04/19/24 03:54	87-86-5	
Phenanthrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	85-01-8	
Phenol	<0.83	ug/L	10.0	0.83	1	04/16/24 18:23	04/19/24 03:54	108-95-2	
Pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	129-00-0	
Pyridine	<1.1	ug/L	10.0	1.1	1	04/16/24 18:23	04/19/24 03:54	110-86-1	
1,2,4-Trichlorobenzene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 03:54	120-82-1	
2,4,5-Trichlorophenol	<1.7	ug/L	25.0	1.7	1	04/16/24 18:23	04/19/24 03:54	95-95-4	
2,4,6-Trichlorophenol	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 03:54	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	66	%	30-120		1	04/16/24 18:23	04/19/24 03:54	4165-60-0	
2-Fluorobiphenyl (S)	58	%	25-120		1	04/16/24 18:23	04/19/24 03:54	321-60-8	
Terphenyl-d14 (S)	65	%	35-125		1	04/16/24 18:23	04/19/24 03:54	1718-51-0	
Phenol-d6 (S)	35	%	10-120		1	04/16/24 18:23	04/19/24 03:54	13127-88-3	
2-Fluorophenol (S)	46	%	20-120		1	04/16/24 18:23	04/19/24 03:54	367-12-4	
2,4,6-Tribromophenol (S)	66	%	25-120		1	04/16/24 18:23	04/19/24 03:54	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
TPH-ORO	0.56J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 15:47		B
TPH-DRO	0.49J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 15:47		B

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW04/SW-1 Lab ID: 60450682005 Collected: 04/10/24 13:10 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	91	%	40-140		1	04/11/24 12:40	04/18/24 15:47	4165-60-0	
2-Fluorobiphenyl (S)	95	%	30-145		1	04/11/24 12:40	04/18/24 15:47	321-60-8	
Terphenyl-d14 (S)	87	%	35-150		1	04/11/24 12:40	04/18/24 15:47	1718-51-0	
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/17/24 11:33	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/17/24 11:33	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/17/24 11:33	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 11:33	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 11:33	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/17/24 11:33	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/17/24 11:33	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/17/24 11:33	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/17/24 11:33	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/17/24 11:33	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:33	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/17/24 11:33	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/17/24 11:33	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/17/24 11:33	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/17/24 11:33	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/17/24 11:33	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/17/24 11:33	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/17/24 11:33	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/17/24 11:33	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/17/24 11:33	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/17/24 11:33	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/17/24 11:33	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/17/24 11:33	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:33	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:33	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:33	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 11:33	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/17/24 11:33	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/17/24 11:33	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/17/24 11:33	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/17/24 11:33	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:33	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/17/24 11:33	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/17/24 11:33	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/17/24 11:33	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/17/24 11:33	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/17/24 11:33	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/17/24 11:33	10061-01-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: **SW04/SW-1** Lab ID: **60450682005** Collected: 04/10/24 13:10 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/17/24 11:33	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:33	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/17/24 11:33	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/17/24 11:33	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/17/24 11:33	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:33	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/17/24 11:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/17/24 11:33	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/17/24 11:33	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/17/24 11:33	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:33	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:33	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/17/24 11:33	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/17/24 11:33	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/17/24 11:33	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/17/24 11:33	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/17/24 11:33	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/17/24 11:33	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/17/24 11:33	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/17/24 11:33	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/17/24 11:33	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 11:33	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/17/24 11:33	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/17/24 11:33	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/17/24 11:33	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/17/24 11:33	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/17/24 11:33	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	80-120		1		04/17/24 11:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		04/17/24 11:33	2199-69-1	
Toluene-d8 (S)	100	%	80-120		1		04/17/24 11:33	2037-26-5	
Preservation pH	1.0		0.10		1		04/17/24 11:33		
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Kansas City									
TPH-GRO	<62.6	ug/L	500	62.6	1		04/11/24 15:00		
<b>Surrogates</b>									
Toluene-d8 (S)	98	%	80-120		1		04/11/24 15:00	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120		1		04/11/24 15:00	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		04/11/24 15:00	2199-69-1	
Preservation pH	11.0		0.10		1		04/11/24 15:00		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B									
Pace Analytical Services - Kansas City									
Alkalinity, Total as CaCO3	364	mg/L	20.0	10.5	1		04/12/24 11:42		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: **SW04/SW-1** Lab ID: **60450682005** Collected: 04/10/24 13:10 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500 OG Oxygen, Dissolved</b>	Analytical Method: SM 4500-O G Pace Analytical Services - Kansas City								
Oxygen, Dissolved	<b>10.7</b>	mg/L	0.10	0.10	1		04/15/24 16:10	7782-44-7	H6
<b>4500S2D Sulfide, Total</b>	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	<b>0.041J</b>	mg/L	0.050	0.016	1		04/15/24 09:13	18496-25-8	
<b>9040 pH</b>	Analytical Method: EPA 9040 Pace Analytical Services - Kansas City								
pH at 25 Degrees C	<b>7.8</b>	Std. Units	0.10	0.10	1		04/19/24 12:37		H6
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Fluoride	<b>0.16J</b>	mg/L	0.20	0.12	1		04/17/24 09:52	16984-48-8	N2
Sulfate	<b>129</b>	mg/L	50.0	27.5	50		04/17/24 10:07	14808-79-8	
<b>350.1 Ammonia</b>	Analytical Method: EPA 350.1 Pace Analytical Services - Kansas City								
Nitrogen, Ammonia	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/19/24 13:25	7664-41-7	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/11/24 14:36		
Nitrogen, Nitrate	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/11/24 14:36	14797-55-8	
Nitrogen, Nitrite	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/11/24 14:36	14797-65-0	L1
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/12/24 17:23		
<b>4500CNE Cyanide, Total</b>	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City								
Cyanide	<b>&lt;0.0038</b>	mg/L	0.0050	0.0038	1	04/22/24 17:00	04/23/24 13:59	57-12-5	

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ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: DUP-02 Lab ID: 60450682006 Collected: 04/10/24 00:00 Received: 04/10/24 16:35 Matrix: Water

Parameters Results Units PQL MDL DF Prepared Analyzed CAS No. Qual

Pesticides (GC) 8081B

Analytical Method: EPA 8081B Preparation Method: 3510C
Pace National - Mt. Juliet

Table with 10 columns: Parameters, Results, Units, PQL, MDL, DF, Prepared, Analyzed, CAS No., Qual. Rows include Aldrin, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Chlordane (Technical), 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, Dieldrin, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin aldehyde, Endrin ketone, Hexachlorobenzene, Heptachlor, Heptachlor epoxide, Methoxychlor, Toxaphene.

Surrogates

Table with 10 columns: Parameters, Results, Units, PQL, MDL, DF, Prepared, Analyzed, CAS No., Qual. Rows include Decachlorobiphenyl (S), Tetrachloro-m-xylene (S).

Chlorinated Herb. (GC) 8151A

Analytical Method: EPA 8151A Preparation Method: 8151A
Pace National - Mt. Juliet

Table with 10 columns: Parameters, Results, Units, PQL, MDL, DF, Prepared, Analyzed, CAS No., Qual. Rows include 2,4-D, Dalapon, 2,4-DB, Dicamba.

REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: DUP-02 Lab ID: 60450682006 Collected: 04/10/24 00:00 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
Dichlorprop	<0.00123	mg/L	0.00236	0.00123	1.18	04/16/24 14:37	04/19/24 04:12	120-36-5	
Dinoseb	<0.000295	mg/L	0.00236	0.000295	1.18	04/16/24 14:37	04/20/24 01:52	88-85-7	
MCPA	<0.0155	mg/L	0.118	0.0155	1.18	04/16/24 14:37	04/19/24 04:12	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.0779	mg/L	0.118	0.0779	1.18	04/16/24 14:37	04/19/24 04:12	93-65-2	
2,4,5-T	<0.000304	mg/L	0.00236	0.000304	1.18	04/16/24 14:37	04/19/24 04:12	93-76-5	
2,4,5-TP (Silvex)	<0.000395	mg/L	0.00236	0.000395	1.18	04/16/24 14:37	04/19/24 04:12	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	72.5	%	14.0-158		1.18	04/16/24 14:37	04/19/24 04:12	19719-28-9	
2,4-DCAA (S)	74.1	%	14.0-158		1.18	04/16/24 14:37	04/20/24 01:52	19719-28-9	
<b>8082 GCS PCB, LV</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<0.15	ug/L	1.0	0.15	1	04/16/24 12:05	04/17/24 14:25	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:25	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:25	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:25	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:25	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:25	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.19	ug/L	1.0	0.19	1	04/16/24 12:05	04/17/24 14:25	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	70	%	20-120		1	04/16/24 12:05	04/17/24 14:25	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Aluminum	0.165	mg/L	0.100	0.0185	1	04/17/24 12:16	04/23/24 00:48	7429-90-5	
Antimony	<0.00103	mg/L	0.00400	0.00103	1	04/17/24 12:16	04/23/24 00:48	7440-36-0	
Arsenic	0.000744J	mg/L	0.00200	0.000180	1	04/17/24 12:16	04/23/24 00:48	7440-38-2	J
Barium	0.0623	mg/L	0.00200	0.000381	1	04/17/24 12:16	04/23/24 00:48	7440-39-3	
Beryllium	<0.000190	mg/L	0.00200	0.000190	1	04/17/24 12:16	04/23/24 00:48	7440-41-7	
Cadmium	<0.000150	mg/L	0.00100	0.000150	1	04/17/24 12:16	04/23/24 00:48	7440-43-9	
Calcium	109	mg/L	10.0	0.936	10	04/17/24 12:16	04/23/24 13:37	7440-70-2	
Chromium	<0.00124	mg/L	0.00200	0.00124	1	04/17/24 12:16	04/23/24 00:48	7440-47-3	
Copper	0.00172J	mg/L	0.00500	0.00151	1	04/17/24 12:16	04/23/24 00:48	7440-50-8	J
Cobalt	0.000367J	mg/L	0.00200	0.000059	1	04/17/24 12:16	04/23/24 00:48	7440-48-4	J
Iron	0.704	mg/L	0.100	0.0281	1	04/17/24 12:16	04/23/24 00:48	7439-89-6	
Lead	<0.000849	mg/L	0.00200	0.000849	1	04/17/24 12:16	04/23/24 00:48	7439-92-1	
Magnesium	47.1	mg/L	10.0	0.735	10	04/17/24 12:16	04/23/24 13:37	7439-95-4	
Manganese	0.0752	mg/L	0.00500	0.000704	1	04/17/24 12:16	04/23/24 00:48	7439-96-5	
Molybdenum	0.00205J	mg/L	0.00500	0.000348	1	04/17/24 12:16	04/23/24 00:48	7439-98-7	J
Nickel	0.00183J	mg/L	0.00200	0.000816	1	04/17/24 12:16	04/23/24 00:48	7440-02-0	J
Potassium	4.70	mg/L	2.00	0.108	1	04/17/24 12:16	04/23/24 00:48	7440-09-7	
Selenium	<0.000300	mg/L	0.00200	0.000300	1	04/17/24 12:16	04/23/24 00:48	7782-49-2	
Silver	<0.000070	mg/L	0.00200	0.000070	1	04/17/24 12:16	04/23/24 00:48	7440-22-4	
Sodium	54.0	mg/L	20.0	3.76	10	04/17/24 12:16	04/23/24 13:37	7440-23-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: DUP-02 Lab ID: 60450682006 Collected: 04/10/24 00:00 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Thallium	<0.000121	mg/L	0.00200	0.000121	1	04/17/24 12:16	04/23/24 00:48	7440-28-0	
Vanadium	0.000748J	mg/L	0.00500	0.000664	1	04/17/24 12:16	04/23/24 00:48	7440-62-2	J
Zinc	0.00625J	mg/L	0.0250	0.00302	1	04/17/24 12:16	04/23/24 00:48	7440-66-6	J
<b>Mercury 7470A</b>									
Analytical Method: EPA 7470A Preparation Method: 7470A									
Pace National - Mt. Juliet									
Mercury	<0.000100	mg/L	0.000200	0.000100	1	04/13/24 15:16	04/14/24 14:43	7439-97-6	
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
Acenaphthene	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 04:16	83-32-9	
Acenaphthylene	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 04:16	208-96-8	
Anthracene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	120-12-7	
Benzo(a)anthracene	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 04:16	56-55-3	
Benzo(a)pyrene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	50-32-8	
Benzo(b)fluoranthene	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 04:16	205-99-2	
Benzo(g,h,i)perylene	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 04:16	191-24-2	
Benzo(k)fluoranthene	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 04:16	207-08-9	
Benzoic Acid	<4.4	ug/L	49.5	4.4	1	04/16/24 18:23	04/19/24 04:16	65-85-0	
Benzyl alcohol	<1.6	ug/L	19.8	1.6	1	04/16/24 18:23	04/19/24 04:16	100-51-6	
4-Bromophenylphenyl ether	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	101-55-3	
Butylbenzylphthalate	<2.4	ug/L	9.9	2.4	1	04/16/24 18:23	04/19/24 04:16	85-68-7	
Carbazole	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	86-74-8	
4-Chloro-3-methylphenol	<1.9	ug/L	19.8	1.9	1	04/16/24 18:23	04/19/24 04:16	59-50-7	
4-Chloroaniline	<2.0	ug/L	19.8	2.0	1	04/16/24 18:23	04/19/24 04:16	106-47-8	
bis(2-Chloroethoxy)methane	<2.2	ug/L	9.9	2.2	1	04/16/24 18:23	04/19/24 04:16	111-91-1	
bis(2-Chloroethyl) ether	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 04:16	111-44-4	
bis(2-Chloroisopropyl) ether	<2.2	ug/L	9.9	2.2	1	04/16/24 18:23	04/19/24 04:16	108-60-1	
2-Chloronaphthalene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	91-58-7	
2-Chlorophenol	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 04:16	95-57-8	
4-Chlorophenylphenyl ether	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 04:16	7005-72-3	
Chrysene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 04:16	53-70-3	
Dibenzofuran	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	132-64-9	
1,2-Dichlorobenzene	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 04:16	95-50-1	
1,3-Dichlorobenzene	<1.5	ug/L	9.9	1.5	1	04/16/24 18:23	04/19/24 04:16	541-73-1	
1,4-Dichlorobenzene	<1.7	ug/L	9.9	1.7	1	04/16/24 18:23	04/19/24 04:16	106-46-7	
3,3'-Dichlorobenzidine	<3.9	ug/L	19.8	3.9	1	04/16/24 18:23	04/19/24 04:16	91-94-1	
2,4-Dichlorophenol	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 04:16	120-83-2	
Diethylphthalate	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 04:16	84-66-2	
2,4-Dimethylphenol	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 04:16	105-67-9	
Dimethylphthalate	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 04:16	131-11-3	
Di-n-butylphthalate	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 04:16	84-74-2	
4,6-Dinitro-2-methylphenol	<2.1	ug/L	49.5	2.1	1	04/16/24 18:23	04/19/24 04:16	534-52-1	
2,4-Dinitrophenol	<2.5	ug/L	49.5	2.5	1	04/16/24 18:23	04/19/24 04:16	51-28-5	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: DUP-02 Lab ID: 60450682006 Collected: 04/10/24 00:00 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
2,4-Dinitrotoluene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	121-14-2	
2,6-Dinitrotoluene	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 04:16	606-20-2	
Di-n-octylphthalate	<2.2	ug/L	9.9	2.2	1	04/16/24 18:23	04/19/24 04:16	117-84-0	
bis(2-Ethylhexyl)phthalate	<2.3	ug/L	9.9	2.3	1	04/16/24 18:23	04/19/24 04:16	117-81-7	
Fluoranthene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	206-44-0	
Fluorene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	86-73-7	
Hexachloro-1,3-butadiene	<1.6	ug/L	9.9	1.6	1	04/16/24 18:23	04/19/24 04:16	87-68-3	
Hexachlorobenzene	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 04:16	118-74-1	
Hexachlorocyclopentadiene	<1.6	ug/L	9.9	1.6	1	04/16/24 18:23	04/19/24 04:16	77-47-4	
Hexachloroethane	<1.4	ug/L	9.9	1.4	1	04/16/24 18:23	04/19/24 04:16	67-72-1	
Indeno(1,2,3-cd)pyrene	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 04:16	193-39-5	
Isophorone	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 04:16	78-59-1	
2-Methylnaphthalene	<2.1	ug/L	9.9	2.1	1	04/16/24 18:23	04/19/24 04:16	91-57-6	
2-Methylphenol(o-Cresol)	<1.8	ug/L	9.9	1.8	1	04/16/24 18:23	04/19/24 04:16	95-48-7	
3&4-Methylphenol(m&p Cresol)	<1.6	ug/L	9.9	1.6	1	04/16/24 18:23	04/19/24 04:16	15831-10-4	
Naphthalene	<2.3	ug/L	9.9	2.3	1	04/16/24 18:23	04/19/24 04:16	91-20-3	
2-Nitroaniline	<1.9	ug/L	49.5	1.9	1	04/16/24 18:23	04/19/24 04:16	88-74-4	
3-Nitroaniline	<1.8	ug/L	49.5	1.8	1	04/16/24 18:23	04/19/24 04:16	99-09-2	
4-Nitroaniline	<2.2	ug/L	49.5	2.2	1	04/16/24 18:23	04/19/24 04:16	100-01-6	
Nitrobenzene	<2.3	ug/L	9.9	2.3	1	04/16/24 18:23	04/19/24 04:16	98-95-3	
2-Nitrophenol	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 04:16	88-75-5	
4-Nitrophenol	<0.37	ug/L	49.5	0.37	1	04/16/24 18:23	04/19/24 04:16	100-02-7	
N-Nitroso-di-n-propylamine	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	621-64-7	
N-Nitrosodiphenylamine	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	86-30-6	
Pentachlorophenol	<3.5	ug/L	49.5	3.5	1	04/16/24 18:23	04/19/24 04:16	87-86-5	
Phenanthrene	<1.9	ug/L	9.9	1.9	1	04/16/24 18:23	04/19/24 04:16	85-01-8	
Phenol	<0.82	ug/L	9.9	0.82	1	04/16/24 18:23	04/19/24 04:16	108-95-2	
Pyrene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	129-00-0	
Pyridine	<1.1	ug/L	9.9	1.1	1	04/16/24 18:23	04/19/24 04:16	110-86-1	
1,2,4-Trichlorobenzene	<2.0	ug/L	9.9	2.0	1	04/16/24 18:23	04/19/24 04:16	120-82-1	
2,4,5-Trichlorophenol	<1.7	ug/L	24.8	1.7	1	04/16/24 18:23	04/19/24 04:16	95-95-4	
2,4,6-Trichlorophenol	<1.4	ug/L	9.9	1.4	1	04/16/24 18:23	04/19/24 04:16	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	62	%	30-120		1	04/16/24 18:23	04/19/24 04:16	4165-60-0	
2-Fluorobiphenyl (S)	55	%	25-120		1	04/16/24 18:23	04/19/24 04:16	321-60-8	
Terphenyl-d14 (S)	61	%	35-125		1	04/16/24 18:23	04/19/24 04:16	1718-51-0	
Phenol-d6 (S)	35	%	10-120		1	04/16/24 18:23	04/19/24 04:16	13127-88-3	
2-Fluorophenol (S)	46	%	20-120		1	04/16/24 18:23	04/19/24 04:16	367-12-4	
2,4,6-Tribromophenol (S)	61	%	25-120		1	04/16/24 18:23	04/19/24 04:16	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
TPH-ORO	0.67J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 16:06		B
TPH-DRO	0.54J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 16:06		B

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: DUP-02 Lab ID: 60450682006 Collected: 04/10/24 00:00 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	94	%	40-140		1	04/11/24 12:40	04/18/24 16:06	4165-60-0	
2-Fluorobiphenyl (S)	90	%	30-145		1	04/11/24 12:40	04/18/24 16:06	321-60-8	
Terphenyl-d14 (S)	85	%	35-150		1	04/11/24 12:40	04/18/24 16:06	1718-51-0	
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/17/24 11:47	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/17/24 11:47	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/17/24 11:47	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 11:47	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 11:47	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/17/24 11:47	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/17/24 11:47	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/17/24 11:47	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/17/24 11:47	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/17/24 11:47	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:47	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/17/24 11:47	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/17/24 11:47	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/17/24 11:47	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/17/24 11:47	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/17/24 11:47	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/17/24 11:47	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/17/24 11:47	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/17/24 11:47	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/17/24 11:47	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/17/24 11:47	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/17/24 11:47	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/17/24 11:47	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:47	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:47	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:47	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 11:47	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/17/24 11:47	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/17/24 11:47	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/17/24 11:47	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/17/24 11:47	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:47	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/17/24 11:47	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/17/24 11:47	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/17/24 11:47	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/17/24 11:47	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/17/24 11:47	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/17/24 11:47	10061-01-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

**Sample: DUP-02**      **Lab ID: 60450682006**      Collected: 04/10/24 00:00      Received: 04/10/24 16:35      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/17/24 11:47	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:47	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/17/24 11:47	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/17/24 11:47	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/17/24 11:47	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/17/24 11:47	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/17/24 11:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/17/24 11:47	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/17/24 11:47	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/17/24 11:47	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:47	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/17/24 11:47	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/17/24 11:47	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/17/24 11:47	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/17/24 11:47	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/17/24 11:47	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/17/24 11:47	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/17/24 11:47	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/17/24 11:47	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/17/24 11:47	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/17/24 11:47	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 11:47	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/17/24 11:47	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/17/24 11:47	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/17/24 11:47	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/17/24 11:47	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/17/24 11:47	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	102	%	80-120		1		04/17/24 11:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	96	%	80-120		1		04/17/24 11:47	2199-69-1	
Toluene-d8 (S)	104	%	80-120		1		04/17/24 11:47	2037-26-5	
Preservation pH	1.0		0.10		1		04/17/24 11:47		
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Kansas City									
TPH-GRO	<62.6	ug/L	500	62.6	1		04/11/24 15:14		
<b>Surrogates</b>									
Toluene-d8 (S)	98	%	80-120		1		04/11/24 15:14	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120		1		04/11/24 15:14	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		04/11/24 15:14	2199-69-1	
Preservation pH	11.0		0.10		1		04/11/24 15:14		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B									
Pace Analytical Services - Kansas City									
Alkalinity, Total as CaCO3	364	mg/L	20.0	10.5	1		04/12/24 11:48		

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: DUP-02 Lab ID: 60450682006 Collected: 04/10/24 00:00 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500 OG Oxygen, Dissolved</b>	Analytical Method: SM 4500-O G Pace Analytical Services - Kansas City								
Oxygen, Dissolved	9.4	mg/L	0.10	0.10	1		04/15/24 16:10	7782-44-7	H6
<b>4500S2D Sulfide, Total</b>	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	0.028J	mg/L	0.050	0.016	1		04/15/24 09:13	18496-25-8	
<b>9040 pH</b>	Analytical Method: EPA 9040 Pace Analytical Services - Kansas City								
pH at 25 Degrees C	7.7	Std. Units	0.10	0.10	1		04/19/24 12:29		H6
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Fluoride	0.17J	mg/L	0.20	0.12	1		04/17/24 10:22	16984-48-8	N2
Sulfate	133	mg/L	50.0	27.5	50		04/17/24 10:37	14808-79-8	
<b>350.1 Ammonia</b>	Analytical Method: EPA 350.1 Pace Analytical Services - Kansas City								
Nitrogen, Ammonia	<0.069	mg/L	0.10	0.069	1		04/19/24 13:32	7664-41-7	M1
<b>353.2 Nitrogen, NO2/NO3 unpres</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/11/24 14:16		
Nitrogen, Nitrate	<0.069	mg/L	0.10	0.069	1		04/11/24 14:16	14797-55-8	
Nitrogen, Nitrite	<0.069	mg/L	0.10	0.069	1		04/11/24 14:16	14797-65-0	L1
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/12/24 17:26		
<b>4500CNE Cyanide, Total</b>	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City								
Cyanide	<0.0038	mg/L	0.0050	0.0038	1	04/22/24 17:00	04/23/24 14:03	57-12-5	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW03/SW-1 Lab ID: 60450682007 Collected: 04/10/24 13:50 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3510C									
Pace National - Mt. Juliet									
Aldrin	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:49	309-00-2	
alpha-BHC	<0.000017 2	mg/L	0.000050 0	0.000017 2	1	04/14/24 17:13	04/14/24 22:49	319-84-6	
beta-BHC	<0.000020 8	mg/L	0.000050 0	0.000020 8	1	04/14/24 17:13	04/14/24 22:49	319-85-7	
delta-BHC	<0.000015 0	mg/L	0.000050 0	0.000015 0	1	04/14/24 17:13	04/14/24 22:49	319-86-8	
gamma-BHC (Lindane)	<0.000020 9	mg/L	0.000050 0	0.000020 9	1	04/14/24 17:13	04/14/24 22:49	58-89-9	
Chlordane (Technical)	<0.000019 8	mg/L	0.00500 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:49	57-74-9	
4,4'-DDD	<0.000017 7	mg/L	0.000050 0	0.000017 7	1	04/14/24 17:13	04/14/24 22:49	72-54-8	
4,4'-DDE	<0.000015 4	mg/L	0.000050 0	0.000015 4	1	04/14/24 17:13	04/14/24 22:49	72-55-9	
4,4'-DDT	<0.000019 8	mg/L	0.000050 0	0.000019 8	1	04/14/24 17:13	04/14/24 22:49	50-29-3	
Dieldrin	<0.000016 2	mg/L	0.000050 0	0.000016 2	1	04/14/24 17:13	04/14/24 22:49	60-57-1	
Endosulfan I	<0.000016 0	mg/L	0.000050 0	0.000016 0	1	04/14/24 17:13	04/14/24 22:49	959-98-8	
Endosulfan II	<0.000016 4	mg/L	0.000050 0	0.000016 4	1	04/14/24 17:13	04/14/24 22:49	33213-65-9	
Endosulfan sulfate	<0.000021 7	mg/L	0.000050 0	0.000021 7	1	04/14/24 17:13	04/14/24 22:49	1031-07-8	
Endrin	<0.000016 1	mg/L	0.000050 0	0.000016 1	1	04/14/24 17:13	04/14/24 22:49	72-20-8	
Endrin aldehyde	<0.000023 7	mg/L	0.000050 0	0.000023 7	1	04/14/24 17:13	04/14/24 22:49	7421-93-4	
Endrin ketone	<0.000021 9	mg/L	0.000050 0	0.000021 9	1	04/14/24 17:13	04/14/24 22:49	53494-70-5	
Hexachlorobenzene	<0.000017 6	mg/L	0.000050 0	0.000017 6	1	04/14/24 17:13	04/14/24 22:49	118-74-1	
Heptachlor	<0.000014 8	mg/L	0.000050 0	0.000014 8	1	04/14/24 17:13	04/14/24 22:49	76-44-8	
Heptachlor epoxide	<0.000018 3	mg/L	0.000050 0	0.000018 3	1	04/14/24 17:13	04/14/24 22:49	1024-57-3	
Methoxychlor	<0.000019 3	mg/L	0.000050 0	0.000019 3	1	04/14/24 17:13	04/14/24 22:49	72-43-5	
Toxaphene	<0.000168	mg/L	0.000500	0.000168	1	04/14/24 17:13	04/14/24 22:49	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	26.9	%	10.0-128		1	04/14/24 17:13	04/14/24 22:49	2051-24-3	
Tetrachloro-m-xylene (S)	55.4	%	10.0-127		1	04/14/24 17:13	04/14/24 22:49	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.000574	mg/L	0.00210	0.000574	1.05	04/16/24 14:37	04/19/24 04:57	94-75-7	
Dalapon	<0.000361	mg/L	0.00210	0.000361	1.05	04/16/24 14:37	04/19/24 04:57	127-20-8	
2,4-DB	<0.000317	mg/L	0.00210	0.000317	1.05	04/16/24 14:37	04/20/24 02:03	94-82-6	
Dicamba	<0.000257	mg/L	0.00210	0.000257	1.05	04/16/24 14:37	04/19/24 04:57	1918-00-9	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW03/SW-1 Lab ID: 60450682007 Collected: 04/10/24 13:50 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
Dichlorprop	<0.00109	mg/L	0.00210	0.00109	1.05	04/16/24 14:37	04/19/24 04:57	120-36-5	
Dinoseb	<0.000263	mg/L	0.00210	0.000263	1.05	04/16/24 14:37	04/20/24 02:03	88-85-7	
MCPA	<0.0138	mg/L	0.105	0.0138	1.05	04/16/24 14:37	04/19/24 04:57	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.0693	mg/L	0.105	0.0693	1.05	04/16/24 14:37	04/19/24 04:57	93-65-2	
2,4,5-T	<0.000271	mg/L	0.00210	0.000271	1.05	04/16/24 14:37	04/19/24 04:57	93-76-5	
2,4,5-TP (Silvex)	<0.000352	mg/L	0.00210	0.000352	1.05	04/16/24 14:37	04/19/24 04:57	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	74.1	%	14.0-158		1.05	04/16/24 14:37	04/19/24 04:57	19719-28-9	
2,4-DCAA (S)	79.0	%	14.0-158		1.05	04/16/24 14:37	04/20/24 02:03	19719-28-9	
<b>8082 GCS PCB, LV</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<0.15	ug/L	1.0	0.15	1	04/16/24 12:05	04/19/24 09:22	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/19/24 09:22	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/19/24 09:22	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/19/24 09:22	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/19/24 09:22	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/19/24 09:22	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.19	ug/L	1.0	0.19	1	04/16/24 12:05	04/19/24 09:22	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	67	%	20-120		1	04/16/24 12:05	04/19/24 09:22	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Aluminum	1.03	mg/L	0.100	0.0185	1	04/17/24 12:16	04/23/24 00:51	7429-90-5	
Antimony	<0.00103	mg/L	0.00400	0.00103	1	04/17/24 12:16	04/23/24 00:51	7440-36-0	
Arsenic	0.00263	mg/L	0.00200	0.000180	1	04/17/24 12:16	04/23/24 00:51	7440-38-2	
Barium	0.0868	mg/L	0.00200	0.000381	1	04/17/24 12:16	04/23/24 00:51	7440-39-3	
Beryllium	<0.000190	mg/L	0.00200	0.000190	1	04/17/24 12:16	04/23/24 00:51	7440-41-7	
Cadmium	<0.000150	mg/L	0.00100	0.000150	1	04/17/24 12:16	04/23/24 00:51	7440-43-9	
Calcium	121	mg/L	10.0	0.936	10	04/17/24 12:16	04/23/24 13:40	7440-70-2	
Chromium	0.00204	mg/L	0.00200	0.00124	1	04/17/24 12:16	04/23/24 00:51	7440-47-3	
Copper	0.00553	mg/L	0.00500	0.00151	1	04/17/24 12:16	04/23/24 00:51	7440-50-8	
Cobalt	0.00245	mg/L	0.00200	0.000059	1	04/17/24 12:16	04/23/24 00:51	7440-48-4	
Iron	3.93	mg/L	0.100	0.0281	1	04/17/24 12:16	04/23/24 00:51	7439-89-6	
Lead	0.00396	mg/L	0.00200	0.000849	1	04/17/24 12:16	04/23/24 00:51	7439-92-1	
Magnesium	46.4	mg/L	10.0	0.735	10	04/17/24 12:16	04/23/24 13:40	7439-95-4	
Manganese	0.307	mg/L	0.00500	0.000704	1	04/17/24 12:16	04/23/24 00:51	7439-96-5	
Molybdenum	0.00104J	mg/L	0.00500	0.000348	1	04/17/24 12:16	04/23/24 00:51	7439-98-7	J
Nickel	0.00743	mg/L	0.00200	0.000816	1	04/17/24 12:16	04/23/24 00:51	7440-02-0	
Potassium	4.70	mg/L	2.00	0.108	1	04/17/24 12:16	04/23/24 00:51	7440-09-7	
Selenium	<0.000300	mg/L	0.00200	0.000300	1	04/17/24 12:16	04/23/24 00:51	7782-49-2	
Silver	<0.000070	mg/L	0.00200	0.000070	1	04/17/24 12:16	04/23/24 00:51	7440-22-4	
Sodium	0			0					
Sodium	52.5	mg/L	20.0	3.76	10	04/17/24 12:16	04/23/24 13:40	7440-23-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW03/SW-1 Lab ID: 60450682007 Collected: 04/10/24 13:50 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Thallium	<0.000121	mg/L	0.00200	0.000121	1	04/17/24 12:16	04/23/24 00:51	7440-28-0	
Vanadium	0.00277J	mg/L	0.00500	0.000664	1	04/17/24 12:16	04/23/24 00:51	7440-62-2	J
Zinc	0.0191J	mg/L	0.0250	0.00302	1	04/17/24 12:16	04/23/24 00:51	7440-66-6	J
<b>Mercury 7470A</b>									
Analytical Method: EPA 7470A Preparation Method: 7470A									
Pace National - Mt. Juliet									
Mercury	<0.000100	mg/L	0.000200	0.000100	1	04/13/24 15:16	04/14/24 15:18	7439-97-6	
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
Acenaphthene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 04:37	83-32-9	
Acenaphthylene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 04:37	208-96-8	
Anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	120-12-7	
Benzo(a)anthracene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	56-55-3	
Benzo(a)pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	50-32-8	
Benzo(b)fluoranthene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 04:37	205-99-2	
Benzo(g,h,i)perylene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 04:37	191-24-2	
Benzo(k)fluoranthene	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 04:37	207-08-9	
Benzoic Acid	<4.4	ug/L	50.0	4.4	1	04/16/24 18:23	04/19/24 04:37	65-85-0	
Benzyl alcohol	<1.6	ug/L	20.0	1.6	1	04/16/24 18:23	04/19/24 04:37	100-51-6	
4-Bromophenylphenyl ether	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	101-55-3	
Butylbenzylphthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 04:37	85-68-7	
Carbazole	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	86-74-8	
4-Chloro-3-methylphenol	<1.9	ug/L	20.0	1.9	1	04/16/24 18:23	04/19/24 04:37	59-50-7	
4-Chloroaniline	<2.0	ug/L	20.0	2.0	1	04/16/24 18:23	04/19/24 04:37	106-47-8	
bis(2-Chloroethoxy)methane	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 04:37	111-91-1	
bis(2-Chloroethyl) ether	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 04:37	111-44-4	
bis(2-Chloroisopropyl) ether	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 04:37	108-60-1	
2-Chloronaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 04:37	91-58-7	
2-Chlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 04:37	95-57-8	
4-Chlorophenylphenyl ether	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 04:37	7005-72-3	
Chrysene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 04:37	53-70-3	
Dibenzofuran	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	132-64-9	
1,2-Dichlorobenzene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 04:37	95-50-1	
1,3-Dichlorobenzene	<1.5	ug/L	10.0	1.5	1	04/16/24 18:23	04/19/24 04:37	541-73-1	
1,4-Dichlorobenzene	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 04:37	106-46-7	
3,3'-Dichlorobenzidine	<3.9	ug/L	20.0	3.9	1	04/16/24 18:23	04/19/24 04:37	91-94-1	
2,4-Dichlorophenol	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 04:37	120-83-2	
Diethylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 04:37	84-66-2	
2,4-Dimethylphenol	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 04:37	105-67-9	
Dimethylphthalate	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 04:37	131-11-3	
Di-n-butylphthalate	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 04:37	84-74-2	
4,6-Dinitro-2-methylphenol	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 04:37	534-52-1	
2,4-Dinitrophenol	<2.5	ug/L	50.0	2.5	1	04/16/24 18:23	04/19/24 04:37	51-28-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW03/SW-1 Lab ID: 60450682007 Collected: 04/10/24 13:50 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
2,4-Dinitrotoluene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	121-14-2	
2,6-Dinitrotoluene	<1.9	ug/L	10.0	1.9	1	04/16/24 18:23	04/19/24 04:37	606-20-2	
Di-n-octylphthalate	<2.2	ug/L	10.0	2.2	1	04/16/24 18:23	04/19/24 04:37	117-84-0	
bis(2-Ethylhexyl)phthalate	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 04:37	117-81-7	
Fluoranthene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	206-44-0	
Fluorene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	86-73-7	
Hexachloro-1,3-butadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 04:37	87-68-3	
Hexachlorobenzene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 04:37	118-74-1	
Hexachlorocyclopentadiene	<1.6	ug/L	10.0	1.6	1	04/16/24 18:23	04/19/24 04:37	77-47-4	
Hexachloroethane	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 04:37	67-72-1	
Indeno(1,2,3-cd)pyrene	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 04:37	193-39-5	
Isophorone	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 04:37	78-59-1	
2-Methylnaphthalene	<2.1	ug/L	10.0	2.1	1	04/16/24 18:23	04/19/24 04:37	91-57-6	
2-Methylphenol(o-Cresol)	<1.8	ug/L	10.0	1.8	1	04/16/24 18:23	04/19/24 04:37	95-48-7	
3&4-Methylphenol(m&p Cresol)	<1.7	ug/L	10.0	1.7	1	04/16/24 18:23	04/19/24 04:37	15831-10-4	
Naphthalene	<2.3	ug/L	10.0	2.3	1	04/16/24 18:23	04/19/24 04:37	91-20-3	
2-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 04:37	88-74-4	
3-Nitroaniline	<1.9	ug/L	50.0	1.9	1	04/16/24 18:23	04/19/24 04:37	99-09-2	
4-Nitroaniline	<2.2	ug/L	50.0	2.2	1	04/16/24 18:23	04/19/24 04:37	100-01-6	
Nitrobenzene	<2.4	ug/L	10.0	2.4	1	04/16/24 18:23	04/19/24 04:37	98-95-3	
2-Nitrophenol	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	88-75-5	
4-Nitrophenol	<0.37	ug/L	50.0	0.37	1	04/16/24 18:23	04/19/24 04:37	100-02-7	
N-Nitroso-di-n-propylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	621-64-7	
N-Nitrosodiphenylamine	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	86-30-6	
Pentachlorophenol	<3.5	ug/L	50.0	3.5	1	04/16/24 18:23	04/19/24 04:37	87-86-5	
Phenanthrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	85-01-8	
Phenol	<0.83	ug/L	10.0	0.83	1	04/16/24 18:23	04/19/24 04:37	108-95-2	
Pyrene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	129-00-0	
Pyridine	<1.1	ug/L	10.0	1.1	1	04/16/24 18:23	04/19/24 04:37	110-86-1	
1,2,4-Trichlorobenzene	<2.0	ug/L	10.0	2.0	1	04/16/24 18:23	04/19/24 04:37	120-82-1	
2,4,5-Trichlorophenol	<1.7	ug/L	25.0	1.7	1	04/16/24 18:23	04/19/24 04:37	95-95-4	
2,4,6-Trichlorophenol	<1.4	ug/L	10.0	1.4	1	04/16/24 18:23	04/19/24 04:37	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	60	%	30-120		1	04/16/24 18:23	04/19/24 04:37	4165-60-0	
2-Fluorobiphenyl (S)	53	%	25-120		1	04/16/24 18:23	04/19/24 04:37	321-60-8	
Terphenyl-d14 (S)	58	%	35-125		1	04/16/24 18:23	04/19/24 04:37	1718-51-0	
Phenol-d6 (S)	34	%	10-120		1	04/16/24 18:23	04/19/24 04:37	13127-88-3	
2-Fluorophenol (S)	45	%	20-120		1	04/16/24 18:23	04/19/24 04:37	367-12-4	
2,4,6-Tribromophenol (S)	59	%	25-120		1	04/16/24 18:23	04/19/24 04:37	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
TPH-ORO	0.83J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 16:25		B
TPH-DRO	0.65J	mg/L	1.0	0.31	1	04/11/24 12:40	04/18/24 16:25		B

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW03/SW-1 Lab ID: 60450682007 Collected: 04/10/24 13:50 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	94	%	40-140		1	04/11/24 12:40	04/18/24 16:25	4165-60-0	
2-Fluorobiphenyl (S)	93	%	30-145		1	04/11/24 12:40	04/18/24 16:25	321-60-8	
Terphenyl-d14 (S)	87	%	35-150		1	04/11/24 12:40	04/18/24 16:25	1718-51-0	
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/17/24 12:01	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/17/24 12:01	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/17/24 12:01	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 12:01	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 12:01	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/17/24 12:01	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/17/24 12:01	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/17/24 12:01	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/17/24 12:01	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/17/24 12:01	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 12:01	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/17/24 12:01	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/17/24 12:01	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/17/24 12:01	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/17/24 12:01	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/17/24 12:01	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/17/24 12:01	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/17/24 12:01	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/17/24 12:01	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/17/24 12:01	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/17/24 12:01	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/17/24 12:01	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/17/24 12:01	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 12:01	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 12:01	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 12:01	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 12:01	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/17/24 12:01	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/17/24 12:01	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/17/24 12:01	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/17/24 12:01	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/17/24 12:01	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/17/24 12:01	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/17/24 12:01	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/17/24 12:01	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/17/24 12:01	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/17/24 12:01	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/17/24 12:01	10061-01-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

**Sample: SW03/SW-1**      **Lab ID: 60450682007**      Collected: 04/10/24 13:50      Received: 04/10/24 16:35      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/17/24 12:01	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 12:01	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/17/24 12:01	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/17/24 12:01	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/17/24 12:01	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/17/24 12:01	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/17/24 12:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/17/24 12:01	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/17/24 12:01	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/17/24 12:01	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 12:01	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/17/24 12:01	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/17/24 12:01	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/17/24 12:01	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/17/24 12:01	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/17/24 12:01	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/17/24 12:01	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/17/24 12:01	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/17/24 12:01	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/17/24 12:01	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/17/24 12:01	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 12:01	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/17/24 12:01	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/17/24 12:01	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/17/24 12:01	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/17/24 12:01	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/17/24 12:01	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	103	%	80-120		1		04/17/24 12:01	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/17/24 12:01	2199-69-1	
Toluene-d8 (S)	103	%	80-120		1		04/17/24 12:01	2037-26-5	
Preservation pH	1.0		0.10		1		04/17/24 12:01		
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Kansas City									
TPH-GRO	<62.6	ug/L	500	62.6	1		04/11/24 15:29		
<b>Surrogates</b>									
Toluene-d8 (S)	98	%	80-120		1		04/11/24 15:29	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120		1		04/11/24 15:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		04/11/24 15:29	2199-69-1	
Preservation pH	11.0		0.10		1		04/11/24 15:29		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B									
Pace Analytical Services - Kansas City									
Alkalinity, Total as CaCO3	364	mg/L	20.0	10.5	1		04/12/24 11:54		

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: SW03/SW-1 Lab ID: 60450682007 Collected: 04/10/24 13:50 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500 OG Oxygen, Dissolved</b>	Analytical Method: SM 4500-O G Pace Analytical Services - Kansas City								
Oxygen, Dissolved	9.0	mg/L	0.10	0.10	1		04/15/24 16:10	7782-44-7	H6
<b>4500S2D Sulfide, Total</b>	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	0.072	mg/L	0.050	0.016	1		04/15/24 09:13	18496-25-8	
<b>9040 pH</b>	Analytical Method: EPA 9040 Pace Analytical Services - Kansas City								
pH at 25 Degrees C	7.6	Std. Units	0.10	0.10	1		04/19/24 12:42		H6
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Fluoride	0.19J	mg/L	0.20	0.12	1		04/17/24 10:52	16984-48-8	N2
Sulfate	149	mg/L	50.0	27.5	50		04/17/24 11:08	14808-79-8	
<b>350.1 Ammonia</b>	Analytical Method: EPA 350.1 Pace Analytical Services - Kansas City								
Nitrogen, Ammonia	<0.069	mg/L	0.10	0.069	1		04/19/24 13:35	7664-41-7	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/11/24 14:37		
Nitrogen, Nitrate	<0.069	mg/L	0.10	0.069	1		04/11/24 14:37	14797-55-8	
Nitrogen, Nitrite	<0.069	mg/L	0.10	0.069	1		04/11/24 14:37	14797-65-0	L1
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<0.069	mg/L	0.10	0.069	1		04/12/24 17:27		
<b>4500CNE Cyanide, Total</b>	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City								
Cyanide	<0.0038	mg/L	0.0050	0.0038	1	04/22/24 17:00	04/23/24 14:04	57-12-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: TRIP BLANK Lab ID: 60450682008 Collected: 04/10/24 08:00 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/17/24 10:09	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/17/24 10:09	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/17/24 10:09	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 10:09	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 10:09	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/17/24 10:09	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/17/24 10:09	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/17/24 10:09	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/17/24 10:09	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/17/24 10:09	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:09	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/17/24 10:09	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/17/24 10:09	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/17/24 10:09	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/17/24 10:09	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/17/24 10:09	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/17/24 10:09	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/17/24 10:09	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/17/24 10:09	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/17/24 10:09	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/17/24 10:09	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/17/24 10:09	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/17/24 10:09	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:09	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:09	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:09	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 10:09	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/17/24 10:09	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/17/24 10:09	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/17/24 10:09	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/17/24 10:09	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:09	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/17/24 10:09	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/17/24 10:09	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/17/24 10:09	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/17/24 10:09	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/17/24 10:09	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/17/24 10:09	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/17/24 10:09	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:09	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/17/24 10:09	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/17/24 10:09	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/17/24 10:09	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:09	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/17/24 10:09	75-09-2	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

**Sample: TRIP BLANK**      **Lab ID: 60450682008**      Collected: 04/10/24 08:00      Received: 04/10/24 16:35      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/17/24 10:09	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/17/24 10:09	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/17/24 10:09	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:09	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:09	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/17/24 10:09	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/17/24 10:09	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/17/24 10:09	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/17/24 10:09	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/17/24 10:09	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/17/24 10:09	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/17/24 10:09	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/17/24 10:09	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/17/24 10:09	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 10:09	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/17/24 10:09	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/17/24 10:09	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/17/24 10:09	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/17/24 10:09	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/17/24 10:09	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	103	%	80-120		1		04/17/24 10:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		04/17/24 10:09	2199-69-1	
Toluene-d8 (S)	102	%	80-120		1		04/17/24 10:09	2037-26-5	
Preservation pH	1.0		0.10		1		04/17/24 10:09		
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Kansas City									
TPH-GRO	<62.6	ug/L	500	62.6	1		04/20/24 20:37		
<b>Surrogates</b>									
Toluene-d8 (S)	99	%	80-120		1		04/20/24 20:37	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120		1		04/20/24 20:37	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		04/20/24 20:37	2199-69-1	
Preservation pH	1.0		0.10		1		04/20/24 20:37		

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: TRIP BLANK Lab ID: 60450682009 Collected: 04/10/24 08:00 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/17/24 10:23	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/17/24 10:23	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/17/24 10:23	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 10:23	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 10:23	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/17/24 10:23	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/17/24 10:23	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/17/24 10:23	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/17/24 10:23	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/17/24 10:23	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:23	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/17/24 10:23	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/17/24 10:23	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/17/24 10:23	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/17/24 10:23	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/17/24 10:23	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/17/24 10:23	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/17/24 10:23	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/17/24 10:23	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/17/24 10:23	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/17/24 10:23	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/17/24 10:23	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/17/24 10:23	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:23	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:23	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:23	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 10:23	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/17/24 10:23	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/17/24 10:23	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/17/24 10:23	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/17/24 10:23	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:23	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/17/24 10:23	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/17/24 10:23	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/17/24 10:23	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/17/24 10:23	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/17/24 10:23	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/17/24 10:23	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/17/24 10:23	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:23	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/17/24 10:23	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/17/24 10:23	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/17/24 10:23	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/17/24 10:23	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/17/24 10:23	75-09-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment WT

Pace Project No.: 60450682

Sample: TRIP BLANK Lab ID: 60450682009 Collected: 04/10/24 08:00 Received: 04/10/24 16:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/17/24 10:23	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/17/24 10:23	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/17/24 10:23	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:23	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/17/24 10:23	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/17/24 10:23	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/17/24 10:23	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/17/24 10:23	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/17/24 10:23	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/17/24 10:23	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/17/24 10:23	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/17/24 10:23	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/17/24 10:23	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/17/24 10:23	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 10:23	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/17/24 10:23	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/17/24 10:23	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/17/24 10:23	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/17/24 10:23	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/17/24 10:23	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/17/24 10:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		04/17/24 10:23	2199-69-1	
Toluene-d8 (S)	102	%	80-120		1		04/17/24 10:23	2037-26-5	
Preservation pH	1.0		0.10		1		04/17/24 10:23		

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch: 2266806

Analysis Method: EPA 8081B

QC Batch Method: 3510C

Analysis Description: Pesticides (GC) 8081B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

METHOD BLANK: R4058496-1

Matrix: Water

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aldrin	mg/L	<0.0000198	0.0000500	0.0000198	04/14/24 20:36	
alpha-BHC	mg/L	<0.0000172	0.0000500	0.0000172	04/14/24 20:36	
beta-BHC	mg/L	<0.0000208	0.0000500	0.0000208	04/14/24 20:36	
delta-BHC	mg/L	<0.0000150	0.0000500	0.0000150	04/14/24 20:36	
gamma-BHC (Lindane)	mg/L	<0.0000209	0.0000500	0.0000209	04/14/24 20:36	
Chlordane (Technical)	mg/L	<0.0000198	0.00500	0.0000198	04/14/24 20:36	
4,4'-DDD	mg/L	<0.0000177	0.0000500	0.0000177	04/14/24 20:36	
4,4'-DDE	mg/L	<0.0000154	0.0000500	0.0000154	04/14/24 20:36	
4,4'-DDT	mg/L	<0.0000198	0.0000500	0.0000198	04/14/24 20:36	
Dieldrin	mg/L	<0.0000162	0.0000500	0.0000162	04/14/24 20:36	
Endosulfan I	mg/L	<0.0000160	0.0000500	0.0000160	04/14/24 20:36	
Endosulfan II	mg/L	<0.0000164	0.0000500	0.0000164	04/14/24 20:36	
Endosulfan sulfate	mg/L	<0.0000217	0.0000500	0.0000217	04/14/24 20:36	
Endrin	mg/L	<0.0000161	0.0000500	0.0000161	04/14/24 20:36	
Endrin aldehyde	mg/L	<0.0000237	0.0000500	0.0000237	04/14/24 20:36	
Endrin ketone	mg/L	<0.0000219	0.0000500	0.0000219	04/14/24 20:36	
Hexachlorobenzene	mg/L	<0.0000176	0.0000500	0.0000176	04/14/24 20:36	
Heptachlor	mg/L	<0.0000148	0.0000500	0.0000148	04/14/24 20:36	
Heptachlor epoxide	mg/L	<0.0000183	0.0000500	0.0000183	04/14/24 20:36	
Methoxychlor	mg/L	<0.0000193	0.0000500	0.0000193	04/14/24 20:36	
Toxaphene	mg/L	<0.0000168	0.0000500	0.0000168	04/14/24 20:36	
Decachlorobiphenyl (S)	%	39.7	10.0-128		04/14/24 20:36	
Tetrachloro-m-xylene (S)	%	53.3	10.0-127		04/14/24 20:36	

LABORATORY CONTROL SAMPLE: R4058496-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aldrin	mg/L	0.00100	0.000555	55.5	22.0-124	
alpha-BHC	mg/L	0.00100	0.000766	76.6	54.0-130	
beta-BHC	mg/L	0.00100	0.000705	70.5	53.0-136	
delta-BHC	mg/L	0.00100	0.000692	69.2	54.0-133	
gamma-BHC (Lindane)	mg/L	0.00100	0.000789	78.9	55.0-129	
4,4'-DDD	mg/L	0.00100	0.000757	75.7	56.0-140	
4,4'-DDE	mg/L	0.00100	0.000681	68.1	52.0-128	
4,4'-DDT	mg/L	0.00100	0.000617	61.7	50.0-141	
Dieldrin	mg/L	0.00100	0.000766	76.6	59.0-133	
Endosulfan I	mg/L	0.00100	0.000722	72.2	57.0-131	
Endosulfan II	mg/L	0.00100	0.000734	73.4	58.0-133	
Endosulfan sulfate	mg/L	0.00100	0.000715	71.5	58.0-133	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

LABORATORY CONTROL SAMPLE: R4058496-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	mg/L	0.00100	0.000755	75.5	57.0-134	
Endrin aldehyde	mg/L	0.00100	0.000645	64.5	53.0-129	
Endrin ketone	mg/L	0.00100	0.000704	70.4	60.0-145	
Hexachlorobenzene	mg/L	0.00100	0.000608	60.8	30.0-114	
Heptachlor	mg/L	0.00100	0.000626	62.6	27.0-132	
Heptachlor epoxide	mg/L	0.00100	0.000741	74.1	57.0-130	
Methoxychlor	mg/L	0.00100	0.000659	65.9	54.0-155	
Decachlorobiphenyl (S)	%			27.7	10.0-128	
Tetrachloro-m-xylene (S)	%			56.8	10.0-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058496-3 R4058496-4

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450682001 Result	Spike Conc.	Spike Conc.	MS Result						
Aldrin	mg/L	ND	0.00100	0.00100	0.000577	0.000612	57.7	61.2	10.0-141	5.89	40
alpha-BHC	mg/L	ND	0.00100	0.00100	0.000795	0.000814	79.5	81.4	10.0-145	2.36	40
beta-BHC	mg/L	ND	0.00100	0.00100	0.000723	0.000748	72.3	74.8	14.0-146	3.40	35
delta-BHC	mg/L	ND	0.00100	0.00100	0.000716	0.000736	71.6	73.6	17.0-143	2.75	38
gamma-BHC (Lindane)	mg/L	ND	0.00100	0.00100	0.000825	0.000846	82.5	84.6	14.0-141	2.51	40
4,4'-DDD	mg/L	ND	0.00100	0.00100	0.000824	0.000887	82.4	88.7	10.0-160	7.36	38
4,4'-DDE	mg/L	ND	0.00100	0.00100	0.000708	0.000750	70.8	75.0	10.0-159	5.76	35
4,4'-DDT	mg/L	ND	0.00100	0.00100	0.000649	0.000702	64.9	70.2	10.0-160	7.85	38
Dieldrin	mg/L	ND	0.00100	0.00100	0.000790	0.000819	79.0	81.9	10.0-158	3.60	38
Endosulfan I	mg/L	ND	0.00100	0.00100	0.000734	0.000758	73.4	75.8	10.0-153	3.22	36
Endosulfan II	mg/L	ND	0.00100	0.00100	0.000747	0.000776	74.7	77.6	10.0-159	3.81	39
Endosulfan sulfate	mg/L	ND	0.00100	0.00100	0.000748	0.000777	74.8	77.7	23.0-147	3.80	35
Endrin	mg/L	ND	0.00100	0.00100	0.000797	0.000825	79.7	82.5	10.0-160	3.45	39
Endrin aldehyde	mg/L	ND	0.00100	0.00100	0.000669	0.000697	66.9	69.7	10.0-148	4.10	38
Endrin ketone	mg/L	ND	0.00100	0.00100	0.000737	0.000763	73.7	76.3	10.0-160	3.47	40
Hexachlorobenzene	mg/L	ND	0.00100	0.00100	0.000621	0.000633	62.1	63.3	10.0-130	1.91	40
Heptachlor	mg/L	ND	0.00100	0.00100	0.000680	0.000736	68.0	73.6	16.0-136	7.91	40
Heptachlor epoxide	mg/L	ND	0.00100	0.00100	0.000762	0.000789	76.2	78.9	10.0-160	3.48	36
Methoxychlor	mg/L	ND	0.00100	0.00100	0.000700	0.000740	70.0	74.0	10.0-160	5.56	34
Decachlorobiphenyl (S)	%						41.9	47.8	10.0-128		
Tetrachloro-m-xylene (S)	%						57.6	56.9	10.0-127		

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch:	2266267	Analysis Method:	EPA 8151A
QC Batch Method:	8151A	Analysis Description:	Chlorinated Herb. (GC) 8151A
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

METHOD BLANK: R4059572-1 Matrix: Water

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4-D	mg/L	<0.000547	0.00200	0.000547	04/18/24 15:25	
Dalapon	mg/L	<0.000344	0.00200	0.000344	04/18/24 15:25	
2,4-DB	mg/L	<0.000302	0.00200	0.000302	04/18/24 15:25	
Dicamba	mg/L	<0.000245	0.00200	0.000245	04/18/24 15:25	
Dichlorprop	mg/L	<0.00104	0.00200	0.00104	04/18/24 15:25	
Dinoseb	mg/L	<0.000250	0.00200	0.000250	04/18/24 15:25	
MCPA	mg/L	<0.0131	0.100	0.0131	04/18/24 15:25	
2-(2-methyl-4-chlorophenoxy)pa	mg/L	<0.0660	0.100	0.0660	04/18/24 15:25	
2,4,5-T	mg/L	<0.000258	0.00200	0.000258	04/18/24 15:25	
2,4,5-TP (Silvex)	mg/L	<0.000335	0.00200	0.000335	04/18/24 15:25	
2,4-DCAA (S)	%	.298	14.0-158		04/18/24 15:25	SR

LABORATORY CONTROL SAMPLE: R4059572-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-D	mg/L	0.00250	0.00202	80.8	50.0-120	
Dalapon	mg/L	0.00250	0.00193	77.2	32.0-120	
2,4-DB	mg/L	0.00250	0.00203	81.2	53.0-140	
Dicamba	mg/L	0.00250	0.00183	73.2	51.0-120	
Dichlorprop	mg/L	0.00250	0.00184	73.6	55.0-127	
Dinoseb	mg/L	0.00250	0.00232	92.8	36.0-134	
MCPA	mg/L	0.250	0.208	83.2	10.0-160	
2-(2-methyl-4-chlorophenoxy)pa	mg/L	0.250	0.157	62.8	10.0-160	
2,4,5-T	mg/L	0.00250	0.00170	68.0	54.0-120	
2,4,5-TP (Silvex)	mg/L	0.00250	0.00215	86.0	50.0-125	
2,4-DCAA (S)	%			1.33	14.0-158	SR

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059572-3 R4059572-4

Parameter	Units	R4059572-3		R4059572-4		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		60450682001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
2,4-D	mg/L	ND	0.00258	0.00278	0.00183	0.00247	70.9	88.8	50.0-120	29.8	20	R1
Dalapon	mg/L	ND	0.00258	0.00278	0.00246	0.00271	95.3	97.5	32.0-120	9.67	20	P9
2,4-DB	mg/L	ND	0.00258	0.00278	0.00200	0.00278	77.5	100	53.0-140	32.6	20	R1
Dicamba	mg/L	ND	0.00258	0.00278	0.00167	0.00221	64.7	79.5	51.0-120	27.8	20	R1
Dichlorprop	mg/L	ND	0.00258	0.00278	0.00181	0.00231	70.2	83.1	55.0-127	24.3	20	R1
Dinoseb	mg/L	ND	0.00258	0.00278	0.00210	0.00246	81.4	88.5	36.0-134	15.8	20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059572-3			R4059572-4			% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		60450682001	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
MCPA	mg/L	ND	0.258	0.278	0.215	0.268	83.3	96.4	10.0-160	21.9	40			
2-(2-methyl-4-chlorophenoxy)pa	mg/L	ND	0.258	0.278	0.237	0.271	91.9	97.5	10.0-160	13.4	23			
2,4,5-T	mg/L	ND	0.00258	0.00278	0.00202	0.00258	78.3	92.8	54.0-120	24.3	20	R1		
2,4,5-TP (Silvex)	mg/L	ND	0.00258	0.00278	0.00164	0.00217	63.6	78.1	50.0-125	27.8	20	R1		
2,4-DCAA (S)	%						63.7	79.6	14.0-158					

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch: 2266907

Analysis Method: EPA 6020B

QC Batch Method: 3015

Analysis Description: Metals (ICPMS) 6020B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

METHOD BLANK: R4060772-1

Matrix: Water

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	mg/L	<0.0185	0.100	0.0185	04/22/24 23:53	
Antimony	mg/L	<0.00103	0.00400	0.00103	04/22/24 23:53	
Arsenic	mg/L	<0.000180	0.00200	0.000180	04/22/24 23:53	
Barium	mg/L	<0.000381	0.00200	0.000381	04/22/24 23:53	
Beryllium	mg/L	<0.000190	0.00200	0.000190	04/22/24 23:53	
Cadmium	mg/L	<0.000150	0.00100	0.000150	04/22/24 23:53	
Calcium	mg/L	<0.0936	1.00	0.0936	04/22/24 23:53	
Chromium	mg/L	<0.00124	0.00200	0.00124	04/22/24 23:53	
Copper	mg/L	<0.00151	0.00500	0.00151	04/22/24 23:53	
Cobalt	mg/L	<0.0000596	0.00200	0.0000596	04/22/24 23:53	
Iron	mg/L	<0.0281	0.100	0.0281	04/22/24 23:53	
Lead	mg/L	<0.000849	0.00200	0.000849	04/22/24 23:53	
Magnesium	mg/L	<0.0735	1.00	0.0735	04/22/24 23:53	
Manganese	mg/L	<0.000704	0.00500	0.000704	04/22/24 23:53	
Molybdenum	mg/L	<0.000348	0.00500	0.000348	04/22/24 23:53	
Nickel	mg/L	<0.000816	0.00200	0.000816	04/22/24 23:53	
Potassium	mg/L	<0.108	2.00	0.108	04/22/24 23:53	
Selenium	mg/L	<0.000300	0.00200	0.000300	04/22/24 23:53	
Silver	mg/L	<0.0000700	0.00200	0.0000700	04/22/24 23:53	
Sodium	mg/L	<0.376	2.00	0.376	04/22/24 23:53	
Thallium	mg/L	<0.000121	0.00200	0.000121	04/22/24 23:53	
Vanadium	mg/L	<0.000664	0.00500	0.000664	04/22/24 23:53	
Zinc	mg/L	<0.00302	0.0250	0.00302	04/22/24 23:53	

LABORATORY CONTROL SAMPLE: R4060772-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/L	1.00	1.03	103	80.0-120	
Antimony	mg/L	0.0500	0.0540	108	80.0-120	
Arsenic	mg/L	0.0500	0.0529	106	80.0-120	
Barium	mg/L	0.0500	0.0511	102	80.0-120	
Beryllium	mg/L	0.0500	0.0486	97.2	80.0-120	
Cadmium	mg/L	0.0500	0.0546	109	80.0-120	
Calcium	mg/L	5.00	5.24	105	80.0-120	
Chromium	mg/L	0.0500	0.0533	107	80.0-120	
Copper	mg/L	0.0500	0.0517	103	80.0-120	
Cobalt	mg/L	0.0500	0.0535	107	80.0-120	
Iron	mg/L	1.00	1.06	106	80.0-120	
Lead	mg/L	0.0500	0.0527	105	80.0-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

LABORATORY CONTROL SAMPLE: R4060772-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	mg/L	5.00	5.16	103	80.0-120	
Manganese	mg/L	0.0500	0.0533	107	80.0-120	
Molybdenum	mg/L	0.0500	0.0523	105	80.0-120	
Nickel	mg/L	0.0500	0.0539	108	80.0-120	
Potassium	mg/L	5.00	5.21	104	80.0-120	
Selenium	mg/L	0.0500	0.0543	109	80.0-120	
Silver	mg/L	0.0500	0.0546	109	80.0-120	
Sodium	mg/L	5.00	5.38	108	80.0-120	
Thallium	mg/L	0.0500	0.0518	104	80.0-120	
Vanadium	mg/L	0.0500	0.0527	105	80.0-120	
Zinc	mg/L	0.0500	0.0517	103	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4060772-4 R4060772-5

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450682001 Result	Spike Conc.	Spike Conc.	MS Result						
Aluminum	mg/L	0.0854	1.00	1.00	1.16	1.17	107	108	75.0-125	1.17	20
Antimony	mg/L	ND	0.0500	0.0500	0.0556	0.0543	111	109	75.0-125	2.31	20
Arsenic	mg/L	0.000884	0.0500	0.0500	0.0536	0.0540	106	106	75.0-125	0.669	20
Barium	mg/L	0.0572	0.0500	0.0500	0.111	0.111	107	107	75.0-125	0.089	20
Beryllium	mg/L	ND	0.0500	0.0500	0.0473	0.0520	94.6	104	75.0-125	9.46	20
Cadmium	mg/L	ND	0.0500	0.0500	0.0548	0.0547	110	109	75.0-125	0.127	20
Calcium	mg/L	147	5.00	5.00	151	150	79.3	62.8	75.0-125	0.547	20 P6
Chromium	mg/L	ND	0.0500	0.0500	0.0534	0.0543	107	109	75.0-125	1.62	20
Copper	mg/L	0.00202	0.0500	0.0500	0.0513	0.0508	98.5	97.6	75.0-125	0.908	20
Cobalt	mg/L	0.000389	0.0500	0.0500	0.0534	0.0541	106	107	75.0-125	1.32	20
Iron	mg/L	0.399	1.00	1.00	1.51	1.57	111	117	75.0-125	3.76	20
Lead	mg/L	ND	0.0500	0.0500	0.0525	0.0523	105	105	75.0-125	0.412	20
Magnesium	mg/L	71.5	5.00	5.00	73.6	77.8	42.8	126	75.0-125	5.52	20 P6
Manganese	mg/L	0.426	0.0500	0.0500	0.476	0.481	98.7	110	75.0-125	1.14	20
Molybdenum	mg/L	0.00228	0.0500	0.0500	0.0570	0.0569	109	109	75.0-125	0.142	20
Nickel	mg/L	0.00214	0.0500	0.0500	0.0548	0.0563	105	108	75.0-125	2.67	20
Potassium	mg/L	5.48	5.00	5.00	11.2	11.3	115	117	75.0-125	0.617	20
Selenium	mg/L	0.000770	0.0500	0.0500	0.0544	0.0557	107	110	75.0-125	2.51	20
Silver	mg/L	ND	0.0500	0.0500	0.0548	0.0551	110	110	75.0-125	0.522	20
Sodium	mg/L	95.1	5.00	5.00	99.0	104	77.4	175	75.0-125	4.79	20 P6
Thallium	mg/L	ND	0.0500	0.0500	0.0519	0.0501	104	100	75.0-125	3.49	20
Vanadium	mg/L	ND	0.0500	0.0500	0.0532	0.0538	106	108	75.0-125	1.02	20
Zinc	mg/L	0.00349	0.0500	0.0500	0.0532	0.0539	99.4	101	75.0-125	1.43	20

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch:	2266159	Analysis Method:	EPA 7470A
QC Batch Method:	7470A	Analysis Description:	Mercury 7470A
		Laboratory:	Pace National - Mt. Juliet
Associated Lab Samples:	60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007		

METHOD BLANK: R4057515-1 Matrix: Water  
 Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	<0.000100	0.000200	0.000100	04/14/24 13:51	

LABORATORY CONTROL SAMPLE: R4057515-6

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00300	0.00352	117	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4057515-4 R4057515-5

Parameter	Units	R4057515-4		R4057515-5		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		60450682001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Mercury	mg/L	ND	0.00300	0.00300	0.00295	0.00286	98.4	95.2	75.0-125	3.33	20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT  
Pace Project No.: 60450682

QC Batch: 890844 Analysis Method: EPA 5030B/8260  
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge  
Laboratory: Pace Analytical Services - Kansas City  
Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007, 60450682008, 60450682009

METHOD BLANK: 3525758 Matrix: Water  
Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007, 60450682008, 60450682009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.084	1.0	0.084	04/17/24 09:14	
1,1,1-Trichloroethane	ug/L	<0.11	1.0	0.11	04/17/24 09:14	
1,1,2,2-Tetrachloroethane	ug/L	<0.15	1.0	0.15	04/17/24 09:14	
1,1,2-Trichloroethane	ug/L	<0.14	1.0	0.14	04/17/24 09:14	
1,1-Dichloroethane	ug/L	<0.12	1.0	0.12	04/17/24 09:14	
1,1-Dichloroethene	ug/L	<0.22	1.0	0.22	04/17/24 09:14	
1,1-Dichloropropene	ug/L	<0.14	1.0	0.14	04/17/24 09:14	
1,2,3-Trichlorobenzene	ug/L	<0.93	1.0	0.93	04/17/24 09:14	
1,2,3-Trichloropropane	ug/L	<0.41	2.5	0.41	04/17/24 09:14	
1,2,4-Trichlorobenzene	ug/L	<0.73	1.0	0.73	04/17/24 09:14	
1,2,4-Trimethylbenzene	ug/L	<0.32	1.0	0.32	04/17/24 09:14	
1,2-Dibromo-3-chloropropane	ug/L	<0.78	2.5	0.78	04/17/24 09:14	
1,2-Dibromoethane (EDB)	ug/L	<0.20	1.0	0.20	04/17/24 09:14	
1,2-Dichlorobenzene	ug/L	<0.12	1.0	0.12	04/17/24 09:14	
1,2-Dichloroethane	ug/L	<0.21	1.0	0.21	04/17/24 09:14	
1,2-Dichloroethene (Total)	ug/L	<0.22	1.0	0.22	04/17/24 09:14	
1,2-Dichloropropane	ug/L	<0.14	1.0	0.14	04/17/24 09:14	
1,3,5-Trimethylbenzene	ug/L	<0.090	1.0	0.090	04/17/24 09:14	
1,3-Dichlorobenzene	ug/L	<0.13	1.0	0.13	04/17/24 09:14	
1,3-Dichloropropane	ug/L	<0.10	1.0	0.10	04/17/24 09:14	
1,4-Dichlorobenzene	ug/L	<0.13	1.0	0.13	04/17/24 09:14	
2,2-Dichloropropane	ug/L	<0.16	1.0	0.16	04/17/24 09:14	
2-Butanone (MEK)	ug/L	<0.98	10.0	0.98	04/17/24 09:14	
2-Chlorotoluene	ug/L	<0.11	1.0	0.11	04/17/24 09:14	
2-Hexanone	ug/L	<1.1	10.0	1.1	04/17/24 09:14	
4-Chlorotoluene	ug/L	<0.15	1.0	0.15	04/17/24 09:14	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.74	10.0	0.74	04/17/24 09:14	
Acetone	ug/L	<2.5	10.0	2.5	04/17/24 09:14	
Benzene	ug/L	<0.14	1.0	0.14	04/17/24 09:14	
Bromobenzene	ug/L	<0.088	1.0	0.088	04/17/24 09:14	
Bromochloromethane	ug/L	<0.20	1.0	0.20	04/17/24 09:14	
Bromodichloromethane	ug/L	<0.16	1.0	0.16	04/17/24 09:14	
Bromoform	ug/L	<0.68	1.0	0.68	04/17/24 09:14	
Bromomethane	ug/L	<0.46	5.0	0.46	04/17/24 09:14	
Carbon disulfide	ug/L	<0.98	5.0	0.98	04/17/24 09:14	
Carbon tetrachloride	ug/L	<0.17	1.0	0.17	04/17/24 09:14	
Chlorobenzene	ug/L	<0.089	1.0	0.089	04/17/24 09:14	
Chloroethane	ug/L	<0.37	1.0	0.37	04/17/24 09:14	
Chloroform	ug/L	<0.22	1.0	0.22	04/17/24 09:14	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

METHOD BLANK: 3525758

Matrix: Water

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007, 60450682008, 60450682009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloromethane	ug/L	<0.28	1.0	0.28	04/17/24 09:14	
cis-1,2-Dichloroethene	ug/L	<0.13	1.0	0.13	04/17/24 09:14	
cis-1,3-Dichloropropene	ug/L	<0.078	1.0	0.078	04/17/24 09:14	
Dibromochloromethane	ug/L	<0.30	1.0	0.30	04/17/24 09:14	
Dibromomethane	ug/L	<0.11	1.0	0.11	04/17/24 09:14	
Dichlorodifluoromethane	ug/L	<0.20	1.0	0.20	04/17/24 09:14	
Ethylbenzene	ug/L	<0.12	1.0	0.12	04/17/24 09:14	
Hexachloro-1,3-butadiene	ug/L	<0.42	1.0	0.42	04/17/24 09:14	
Isopropylbenzene (Cumene)	ug/L	<0.097	1.0	0.097	04/17/24 09:14	
Methyl-tert-butyl ether	ug/L	<0.13	1.0	0.13	04/17/24 09:14	
Methylene Chloride	ug/L	<0.39	1.0	0.39	04/17/24 09:14	
n-Butylbenzene	ug/L	<0.15	1.0	0.15	04/17/24 09:14	
n-Propylbenzene	ug/L	<0.12	1.0	0.12	04/17/24 09:14	
Naphthalene	ug/L	<0.82	10.0	0.82	04/17/24 09:14	
p-Isopropyltoluene	ug/L	<0.13	1.0	0.13	04/17/24 09:14	
sec-Butylbenzene	ug/L	<0.11	1.0	0.11	04/17/24 09:14	
Styrene	ug/L	<0.12	1.0	0.12	04/17/24 09:14	
tert-Butylbenzene	ug/L	<0.12	1.0	0.12	04/17/24 09:14	
Tetrachloroethene	ug/L	<0.33	1.0	0.33	04/17/24 09:14	
Toluene	ug/L	<0.25	1.0	0.25	04/17/24 09:14	
trans-1,2-Dichloroethene	ug/L	<0.10	1.0	0.10	04/17/24 09:14	
trans-1,3-Dichloropropene	ug/L	<0.18	1.0	0.18	04/17/24 09:14	
Trichloroethene	ug/L	<0.21	1.0	0.21	04/17/24 09:14	
Trichlorofluoromethane	ug/L	<0.16	1.0	0.16	04/17/24 09:14	
Vinyl chloride	ug/L	<0.17	1.0	0.17	04/17/24 09:14	
Xylene (Total)	ug/L	<0.28	3.0	0.28	04/17/24 09:14	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		04/17/24 09:14	
4-Bromofluorobenzene (S)	%	104	80-120		04/17/24 09:14	
Toluene-d8 (S)	%	105	80-120		04/17/24 09:14	

LABORATORY CONTROL SAMPLE: 3525759

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.6	93	80-120	
1,1,1-Trichloroethane	ug/L	20	17.9	89	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.0	95	70-130	
1,1,2-Trichloroethane	ug/L	20	19.4	97	75-125	
1,1-Dichloroethane	ug/L	20	17.7	89	75-120	
1,1-Dichloroethene	ug/L	20	17.7	88	75-120	
1,1-Dichloropropene	ug/L	20	18.5	93	75-125	
1,2,3-Trichlorobenzene	ug/L	20	19.1	95	70-125	
1,2,3-Trichloropropane	ug/L	20	19.6	98	75-125	
1,2,4-Trichlorobenzene	ug/L	20	18.9	95	75-120	

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**REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450682

LABORATORY CONTROL SAMPLE: 3525759

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	20.3	101	75-120	
1,2-Dibromo-3-chloropropane	ug/L	20	21.2	106	65-125	
1,2-Dibromoethane (EDB)	ug/L	20	18.7	94	80-120	
1,2-Dichlorobenzene	ug/L	20	19.6	98	80-120	
1,2-Dichloroethane	ug/L	20	18.6	93	80-120	
1,2-Dichloroethene (Total)	ug/L	40	34.6	86	80-120	
1,2-Dichloropropane	ug/L	20	17.4	87	80-120	
1,3,5-Trimethylbenzene	ug/L	20	20.2	101	75-120	
1,3-Dichlorobenzene	ug/L	20	20.1	101	80-120	
1,3-Dichloropropane	ug/L	20	18.5	92	80-120	
1,4-Dichlorobenzene	ug/L	20	19.7	98	80-120	
2,2-Dichloropropane	ug/L	20	18.1	90	60-130	
2-Butanone (MEK)	ug/L	100	79.5	79	60-140	
2-Chlorotoluene	ug/L	20	20.4	102	80-120	
2-Hexanone	ug/L	100	87.3	87	55-155	
4-Chlorotoluene	ug/L	20	20.6	103	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	82.3	82	70-135	
Acetone	ug/L	100	88.0	88	25-185	
Benzene	ug/L	20	16.8	84	80-120	
Bromobenzene	ug/L	20	20.5	102	80-120	
Bromochloromethane	ug/L	20	18.5	92	80-120	
Bromodichloromethane	ug/L	20	16.7	84	80-120	
Bromoform	ug/L	20	18.3	92	70-135	
Bromomethane	ug/L	20	14.2	71	50-145	
Carbon disulfide	ug/L	20	17.4	87	70-130	
Carbon tetrachloride	ug/L	20	18.3	92	80-130	
Chlorobenzene	ug/L	20	19.2	96	80-120	
Chloroethane	ug/L	20	17.4	87	60-135	
Chloroform	ug/L	20	17.7	88	75-125	
Chloromethane	ug/L	20	17.3	87	60-130	
cis-1,2-Dichloroethene	ug/L	20	17.0	85	80-120	
cis-1,3-Dichloropropene	ug/L	20	17.8	89	75-125	
Dibromochloromethane	ug/L	20	18.1	90	80-120	
Dibromomethane	ug/L	20	18.6	93	75-125	
Dichlorodifluoromethane	ug/L	20	18.5	92	40-170	
Ethylbenzene	ug/L	20	19.7	99	80-120	
Hexachloro-1,3-butadiene	ug/L	20	19.1	95	70-125	
Isopropylbenzene (Cumene)	ug/L	20	20.2	101	80-130	
Methyl-tert-butyl ether	ug/L	20	17.7	88	75-125	
Methylene Chloride	ug/L	20	19.3	96	70-130	
n-Butylbenzene	ug/L	20	20.3	102	70-120	
n-Propylbenzene	ug/L	20	20.0	100	80-120	
Naphthalene	ug/L	20	19.5	97	60-140	
p-Isopropyltoluene	ug/L	20	20.6	103	80-120	
sec-Butylbenzene	ug/L	20	21.2	106	80-125	
Styrene	ug/L	20	19.5	97	80-155	
tert-Butylbenzene	ug/L	20	20.7	104	75-125	

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## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

LABORATORY CONTROL SAMPLE: 3525759

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/L	20	19.3	96	80-125	
Toluene	ug/L	20	19.0	95	80-120	
trans-1,2-Dichloroethene	ug/L	20	17.6	88	75-125	
trans-1,3-Dichloropropene	ug/L	20	17.5	87	70-125	
Trichloroethene	ug/L	20	17.6	88	80-125	
Trichlorofluoromethane	ug/L	20	19.0	95	65-140	
Vinyl chloride	ug/L	20	18.3	91	65-130	
Xylene (Total)	ug/L	60	58.6	98	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			103	80-120	
Toluene-d8 (S)	%			105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525760 3525761

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		60450682001 Result	Spike Conc.	Spike Conc.	Conc.							
1,1,1,2-Tetrachloroethane	ug/L	<0.084	20	20	20	18.0	17.2	90	86	80-120	5	15
1,1,1-Trichloroethane	ug/L	<0.11	20	20	20	18.0	17.9	90	90	75-125	1	15
1,1,2,2-Tetrachloroethane	ug/L	<0.15	20	20	20	18.1	17.1	90	86	80-120	6	15
1,1,2-Trichloroethane	ug/L	<0.14	20	20	20	17.6	17.4	88	87	80-120	1	20
1,1-Dichloroethane	ug/L	<0.12	20	20	20	17.3	17.4	86	87	75-120	1	15
1,1-Dichloroethene	ug/L	<0.22	20	20	20	17.8	17.7	89	88	75-120	1	25
1,1-Dichloropropene	ug/L	<0.14	20	20	20	19.1	18.8	95	94	75-125	2	20
1,2,3-Trichlorobenzene	ug/L	<0.93	20	20	20	17.9	18.6	89	93	60-135	4	25
1,2,3-Trichloropropane	ug/L	<0.41	20	20	20	16.1	18.5	80	92	75-120	14	20
1,2,4-Trichlorobenzene	ug/L	<0.73	20	20	20	17.7	16.7	88	84	65-130	6	25
1,2,4-Trimethylbenzene	ug/L	<0.32	20	20	20	19.8	18.8	99	94	80-120	5	20
1,2-Dibromo-3-chloropropane	ug/L	<0.78	20	20	20	18.2	15.3	91	76	65-130	17	25
1,2-Dibromoethane (EDB)	ug/L	<0.20	20	20	20	18.3	17.2	91	86	80-120	6	20
1,2-Dichlorobenzene	ug/L	<0.12	20	20	20	18.5	18.4	93	92	80-120	1	20
1,2-Dichloroethane	ug/L	<0.21	20	20	20	18.1	17.1	90	86	80-120	6	25
1,2-Dichloroethene (Total)	ug/L	<0.22	40	40	40	34.1	34.4	85	86	80-120	1	20
1,2-Dichloropropane	ug/L	<0.14	20	20	20	17.0	16.3	85	81	80-120	5	20
1,3,5-Trimethylbenzene	ug/L	<0.090	20	20	20	19.0	19.1	95	95	75-120	0	20
1,3-Dichlorobenzene	ug/L	<0.13	20	20	20	19.1	18.1	95	91	80-120	5	20
1,3-Dichloropropane	ug/L	<0.10	20	20	20	17.7	17.0	89	85	80-120	4	20
1,4-Dichlorobenzene	ug/L	<0.13	20	20	20	18.6	17.9	93	90	80-120	4	20
2,2-Dichloropropane	ug/L	<0.16	20	20	20	16.9	17.6	84	88	55-135	4	30
2-Butanone (MEK)	ug/L	<0.98	100	100	100	73.8	68.4	74	68	50-155	8	25
2-Chlorotoluene	ug/L	<0.11	20	20	20	19.4	19.5	97	97	80-120	0	20
2-Hexanone	ug/L	<1.1	100	100	100	77.9	73.5	78	74	55-145	6	20
4-Chlorotoluene	ug/L	<0.15	20	20	20	19.6	18.7	98	93	80-120	5	20
4-Methyl-2-pentanone (MIBK)	ug/L	<0.74	100	100	100	77.3	75.6	77	76	70-130	2	20
Acetone	ug/L	<2.5	100	100	100	72.7	67.4	73	67	35-160	8	25

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525760 3525761												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		60450682001 Result	Spike Conc.	Spike Conc.	MS Result							
Benzene	ug/L	<0.14	20	20	17.2	16.9	86	85	80-120	1	25	
Bromobenzene	ug/L	<0.088	20	20	19.7	18.8	98	94	80-120	5	15	
Bromochloromethane	ug/L	<0.20	20	20	16.7	17.4	83	87	80-120	4	20	
Bromodichloromethane	ug/L	<0.16	20	20	15.9	16.3	80	81	80-120	2	15	
Bromoform	ug/L	<0.68	20	20	17.3	16.3	87	81	60-130	6	20	
Bromomethane	ug/L	<0.46	20	20	15.7	15.9	78	80	50-140	2	45	
Carbon disulfide	ug/L	<0.98	20	20	17.1	17.6	84	87	75-125	3	25	
Carbon tetrachloride	ug/L	<0.17	20	20	19.3	19.0	97	95	70-130	2	20	
Chlorobenzene	ug/L	<0.089	20	20	18.9	18.6	95	93	80-120	2	20	
Chloroethane	ug/L	<0.37	20	20	20.0	19.0	100	95	70-130	5	20	
Chloroform	ug/L	<0.22	20	20	17.8	18.1	89	90	75-120	2	20	
Chloromethane	ug/L	<0.28	20	20	17.3	17.3	86	87	45-145	0	30	
cis-1,2-Dichloroethene	ug/L	<0.13	20	20	16.8	16.6	84	83	80-120	1	20	
cis-1,3-Dichloropropene	ug/L	<0.078	20	20	16.3	16.0	82	80	75-125	2	20	
Dibromochloromethane	ug/L	<0.30	20	20	16.6	17.2	83	86	75-125	4	20	
Dibromomethane	ug/L	<0.11	20	20	17.5	17.2	87	86	80-120	1	20	
Dichlorodifluoromethane	ug/L	<0.20	20	20	18.2	17.8	91	89	25-180	2	25	
Ethylbenzene	ug/L	<0.12	20	20	19.8	18.6	99	93	80-120	6	25	
Hexachloro-1,3-butadiene	ug/L	<0.42	20	20	18.1	17.2	90	86	65-125	5	30	
Isopropylbenzene (Cumene)	ug/L	<0.097	20	20	19.5	19.3	97	96	80-125	1	20	
Methyl-tert-butyl ether	ug/L	<0.13	20	20	17.4	16.4	87	82	75-125	6	30	
Methylene Chloride	ug/L	<0.39	20	20	18.6	19.2	93	96	70-140	3	25	
n-Butylbenzene	ug/L	<0.15	20	20	18.5	19.0	93	95	70-125	2	25	
n-Propylbenzene	ug/L	<0.12	20	20	19.2	19.4	96	97	80-120	1	20	
Naphthalene	ug/L	<0.82	20	20	18.0	16.7	90	84	60-140	7	25	
p-Isopropyltoluene	ug/L	<0.13	20	20	19.5	19.4	97	97	80-120	0	20	
sec-Butylbenzene	ug/L	<0.11	20	20	20.2	19.8	101	99	80-120	2	20	
Styrene	ug/L	<0.12	20	20	18.7	18.6	93	93	80-120	0	30	
tert-Butylbenzene	ug/L	<0.12	20	20	19.5	19.8	98	99	80-120	1	20	
Tetrachloroethene	ug/L	<0.33	20	20	19.1	19.1	96	95	80-125	0	25	
Toluene	ug/L	<0.25	20	20	18.5	19.0	92	95	80-120	3	25	
trans-1,2-Dichloroethene	ug/L	<0.10	20	20	17.3	17.8	87	89	80-120	2	20	
trans-1,3-Dichloropropene	ug/L	<0.18	20	20	16.6	16.2	83	81	75-125	3	15	
Trichloroethene	ug/L	<0.21	20	20	17.1	17.5	85	88	80-125	3	20	
Trichlorofluoromethane	ug/L	<0.16	20	20	19.6	19.8	98	99	75-125	1	20	
Vinyl chloride	ug/L	<0.17	20	20	19.1	19.5	95	98	65-140	2	25	
Xylene (Total)	ug/L	<0.28	60	60	58.0	57.8	97	96	80-120	0	25	
1,2-Dichlorobenzene-d4 (S)	%						96	96	80-120			
4-Bromofluorobenzene (S)	%						101	100	80-120			
Toluene-d8 (S)	%						104	105	80-120			
Preservation pH		1.0			1.0	1.0				0		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525762 3525763												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		60450724005 Result	Spike Conc.	Spike Conc.	MS Result							
1,1,1,2-Tetrachloroethane	ug/L	ND	400	400	348	350	87	87	80-120	0	15	
1,1,1-Trichloroethane	ug/L	ND	400	400	348	342	87	86	75-125	2	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	400	400	357	366	89	92	80-120	2	15	
1,1,2-Trichloroethane	ug/L	ND	400	400	361	369	90	92	80-120	2	20	
1,1-Dichloroethane	ug/L	14.2J	400	400	361	362	87	87	75-120	0	15	
1,1-Dichloroethene	ug/L	ND	400	400	325	332	81	83	75-120	2	25	
1,1-Dichloropropene	ug/L	ND	400	400	349	350	87	88	75-125	0	20	
1,2,3-Trichlorobenzene	ug/L	ND	400	400	343	369	86	92	60-135	7	25	
1,2,3-Trichloropropane	ug/L	ND	400	400	341	404	85	101	75-120	17	20	
1,2,4-Trichlorobenzene	ug/L	ND	400	400	341	355	85	89	65-130	4	25	
1,2,4-Trimethylbenzene	ug/L	ND	400	400	377	373	94	93	80-120	1	20	
1,2-Dibromo-3-chloropropane	ug/L	ND	400	400	328	401	82	100	65-130	20	25	
1,2-Dibromoethane (EDB)	ug/L	ND	400	400	361	352	90	88	80-120	2	20	
1,2-Dichlorobenzene	ug/L	ND	400	400	375	384	94	96	80-120	2	20	
1,2-Dichloroethane	ug/L	ND	400	400	370	361	92	90	80-120	2	25	
1,2-Dichloroethene (Total)	ug/L	576	800	800	1300	1290	91	89	80-120	1	20	
1,2-Dichloropropane	ug/L	ND	400	400	331	350	83	88	80-120	6	20	
1,3,5-Trimethylbenzene	ug/L	ND	400	400	394	381	98	95	75-120	3	20	
1,3-Dichlorobenzene	ug/L	ND	400	400	373	374	93	93	80-120	0	20	
1,3-Dichloropropane	ug/L	ND	400	400	360	366	90	92	80-120	2	20	
1,4-Dichlorobenzene	ug/L	ND	400	400	360	370	90	93	80-120	3	20	
2,2-Dichloropropane	ug/L	ND	400	400	331	340	83	85	55-135	3	30	
2-Butanone (MEK)	ug/L	ND	2000	2000	1560	1550	78	77	50-155	1	25	
2-Chlorotoluene	ug/L	ND	400	400	380	386	95	97	80-120	2	20	
2-Hexanone	ug/L	ND	2000	2000	1650	1640	82	82	55-145	0	20	
4-Chlorotoluene	ug/L	ND	400	400	399	383	100	96	80-120	4	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2000	2000	1650	1630	82	81	70-130	1	20	
Acetone	ug/L	ND	2000	2000	1430	1480	72	74	35-160	3	25	
Benzene	ug/L	ND	400	400	345	342	86	86	80-120	1	25	
Bromobenzene	ug/L	ND	400	400	384	394	96	99	80-120	3	15	
Bromochloromethane	ug/L	ND	400	400	363	365	91	91	80-120	1	20	
Bromodichloromethane	ug/L	ND	400	400	336	319	84	80	80-120	5	15	
Bromoform	ug/L	ND	400	400	343	354	86	88	60-130	3	20	
Bromomethane	ug/L	ND	400	400	286	317	72	79	50-140	10	45	
Carbon disulfide	ug/L	ND	400	400	331	327	83	82	75-125	1	25	
Carbon tetrachloride	ug/L	ND	400	400	358	356	89	89	70-130	1	20	
Chlorobenzene	ug/L	24.7	400	400	393	393	92	92	80-120	0	20	
Chloroethane	ug/L	ND	400	400	367	351	92	88	70-130	4	20	
Chloroform	ug/L	ND	400	400	359	356	90	89	75-120	1	20	
Chloromethane	ug/L	ND	400	400	316	321	79	80	45-145	2	30	
cis-1,2-Dichloroethene	ug/L	566	400	400	953	957	97	98	80-120	0	20	
cis-1,3-Dichloropropene	ug/L	ND	400	400	330	345	82	86	75-125	5	20	
Dibromochloromethane	ug/L	ND	400	400	357	347	89	87	75-125	3	20	
Dibromomethane	ug/L	ND	400	400	360	349	90	87	80-120	3	20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

Parameter	Units	60450724005		3525762		3525763		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result								
Dichlorodifluoromethane	ug/L	ND	400	400	345	329	86	82	25-180	5	25			
Ethylbenzene	ug/L	ND	400	400	381	379	95	95	80-120	1	25			
Hexachloro-1,3-butadiene	ug/L	ND	400	400	332	337	83	84	65-125	2	30			
Isopropylbenzene (Cumene)	ug/L	ND	400	400	377	379	94	95	80-125	0	20			
Methyl-tert-butyl ether	ug/L	ND	400	400	346	351	87	88	75-125	2	30			
Methylene Chloride	ug/L	ND	400	400	385	375	96	94	70-140	3	25			
n-Butylbenzene	ug/L	ND	400	400	367	374	92	94	70-125	2	25			
n-Propylbenzene	ug/L	ND	400	400	370	368	93	92	80-120	1	20			
Naphthalene	ug/L	ND	400	400	337	376	84	94	60-140	11	25			
p-Isopropyltoluene	ug/L	ND	400	400	369	371	92	93	80-120	1	20			
sec-Butylbenzene	ug/L	ND	400	400	387	395	97	99	80-120	2	20			
Styrene	ug/L	ND	400	400	364	360	91	90	80-120	1	30			
tert-Butylbenzene	ug/L	ND	400	400	370	376	93	94	80-120	2	20			
Tetrachloroethene	ug/L	ND	400	400	368	373	92	93	80-125	1	25			
Toluene	ug/L	ND	400	400	367	359	92	90	80-120	2	25			
trans-1,2-Dichloroethene	ug/L	9.7J	400	400	347	334	84	81	80-120	4	20			
trans-1,3-Dichloropropene	ug/L	ND	400	400	335	343	84	86	75-125	2	15			
Trichloroethene	ug/L	ND	400	400	348	335	87	84	80-125	4	20			
Trichlorofluoromethane	ug/L	ND	400	400	386	370	97	92	75-125	4	20			
Vinyl chloride	ug/L	71.9	400	400	442	437	93	91	65-140	1	25			
Xylene (Total)	ug/L	ND	1200	1200	1150	1100	95	92	80-120	4	25			
1,2-Dichlorobenzene-d4 (S)	%						98	98	80-120					
4-Bromofluorobenzene (S)	%						97	102	80-120					
Toluene-d8 (S)	%						105	102	80-120					
Preservation pH		1.0			1.0	1.0						0		

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch:	890228	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV MO GRO Oxygenates
		Laboratory:	Pace Analytical Services - Kansas City
Associated Lab Samples:	60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007		

METHOD BLANK: 3523411 Matrix: Water  
 Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	ug/L	<62.6	500	62.6	04/11/24 12:11	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		04/11/24 12:11	
4-Bromofluorobenzene (S)	%	97	80-120		04/11/24 12:11	
Toluene-d8 (S)	%	98	80-120		04/11/24 12:11	

LABORATORY CONTROL SAMPLE: 3523412

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	ug/L	4000	3910	98	70-135	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3523413 3523414

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450682001 Result	Spike Conc.	Spike Conc.	Result						
1,2-Dichlorobenzene-d4 (S)	%					101	100	80-120		10	
4-Bromofluorobenzene (S)	%					99	100	80-120		10	
Toluene-d8 (S)	%					100	102	80-120		10	
Preservation pH		11.0			11.0	11.0				0	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch:	891416	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV MO GRO Oxygenates
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450682008

METHOD BLANK: 3528205 Matrix: Water

Associated Lab Samples: 60450682008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	ug/L	<62.6	500	62.6	04/20/24 20:08	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120		04/20/24 20:08	
4-Bromofluorobenzene (S)	%	101	80-120		04/20/24 20:08	
Toluene-d8 (S)	%	99	80-120		04/20/24 20:08	

LABORATORY CONTROL SAMPLE: 3528206

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	ug/L	4000	3310	83	70-135	
1,2-Dichlorobenzene-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3528207 3528208

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60451238014	Spike Conc.	Spike Conc.	Result						
1,2-Dichlorobenzene-d4 (S)	%					99	101	80-120		10	
4-Bromofluorobenzene (S)	%					98	101	80-120		10	
Toluene-d8 (S)	%					99	100	80-120		10	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch: 890662 Analysis Method: EPA 8082  
 QC Batch Method: EPA 3510 Analysis Description: 8082 GCS PCB, LV  
 Laboratory: Pace Analytical Services - Kansas City  
 Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

METHOD BLANK: 3525041 Matrix: Water  
 Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.15	1.0	0.15	04/17/24 11:42	
PCB-1221 (Aroclor 1221)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1232 (Aroclor 1232)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1242 (Aroclor 1242)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1248 (Aroclor 1248)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1254 (Aroclor 1254)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1260 (Aroclor 1260)	ug/L	<0.19	1.0	0.19	04/17/24 11:42	
Decachlorobiphenyl (S)	%	69	20-120		04/17/24 11:42	

LABORATORY CONTROL SAMPLE: 3525042

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	5	3.8	75	23-120	
PCB-1260 (Aroclor 1260)	ug/L	5	3.8	77	28-120	
Decachlorobiphenyl (S)	%			69	20-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525045 3525046

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450682001 Result	Spike Conc.	Spike Conc.	Result						
PCB-1016 (Aroclor 1016)	ug/L	<0.15	5	5	3.5	3.5	70	69	23-120	1	30
PCB-1260 (Aroclor 1260)	ug/L	<0.19	5	5	3.7	3.5	75	71	28-120	6	30
Decachlorobiphenyl (S)	%						70	67	20-120		

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## QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch: 890658

Analysis Method: EPA 8270

QC Batch Method: EPA 3510

Analysis Description: 8270 Water MSSV, RV

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

METHOD BLANK: 3525033

Matrix: Water

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
1,2-Dichlorobenzene	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
1,3-Dichlorobenzene	ug/L	<1.5	10.0	1.5	04/18/24 18:08	
1,4-Dichlorobenzene	ug/L	<1.7	10.0	1.7	04/18/24 18:08	
2,4,5-Trichlorophenol	ug/L	<1.7	25.0	1.7	04/18/24 18:08	
2,4,6-Trichlorophenol	ug/L	<1.4	10.0	1.4	04/18/24 18:08	
2,4-Dichlorophenol	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
2,4-Dimethylphenol	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
2,4-Dinitrophenol	ug/L	<2.5	50.0	2.5	04/18/24 18:08	
2,4-Dinitrotoluene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
2,6-Dinitrotoluene	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
2-Chloronaphthalene	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
2-Chlorophenol	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
2-Methylnaphthalene	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
2-Methylphenol(o-Cresol)	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
2-Nitroaniline	ug/L	<1.9	50.0	1.9	04/18/24 18:08	
2-Nitrophenol	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
3&4-Methylphenol(m&p Cresol)	ug/L	<1.7	10.0	1.7	04/18/24 18:08	
3,3'-Dichlorobenzidine	ug/L	<3.9	20.0	3.9	04/18/24 18:08	
3-Nitroaniline	ug/L	<1.9	50.0	1.9	04/18/24 18:08	
4,6-Dinitro-2-methylphenol	ug/L	<2.2	50.0	2.2	04/18/24 18:08	
4-Bromophenylphenyl ether	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
4-Chloro-3-methylphenol	ug/L	<1.9	20.0	1.9	04/18/24 18:08	
4-Chloroaniline	ug/L	<2.0	20.0	2.0	04/18/24 18:08	
4-Chlorophenylphenyl ether	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
4-Nitroaniline	ug/L	<2.2	50.0	2.2	04/18/24 18:08	
4-Nitrophenol	ug/L	<0.37	50.0	0.37	04/18/24 18:08	
Acenaphthene	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
Acenaphthylene	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
Anthracene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Benzo(a)anthracene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Benzo(a)pyrene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Benzo(b)fluoranthene	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
Benzo(g,h,i)perylene	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
Benzo(k)fluoranthene	ug/L	<2.2	10.0	2.2	04/18/24 18:08	
Benzoic Acid	ug/L	<4.4	50.0	4.4	04/18/24 18:08	
Benzyl alcohol	ug/L	<1.6	20.0	1.6	04/18/24 18:08	
bis(2-Chloroethoxy)methane	ug/L	<2.2	10.0	2.2	04/18/24 18:08	
bis(2-Chloroethyl) ether	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
bis(2-Chloroisopropyl) ether	ug/L	<2.3	10.0	2.3	04/18/24 18:08	

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## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

METHOD BLANK: 3525033

Matrix: Water

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Ethylhexyl)phthalate	ug/L	<2.4	10.0	2.4	04/18/24 18:08	
Butylbenzylphthalate	ug/L	<2.4	10.0	2.4	04/18/24 18:08	
Carbazole	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Chrysene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Di-n-butylphthalate	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
Di-n-octylphthalate	ug/L	<2.2	10.0	2.2	04/18/24 18:08	
Dibenz(a,h)anthracene	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
Dibenzofuran	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Diethylphthalate	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
Dimethylphthalate	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
Fluoranthene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Fluorene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Hexachloro-1,3-butadiene	ug/L	<1.6	10.0	1.6	04/18/24 18:08	
Hexachlorobenzene	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
Hexachlorocyclopentadiene	ug/L	<1.6	10.0	1.6	04/18/24 18:08	
Hexachloroethane	ug/L	<1.4	10.0	1.4	04/18/24 18:08	
Indeno(1,2,3-cd)pyrene	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
Isophorone	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
N-Nitroso-di-n-propylamine	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
N-Nitrosodiphenylamine	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Naphthalene	ug/L	<2.3	10.0	2.3	04/18/24 18:08	
Nitrobenzene	ug/L	<2.4	10.0	2.4	04/18/24 18:08	
Pentachlorophenol	ug/L	<3.5	50.0	3.5	04/18/24 18:08	
Phenanthrene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Phenol	ug/L	<0.83	10.0	0.83	04/18/24 18:08	
Pyrene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Pyridine	ug/L	<1.1	10.0	1.1	04/18/24 18:08	
2,4,6-Tribromophenol (S)	%	71	25-120		04/18/24 18:08	
2-Fluorobiphenyl (S)	%	59	25-120		04/18/24 18:08	
2-Fluorophenol (S)	%	52	20-120		04/18/24 18:08	
Nitrobenzene-d5 (S)	%	67	30-120		04/18/24 18:08	
Phenol-d6 (S)	%	40	10-120		04/18/24 18:08	
Terphenyl-d14 (S)	%	72	35-125		04/18/24 18:08	

LABORATORY CONTROL SAMPLE: 3525034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	100	58.5	59	45-120	
1,2-Dichlorobenzene	ug/L	100	55.6	56	45-120	
1,3-Dichlorobenzene	ug/L	100	55.1	55	40-120	
1,4-Dichlorobenzene	ug/L	100	55.2	55	40-120	
2,4,5-Trichlorophenol	ug/L	100	63.4	63	55-120	
2,4,6-Trichlorophenol	ug/L	100	64.2	64	50-120	
2,4-Dichlorophenol	ug/L	100	62.8	63	50-120	

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## QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450682

LABORATORY CONTROL SAMPLE: 3525034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dimethylphenol	ug/L	100	62.0	62	50-120	
2,4-Dinitrophenol	ug/L	100	62.8	63	10-140	
2,4-Dinitrotoluene	ug/L	100	65.7	66	60-120	
2,6-Dinitrotoluene	ug/L	100	66.1	66	55-120	
2-Chloronaphthalene	ug/L	100	61.1	61	50-120	
2-Chlorophenol	ug/L	100	63.8	64	45-120	
2-Methylnaphthalene	ug/L	100	60.1	60	45-120	
2-Methylphenol(o-Cresol)	ug/L	100	62.6	63	40-120	
2-Nitroaniline	ug/L	100	71.7	72	55-120	
2-Nitrophenol	ug/L	100	65.7	66	50-120	
3&4-Methylphenol(m&p Cresol)	ug/L	100	60.9	61	35-120	
3,3'-Dichlorobenzidine	ug/L	100	86.0	86	50-130	
3-Nitroaniline	ug/L	100	74.3	74	65-125	
4,6-Dinitro-2-methylphenol	ug/L	100	67.9	68	35-130	
4-Bromophenylphenyl ether	ug/L	100	66.0	66	58-120	
4-Chloro-3-methylphenol	ug/L	100	67.6	68	55-120	
4-Chloroaniline	ug/L	100	75.6	76	55-125	
4-Chlorophenylphenyl ether	ug/L	100	63.0	63	55-120	
4-Nitroaniline	ug/L	100	69.0	69	60-120	
4-Nitrophenol	ug/L	100	42.3J	42	15-120	
Acenaphthene	ug/L	100	61.7	62	55-120	
Acenaphthylene	ug/L	100	61.0	61	55-120	
Anthracene	ug/L	100	65.3	65	60-120	
Benzo(a)anthracene	ug/L	100	67.8	68	60-120	
Benzo(a)pyrene	ug/L	100	66.1	66	60-120	
Benzo(b)fluoranthene	ug/L	100	66.3	66	60-120	
Benzo(g,h,i)perylene	ug/L	100	69.4	69	60-120	
Benzo(k)fluoranthene	ug/L	100	65.6	66	55-120	
Benzoic Acid	ug/L	100	37.9J	38	10-120	
Benzyl alcohol	ug/L	100	65.2	65	45-120	
bis(2-Chloroethoxy)methane	ug/L	100	67.6	68	50-120	
bis(2-Chloroethyl) ether	ug/L	100	67.5	68	50-120	
bis(2-Chloroisopropyl) ether	ug/L	100	67.1	67	45-120	
bis(2-Ethylhexyl)phthalate	ug/L	100	71.3	71	60-120	
Butylbenzylphthalate	ug/L	100	72.5	72	60-120	
Carbazole	ug/L	100	64.3	64	60-120	
Chrysene	ug/L	100	67.3	67	60-120	
Di-n-butylphthalate	ug/L	100	70.3	70	60-120	
Di-n-octylphthalate	ug/L	100	71.8	72	60-120	
Dibenz(a,h)anthracene	ug/L	100	68.1	68	60-120	
Dibenzofuran	ug/L	100	60.9	61	60-120	
Diethylphthalate	ug/L	100	66.5	67	60-120	
Dimethylphthalate	ug/L	100	64.1	64	55-120	
Fluoranthene	ug/L	100	66.3	66	60-120	
Fluorene	ug/L	100	63.2	63	60-120	
Hexachloro-1,3-butadiene	ug/L	100	56.8	57	35-120	
Hexachlorobenzene	ug/L	100	68.9	69	55-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

LABORATORY CONTROL SAMPLE: 3525034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachlorocyclopentadiene	ug/L	100	47.9	48	20-120	
Hexachloroethane	ug/L	100	55.7	56	30-120	
Indeno(1,2,3-cd)pyrene	ug/L	100	68.3	68	55-120	
Isophorone	ug/L	100	68.5	68	55-120	
N-Nitroso-di-n-propylamine	ug/L	100	69.7	70	50-120	
N-Nitrosodiphenylamine	ug/L	100	63.6	64	60-120	
Naphthalene	ug/L	100	60.1	60	45-120	
Nitrobenzene	ug/L	100	68.3	68	45-120	
Pentachlorophenol	ug/L	100	64.7	65	20-145	
Phenanthrene	ug/L	100	64.0	64	60-120	
Phenol	ug/L	100	41.5	41	10-120	
Pyrene	ug/L	100	65.0	65	60-120	
Pyridine	ug/L	100	48.0	48	10-120	
2,4,6-Tribromophenol (S)	%			70	25-120	
2-Fluorobiphenyl (S)	%			59	25-120	
2-Fluorophenol (S)	%			53	20-120	
Nitrobenzene-d5 (S)	%			69	30-120	
Phenol-d6 (S)	%			40	10-120	
Terphenyl-d14 (S)	%			66	35-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525035 3525036

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		60450682001	Spike Conc.	Spike Conc.	Result							Result
1,2,4-Trichlorobenzene	ug/L	<2.0	99	100	65.3	55.0	66	55	45-120	17	30	
1,2-Dichlorobenzene	ug/L	<1.8	99	100	64.3	54.4	65	54	45-120	17	30	
1,3-Dichlorobenzene	ug/L	<1.5	99	100	64.5	54.3	65	54	40-120	17	30	
1,4-Dichlorobenzene	ug/L	<1.7	99	100	64.2	54.0	65	54	40-120	17	30	
2,4,5-Trichlorophenol	ug/L	<1.7	99	100	68.2	57.8	69	58	25-135	17	30	
2,4,6-Trichlorophenol	ug/L	<1.4	99	100	68.5	56.8	69	57	50-120	19	30	
2,4-Dichlorophenol	ug/L	<1.8	99	100	66.4	54.8	67	55	45-120	19	25	
2,4-Dimethylphenol	ug/L	<1.9	99	100	63.6	52.3	64	52	35-120	19	30	
2,4-Dinitrophenol	ug/L	<2.5	99	100	65.2	52.8	66	53	10-140	21	35	
2,4-Dinitrotoluene	ug/L	<2.0	99	100	71.1	60.3	72	60	55-120	16	35	
2,6-Dinitrotoluene	ug/L	<1.9	99	100	69.9	60.9	71	61	55-120	14	35	
2-Chloronaphthalene	ug/L	<2.1	99	100	66.3	56.2	67	56	45-120	16	35	
2-Chlorophenol	ug/L	<1.8	99	100	66.8	55.4	67	55	45-120	19	25	
2-Methylnaphthalene	ug/L	<2.1	99	100	66.3	56.4	67	56	45-120	16	30	
2-Methylphenol(o-Cresol)	ug/L	<1.8	99	100	64.5	52.0	65	52	40-120	21	30	
2-Nitroaniline	ug/L	<1.9	99	100	76.5	65.9	77	66	55-120	15	30	
2-Nitrophenol	ug/L	<2.0	99	100	69.2	59.0	70	59	50-120	16	30	
3&4-Methylphenol(m&p Cresol)	ug/L	<1.7	99	100	62.2	51.2	63	51	30-120	19	35	
3,3'-Dichlorobenzidine	ug/L	<3.9	99	100	78.1	67.8	79	68	10-155	14	35	
3-Nitroaniline	ug/L	<1.9	99	100	80.5	64.0	81	64	65-125	23	30 M1	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525035 3525036												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		60450682001 Result	Spike Conc.	Spike Conc.	MS Result							
4,6-Dinitro-2-methylphenol	ug/L	<2.2	99	100	68.5	56.1	69	56	10-155	20	30	
4-Bromophenylphenyl ether	ug/L	<2.0	99	100	69.7	58.2	70	58	50-120	18	35	
4-Chloro-3-methylphenol	ug/L	<1.9	99	100	70.5	59.5	71	59	50-120	17	25	
4-Chloroaniline	ug/L	<2.0	99	100	76.2	56.1	77	56	15-135	30	30	
4-Chlorophenylphenyl ether	ug/L	<1.9	99	100	67.7	58.6	68	59	50-120	15	35	
4-Nitroaniline	ug/L	<2.2	99	100	71.1	59.7	72	60	50-120	17	30	
4-Nitrophenol	ug/L	<0.37	99	100	46.0J	39.6J	46	40	10-120		30	
Acenaphthene	ug/L	<2.1	99	100	67.6	56.6	68	57	55-120	18	30	
Acenaphthylene	ug/L	<1.9	99	100	66.4	56.2	67	56	50-120	17	30	
Anthracene	ug/L	<2.0	99	100	69.8	57.7	71	58	55-120	19	30	
Benzo(a)anthracene	ug/L	<2.0	99	100	70.2	59.3	71	59	55-120	17	25	
Benzo(a)pyrene	ug/L	<2.0	99	100	70.4	59.0	71	59	55-120	18	30	
Benzo(b)fluoranthene	ug/L	<1.9	99	100	69.8	60.8	70	61	55-120	14	30	
Benzo(g,h,i)perylene	ug/L	<1.8	99	100	74.2	60.5	75	61	50-120	20	30	
Benzo(k)fluoranthene	ug/L	<2.2	99	100	70.1	56.4	71	56	50-120	22	30	
Benzoic Acid	ug/L	<4.4	99	100	33.7J	24.0J	34	24	10-120		30	
Benzyl alcohol	ug/L	<1.6	99	100	70.9	58.7	72	59	35-120	19	30	
bis(2-Chloroethoxy)methane	ug/L	<2.2	99	100	70.9	59.9	72	60	50-120	17	30	
bis(2-Chloroethyl) ether	ug/L	<2.1	99	100	71.9	59.8	73	60	45-120	19	30	
bis(2-Chloroisopropyl) ether	ug/L	<2.3	99	100	72.1	60.4	73	60	45-120	18	30	
bis(2-Ethylhexyl)phthalate	ug/L	<2.4	99	100	73.0	62.8	74	63	55-120	15	35	
Butylbenzylphthalate	ug/L	<2.4	99	100	75.4	64.9	76	65	55-120	15	35	
Carbazole	ug/L	<2.0	99	100	67.7	56.0	68	56	55-120	19	35	
Chrysene	ug/L	<2.0	99	100	69.4	58.7	70	59	55-120	17	30	
Di-n-butylphthalate	ug/L	<2.1	99	100	74.5	63.5	75	64	55-120	16	35	
Di-n-octylphthalate	ug/L	<2.2	99	100	76.2	64.3	77	64	60-120	17	35	
Dibenz(a,h)anthracene	ug/L	<1.8	99	100	72.5	61.3	73	61	50-120	17	30	
Dibenzofuran	ug/L	<2.0	99	100	67.9	57.6	69	58	50-120	16	30	
Diethylphthalate	ug/L	<2.1	99	100	72.0	61.2	73	61	55-120	16	35	
Dimethylphthalate	ug/L	<1.9	99	100	68.7	58.3	69	58	50-120	16	35	
Fluoranthene	ug/L	<2.0	99	100	71.1	59.3	72	59	55-120	18	30	
Fluorene	ug/L	<2.0	99	100	68.8	58.1	69	58	55-120	17	30	
Hexachloro-1,3-butadiene	ug/L	<1.6	99	100	64.3	54.4	65	54	35-120	17	35	
Hexachlorobenzene	ug/L	<2.1	99	100	71.4	59.5	72	59	50-120	18	35	
Hexachlorocyclopentadiene	ug/L	<1.6	99	100	49.3	43.0	50	43	15-120	14	40	
Hexachloroethane	ug/L	<1.4	99	100	64.8	55.7	65	56	30-120	15	35	
Indeno(1,2,3-cd)pyrene	ug/L	<1.8	99	100	72.8	60.0	74	60	50-120	19	30	
Isophorone	ug/L	<2.1	99	100	72.2	61.4	73	61	50-120	16	30	
N-Nitroso-di-n-propylamine	ug/L	<2.0	99	100	75.9	62.6	77	63	50-120	19	35	
N-Nitrosodiphenylamine	ug/L	<2.0	99	100	65.2	55.6	66	56	50-120	16	35	
Naphthalene	ug/L	<2.3	99	100	66.3	56.0	67	56	25-120	17	25	
Nitrobenzene	ug/L	<2.4	99	100	72.0	60.8	73	61	45-120	17	35	
Pentachlorophenol	ug/L	<3.5	99	100	67.1	57.3	68	57	20-145	16	40	
Phenanthrene	ug/L	<2.0	99	100	68.1	57.4	69	57	55-120	17	30	
Phenol	ug/L	<0.83	99	100	42.0	35.0	42	35	10-120	18	30	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

Parameter	Units	60450682001		3525035		3525036		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Pyrene	ug/L	<2.0	99	100	66.9	57.3	68	57	60-120	15	30	M1		
Pyridine	ug/L	<1.1	99	100	60.8	41.5	61	42	10-120	38	35	R1		
2,4,6-Tribromophenol (S)	%						74	62	25-120					
2-Fluorobiphenyl (S)	%						65	54	25-120					
2-Fluorophenol (S)	%						54	44	20-120					
Nitrobenzene-d5 (S)	%						73	62	30-120					
Phenol-d6 (S)	%						41	34	10-120					
Terphenyl-d14 (S)	%						70	58	35-125					

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch:	890118	Analysis Method:	EPA 8270
QC Batch Method:	EPA 3511	Analysis Description:	8270 MSSV TPH ORO
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

METHOD BLANK: 3522887 Matrix: Water  
 Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-DRO	mg/L	0.50J	1.0	0.31	04/18/24 12:13	
TPH-ORO	mg/L	0.69J	1.0	0.31	04/18/24 12:13	
2-Fluorobiphenyl (S)	%	99	30-145		04/18/24 12:13	
Nitrobenzene-d5 (S)	%	106	40-140		04/18/24 12:13	
Terphenyl-d14 (S)	%	100	35-150		04/18/24 12:13	

LABORATORY CONTROL SAMPLE: 3522888

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/L	25	25.4	102	45-135	
2-Fluorobiphenyl (S)	%			97	30-145	
Nitrobenzene-d5 (S)	%			110	40-140	
Terphenyl-d14 (S)	%			100	35-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3523057 3523058

Parameter	Units	60450682001		3523057		3523058		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec						
TPH-DRO	mg/L	0.50J	25	25	20.3	26.6	79	104	45-135	27	27		
2-Fluorobiphenyl (S)	%						92	94	30-145				
Nitrobenzene-d5 (S)	%						97	95	40-140				
Terphenyl-d14 (S)	%						83	91	35-150				

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### QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch:	890338	Analysis Method:	SM 2320B
QC Batch Method:	SM 2320B	Analysis Description:	2320B Alkalinity
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450682001, 60450682002, 60450682004, 60450682005, 60450682006, 60450682007

METHOD BLANK: 3523756 Matrix: Water

Associated Lab Samples: 60450682001, 60450682002, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	04/12/24 11:07	

LABORATORY CONTROL SAMPLE: 3523757

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	488	98	90-110	

SAMPLE DUPLICATE: 3523822

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	349	346	1	10	

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### QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch: 890624

Analysis Method: SM 4500-O G

QC Batch Method: SM 4500-O G

Analysis Description: 4500OG Oxygen, Dissolved

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450682001, 60450682002, 60450682004, 60450682005, 60450682006, 60450682007

SAMPLE DUPLICATE: 3524961

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Oxygen, Dissolved	mg/L	10.2	11.3	10	10	H6

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch: 890502 Analysis Method: SM 4500-S-2 D  
 QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total  
 Laboratory: Pace Analytical Services - Kansas City  
 Associated Lab Samples: 60450682001, 60450682002, 60450682004, 60450682005, 60450682006, 60450682007

METHOD BLANK: 3524496 Matrix: Water  
 Associated Lab Samples: 60450682001, 60450682002, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	<0.016	0.050	0.016	04/15/24 09:13	

LABORATORY CONTROL SAMPLE: 3524497

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.48	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3524498 3524499

Parameter	Units	60450682001		60450682002		60450682004		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result				
Sulfide, Total	mg/L	0.045J	0.5	0.5	0.36	0.45	63	82	75-125	23	20 M1,R1

SAMPLE DUPLICATE: 3524500

Parameter	Units	60450682002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	<0.016	0.016J		20	

SAMPLE DUPLICATE: 3524501

Parameter	Units	60450682004 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.021J	630		20	

SAMPLE DUPLICATE: 3525103

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.045J	<0.016		20	

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### QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch: 891249

Analysis Method: EPA 9040

QC Batch Method: EPA 9040

Analysis Description: 9040 pH

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450682002, 60450682004, 60450682005, 60450682006, 60450682007

SAMPLE DUPLICATE: 3527750

Parameter	Units	60451102001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.5	8.5	0	10	H6

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### QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch: 891666

Analysis Method: EPA 9040

QC Batch Method: EPA 9040

Analysis Description: 9040 pH

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450682001

SAMPLE DUPLICATE: 3529112

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.9	8.0	1	10	H6

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch: 890644 Analysis Method: EPA 300.0  
 QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions  
 Laboratory: Pace Analytical Services - Kansas City  
 Associated Lab Samples: 60450682001, 60450682002, 60450682004, 60450682005, 60450682006, 60450682007

METHOD BLANK: 3525007 Matrix: Water  
 Associated Lab Samples: 60450682001, 60450682002, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	<0.12	0.20	0.12	04/16/24 16:27	N2
Sulfate	mg/L	<0.55	1.0	0.55	04/16/24 16:27	

LABORATORY CONTROL SAMPLE: 3525008

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.4	94	90-110	N2
Sulfate	mg/L	5	4.8	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525009 3525010

Parameter	Units	60450682001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	<0.12	2.5	2.5	2.5	2.5	99	100	80-120	1	15	N2
Sulfate	mg/L	324	250	250	561	581	95	103	80-120	4	15	

MATRIX SPIKE SAMPLE: 3525011

Parameter	Units	60450788003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	ND	50	47.7	95	80-120	N2
Sulfate	mg/L	73.3	100	174	101	80-120	

SAMPLE DUPLICATE: 3525012

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Fluoride	mg/L	<0.12	<0.12		15	N2
Sulfate	mg/L	324	313	3	15	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch:	891280	Analysis Method:	EPA 350.1
QC Batch Method:	EPA 350.1	Analysis Description:	350.1 Ammonia
		Laboratory:	Pace Analytical Services - Kansas City
Associated Lab Samples:	60450682001, 60450682002, 60450682003, 60450682004, 60450682005		

METHOD BLANK: 3527739 Matrix: Water  
 Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.069	0.10	0.069	04/19/24 12:45	

LABORATORY CONTROL SAMPLE: 3527740

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	5.3	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3527741 3527743

Parameter	Units	60450682001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.069	5	5	5.5	6.0	110	121	90-110	10	18	M1

SAMPLE DUPLICATE: 3527742

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	<0.069	<0.069		18	

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QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch: 891282

Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1

Analysis Description: 350.1 Ammonia

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450682006, 60450682007

METHOD BLANK: 3527745

Matrix: Water

Associated Lab Samples: 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.069	0.10	0.069	04/19/24 13:29	

LABORATORY CONTROL SAMPLE: 3527746

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	4.9	98	90-110	

MATRIX SPIKE SAMPLE: 3527747

Parameter	Units	60450682006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	<0.069	5	5.6	111	90-110	M1

MATRIX SPIKE SAMPLE: 3527749

Parameter	Units	60450676001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	24.2	10	36.2	120	90-110	M1

SAMPLE DUPLICATE: 3527748

Parameter	Units	60450682007 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	<0.069	<0.069		18	

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REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch:	890187	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, Unpres.
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

METHOD BLANK: 3523179 Matrix: Water

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	<0.069	0.10	0.069	04/11/24 14:15	
Nitrogen, Nitrite	mg/L	<0.069	0.10	0.069	04/11/24 14:15	
Nitrogen, NO2 plus NO3	mg/L	<0.069	0.10	0.069	04/11/24 14:15	

LABORATORY CONTROL SAMPLE: 3523180

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1	1.0	103	70-130	
Nitrogen, Nitrite	mg/L	1	1.1	112	90-110 L1	
Nitrogen, NO2 plus NO3	mg/L	2	2.2	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3523181 3523183

Parameter	Units	60450682001		3523183		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Nitrogen, Nitrate	mg/L	<0.069	1	1	0.86	1.1	86	106	70-130	21	20
Nitrogen, Nitrite	mg/L	<0.069	1	1	0.79	1.2	79	116	90-110	38	20 M0, R1
Nitrogen, NO2 plus NO3	mg/L	<0.069	2	2	1.6	2.2	82	111	90-110	30	20 M1, R1

SAMPLE DUPLICATE: 3523182

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	<0.069	<0.069		20	
Nitrogen, Nitrite	mg/L	<0.069	<0.069		20	
Nitrogen, NO2 plus NO3	mg/L	<0.069	<0.069		20	

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch:	890370	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, preserved
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450682001, 60450682002

METHOD BLANK: 3523857 Matrix: Water

Associated Lab Samples: 60450682001, 60450682002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.069	0.10	0.069	04/12/24 16:52	

LABORATORY CONTROL SAMPLE: 3523858

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.2	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3523859 3523861

Parameter	Units	60450682001		3523861		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Nitrogen, NO2 plus NO3	mg/L	<0.069	2	2	2.1	1.7	103	85	90-110	19	20 M1

SAMPLE DUPLICATE: 3523860

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.069	<0.069		20	

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QUALITY CONTROL DATA

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch: 890371 Analysis Method: EPA 353.2  
 QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved  
 Laboratory: Pace Analytical Services - Kansas City  
 Associated Lab Samples: 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

METHOD BLANK: 3523862 Matrix: Water  
 Associated Lab Samples: 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.069	0.10	0.069	04/12/24 17:19	

LABORATORY CONTROL SAMPLE: 3523863

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.2	108	90-110	

MATRIX SPIKE SAMPLE: 3523864

Parameter	Units	60450682003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.069	2	2.2	108	90-110	

MATRIX SPIKE SAMPLE: 3523866

Parameter	Units	60450684003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	2.0	95	90-110	

SAMPLE DUPLICATE: 3523865

Parameter	Units	60450682005 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.069	<0.069		20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment WT

Pace Project No.: 60450682

QC Batch:	891601	Analysis Method:	SM 4500-CN-E
QC Batch Method:	SM 4500-CN-E	Analysis Description:	4500CNE Cyanide, Total
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

METHOD BLANK: 3528854 Matrix: Water

Associated Lab Samples: 60450682001, 60450682002, 60450682003, 60450682004, 60450682005, 60450682006, 60450682007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cyanide	mg/L	<0.0038	0.0050	0.0038	04/23/24 13:46	

LABORATORY CONTROL SAMPLE: 3528855

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.1	0.10	100	69-126	

MATRIX SPIKE SAMPLE: 3528856

Parameter	Units	60450682001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	<0.0038	0.1	0.086	85	55-124	

SAMPLE DUPLICATE: 3528857

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	<0.0038	<0.0038		46	

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## QUALIFIERS

Project: KC Water Treatment WT

Pace Project No.: 60450682

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

H6 Analysis initiated outside of the 15 minute EPA required holding time.

J Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.

L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

P9 RPD between the primary and confirmatory analysis exceeded 40%.

R1 RPD value was outside control limits.

SR Surrogate recovery was below laboratory control limits. Results may be biased low.

## REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KC Water Treatment WT

Pace Project No.: 60450682

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450682001	SW07/SW-1	3510C	2266806	EPA 8081B	2266806
60450682002	SW06/SW-1	3510C	2266806	EPA 8081B	2266806
60450682003	RINSATE-24-04-10	3510C	2266806	EPA 8081B	2266806
60450682004	SW05/SW-1	3510C	2266806	EPA 8081B	2266806
60450682005	SW04/SW-1	3510C	2266806	EPA 8081B	2266806
60450682006	DUP-02	3510C	2266806	EPA 8081B	2266806
60450682007	SW03/SW-1	3510C	2266806	EPA 8081B	2266806
60450682001	SW07/SW-1	8151A	2266267	EPA 8151A	2266267
60450682002	SW06/SW-1	8151A	2266267	EPA 8151A	2266267
60450682003	RINSATE-24-04-10	8151A	2266267	EPA 8151A	2266267
60450682004	SW05/SW-1	8151A	2266267	EPA 8151A	2266267
60450682005	SW04/SW-1	8151A	2266267	EPA 8151A	2266267
60450682006	DUP-02	8151A	2266267	EPA 8151A	2266267
60450682007	SW03/SW-1	8151A	2266267	EPA 8151A	2266267
60450682001	SW07/SW-1	EPA 3510	890662	EPA 8082	890882
60450682002	SW06/SW-1	EPA 3510	890662	EPA 8082	890882
60450682003	RINSATE-24-04-10	EPA 3510	890662	EPA 8082	890882
60450682004	SW05/SW-1	EPA 3510	890662	EPA 8082	890882
60450682005	SW04/SW-1	EPA 3510	890662	EPA 8082	890882
60450682006	DUP-02	EPA 3510	890662	EPA 8082	890882
60450682007	SW03/SW-1	EPA 3510	890662	EPA 8082	890882
60450682001	SW07/SW-1	3015	2266907	EPA 6020B	2266907
60450682002	SW06/SW-1	3015	2266907	EPA 6020B	2266907
60450682003	RINSATE-24-04-10	3015	2266907	EPA 6020B	2266907
60450682004	SW05/SW-1	3015	2266907	EPA 6020B	2266907
60450682005	SW04/SW-1	3015	2266907	EPA 6020B	2266907
60450682006	DUP-02	3015	2266907	EPA 6020B	2266907
60450682007	SW03/SW-1	3015	2266907	EPA 6020B	2266907
60450682001	SW07/SW-1	7470A	2266159	EPA 7470A	2266159
60450682002	SW06/SW-1	7470A	2266159	EPA 7470A	2266159
60450682003	RINSATE-24-04-10	7470A	2266159	EPA 7470A	2266159
60450682004	SW05/SW-1	7470A	2266159	EPA 7470A	2266159
60450682005	SW04/SW-1	7470A	2266159	EPA 7470A	2266159
60450682006	DUP-02	7470A	2266159	EPA 7470A	2266159
60450682007	SW03/SW-1	7470A	2266159	EPA 7470A	2266159
60450682001	SW07/SW-1	EPA 3510	890658	EPA 8270	891183
60450682002	SW06/SW-1	EPA 3510	890658	EPA 8270	891183
60450682003	RINSATE-24-04-10	EPA 3510	890658	EPA 8270	891183
60450682004	SW05/SW-1	EPA 3510	890658	EPA 8270	891183
60450682005	SW04/SW-1	EPA 3510	890658	EPA 8270	891183
60450682006	DUP-02	EPA 3510	890658	EPA 8270	891183
60450682007	SW03/SW-1	EPA 3510	890658	EPA 8270	891183
60450682001	SW07/SW-1	EPA 3511	890118	EPA 8270	890695
60450682002	SW06/SW-1	EPA 3511	890118	EPA 8270	890695
60450682003	RINSATE-24-04-10	EPA 3511	890118	EPA 8270	890695
60450682004	SW05/SW-1	EPA 3511	890118	EPA 8270	890695

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KC Water Treatment WT

Pace Project No.: 60450682

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450682005	SW04/SW-1	EPA 3511	890118	EPA 8270	890695
60450682006	DUP-02	EPA 3511	890118	EPA 8270	890695
60450682007	SW03/SW-1	EPA 3511	890118	EPA 8270	890695
60450682001	SW07/SW-1	EPA 5030B/8260	890844		
60450682002	SW06/SW-1	EPA 5030B/8260	890844		
60450682003	RINSATE-24-04-10	EPA 5030B/8260	890844		
60450682004	SW05/SW-1	EPA 5030B/8260	890844		
60450682005	SW04/SW-1	EPA 5030B/8260	890844		
60450682006	DUP-02	EPA 5030B/8260	890844		
60450682007	SW03/SW-1	EPA 5030B/8260	890844		
60450682008	TRIP BLANK	EPA 5030B/8260	890844		
60450682009	TRIP BLANK	EPA 5030B/8260	890844		
60450682001	SW07/SW-1	EPA 8260	890228		
60450682002	SW06/SW-1	EPA 8260	890228		
60450682003	RINSATE-24-04-10	EPA 8260	890228		
60450682004	SW05/SW-1	EPA 8260	890228		
60450682005	SW04/SW-1	EPA 8260	890228		
60450682006	DUP-02	EPA 8260	890228		
60450682007	SW03/SW-1	EPA 8260	890228		
60450682008	TRIP BLANK	EPA 8260	891416		
60450682001	SW07/SW-1	SM 2320B	890338		
60450682002	SW06/SW-1	SM 2320B	890338		
60450682004	SW05/SW-1	SM 2320B	890338		
60450682005	SW04/SW-1	SM 2320B	890338		
60450682006	DUP-02	SM 2320B	890338		
60450682007	SW03/SW-1	SM 2320B	890338		
60450682001	SW07/SW-1	SM 4500-O G	890624		
60450682002	SW06/SW-1	SM 4500-O G	890624		
60450682004	SW05/SW-1	SM 4500-O G	890624		
60450682005	SW04/SW-1	SM 4500-O G	890624		
60450682006	DUP-02	SM 4500-O G	890624		
60450682007	SW03/SW-1	SM 4500-O G	890624		
60450682001	SW07/SW-1	SM 4500-S-2 D	890502		
60450682002	SW06/SW-1	SM 4500-S-2 D	890502		
60450682004	SW05/SW-1	SM 4500-S-2 D	890502		
60450682005	SW04/SW-1	SM 4500-S-2 D	890502		
60450682006	DUP-02	SM 4500-S-2 D	890502		
60450682007	SW03/SW-1	SM 4500-S-2 D	890502		
60450682001	SW07/SW-1	EPA 9040	891666		
60450682002	SW06/SW-1	EPA 9040	891249		
60450682004	SW05/SW-1	EPA 9040	891249		
60450682005	SW04/SW-1	EPA 9040	891249		
60450682006	DUP-02	EPA 9040	891249		
60450682007	SW03/SW-1	EPA 9040	891249		

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KC Water Treatment WT

Pace Project No.: 60450682

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450682001	SW07/SW-1	EPA 300.0	890644		
60450682002	SW06/SW-1	EPA 300.0	890644		
60450682004	SW05/SW-1	EPA 300.0	890644		
60450682005	SW04/SW-1	EPA 300.0	890644		
60450682006	DUP-02	EPA 300.0	890644		
60450682007	SW03/SW-1	EPA 300.0	890644		
60450682001	SW07/SW-1	EPA 350.1	891280		
60450682002	SW06/SW-1	EPA 350.1	891280		
60450682003	RINSATE-24-04-10	EPA 350.1	891280		
60450682004	SW05/SW-1	EPA 350.1	891280		
60450682005	SW04/SW-1	EPA 350.1	891280		
60450682006	DUP-02	EPA 350.1	891282		
60450682007	SW03/SW-1	EPA 350.1	891282		
60450682001	SW07/SW-1	EPA 353.2	890187		
60450682002	SW06/SW-1	EPA 353.2	890187		
60450682003	RINSATE-24-04-10	EPA 353.2	890187		
60450682004	SW05/SW-1	EPA 353.2	890187		
60450682005	SW04/SW-1	EPA 353.2	890187		
60450682006	DUP-02	EPA 353.2	890187		
60450682007	SW03/SW-1	EPA 353.2	890187		
60450682001	SW07/SW-1	EPA 353.2	890370		
60450682002	SW06/SW-1	EPA 353.2	890370		
60450682003	RINSATE-24-04-10	EPA 353.2	890371		
60450682004	SW05/SW-1	EPA 353.2	890371		
60450682005	SW04/SW-1	EPA 353.2	890371		
60450682006	DUP-02	EPA 353.2	890371		
60450682007	SW03/SW-1	EPA 353.2	890371		
60450682001	SW07/SW-1	SM 4500-CN-E	891601	SM 4500-CN-E	891986
60450682002	SW06/SW-1	SM 4500-CN-E	891601	SM 4500-CN-E	891986
60450682003	RINSATE-24-04-10	SM 4500-CN-E	891601	SM 4500-CN-E	891986
60450682004	SW05/SW-1	SM 4500-CN-E	891601	SM 4500-CN-E	891986
60450682005	SW04/SW-1	SM 4500-CN-E	891601	SM 4500-CN-E	891986
60450682006	DUP-02	SM 4500-CN-E	891601	SM 4500-CN-E	891986
60450682007	SW03/SW-1	SM 4500-CN-E	891601	SM 4500-CN-E	891986

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DC#\_Title: ENV-FRM-LENE-0009\_Sample C

Revision: 2

Effective Date: 01/12/2022

WO#: 60450682



Client Name: Buras + McDowell

Courier: FedEx  UPS  VIA  Clay  PEX  ECI  Pace  Xroads  Client  Other

Tracking #: \_\_\_\_\_ Pace Shipping Label Used? Yes  No

Custody Seal on Cooler/Box Present: Yes  No  Seals intact: Yes  No

Packing Material: Bubble Wrap  Bubble Bags  Foam  None  Other  2pc

Thermometer Used: T298 Type of Ice: Wet Blue  None

Cooler Temperature (°C): As-read 3.6 Corr. Factor -0.3 Corrected 3.3

Date and initials of person examining contents 01-16-2022 te2

Temperature should be above freezing to 6°C 1.2, 3.0, 3.7, 3.1.5 1.4, 2.7, 3.4, 3.0, 1.2

Chain of Custody present:  Yes  No  N/A

Chain of Custody relinquished:  Yes  No  N/A

Samples arrived within holding time:  Yes  No  N/A

Short Hold Time analyses (<72hr):  Yes  No  N/A

NOX

Rush Turn Around Time requested:  Yes  No  N/A

Sufficient volume:  Yes  No  N/A

Correct containers used:  Yes  No  N/A

Pace containers used:  Yes  No  N/A

Containers intact:  Yes  No  N/A

Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?  Yes  No  N/A

Filtered volume received for dissolved tests?  Yes  No  N/A

Sample labels match COC: Date / time / ID / analyses  Yes  No  N/A

Samples contain multiple phases? Matrix: MS  Yes  No  N/A

Containers requiring pH preservation in compliance?  Yes  No  N/A

List sample IDs, volumes, lot #'s of preservative and the date/time added.

(HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide)  
(Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)

LOT#: 67187, 55199, 55200, 60620J

Cyanide water sample checks:

Lead acetate strip turns dark? (Record only)  Yes  No

Potassium iodide test strip turns blue/purple? (Preserve)  Yes  No

Trip Blank present:  Yes  No  N/A

2V694, 2D690

Headspace in VOA vials (>6mm):  Yes  No  N/A

all vials in cooler 2

Samples from USDA Regulated Area: State:  Yes  No  N/A

Additional labels attached to 5035A / TX1005 vials in the field?  Yes  No  N/A

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

Pace® Location Requested (City/State): **6045 0682**

Pace Analytical Kansas  
9608 Loiret Blvd., Lenexa, KS 66219

Company Name: **BURNS & MCDONNELL**  
Street Address: **9400 Ward Parkway, Kansas City, MO 64114**

Contact/Report To: **Justin Carter**  
Phone #: **816-333-9400**  
E-Mail: **jcarter@burnsmcd.com**  
Cc E-Mail:

Customer Project #: **KC Water Treatment WT**

Project Name: **KC Water Treatment WT**

Site Collection Info/Facility ID (as applicable):

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET [ ] MS

Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: **Missouri**

Reportable [ ] Yes [ ] No

Invoice To: **Accounts Payable**

Invoice E-Mail: **accountspayable@burnsmcd.com**

Purchase Order # (if applicable): **TBD**

Quote #:

County / State origin of sample(s): **Missouri**

Rush (Pre-approval required): **DW PWSID # or WW Permit # as applicable:**

[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other

Date Results Requested: **Field Filtered (if applicable): [ ] Yes [ ] No**

[ ] Other

\* Matrix Codes (insert in Matrix box below): Drinking Water (DW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix*	Comp / Grab	Composite Start Date	Time	Collected or Composite End Date	Time	# Cont.	Res. Results	Units	2320B Alkalinity	4500 OG Oxygen, Dissolved	4500CNE Cyanide, Total	4500SD Sulfide, Total	6020/7470 Metals **see list	8081 Pesticides	8082 GCS PCB, LV	8260 MSV	8260 MSV GRO	8270 MSSV DR/ORO	Sample Comment
<del>SW07/SW-1</del>	<del>SW</del>				<del>4/10/24</del>	<del>0820</del>				X	X	X	X	X	X	X	X	X	X	<del>MS</del>
<del>SW07/SW-1MSD</del>	<del>↓</del>					<del>0820</del>				X	X	X	X	X	X	X	X	X	X	<del>MSD</del>
<del>SD07/SD-1</del>	<del>SED</del>					<del>0830</del>				X	X	X	X	X	X	X	X	X	X	<del>MS</del>
<del>SD07/SD-1MSD</del>	<del>↓</del>					<del>0830</del>				X	X	X	X	X	X	X	X	X	X	<del>MSD</del>
<del>SD06/SD-1</del>	<del>↓</del>					<del>1010</del>				X	X	X	X	X	X	X	X	X	X	<del>MS</del>
<del>SW06/SW-1</del>	<del>SW</del>					<del>1020</del>				X	X	X	X	X	X	X	X	X	X	<del>MSD</del>
<del>Rinsate-24-04-10</del>	<del>ERB</del>					<del>1030</del>				X	X	X	X	X	X	X	X	X	X	<del>Rinsafe</del>
<del>SW05/SW-1</del>	<del>SW</del>					<del>1115</del>				X	X	X	X	X	X	X	X	X	X	<del>MSD</del>

Customer Remarks / Special Conditions / Possible Hazards:  
**Short Hold -48 hour nitrate/nitrite**

Thermometer ID: **1298** Obs. Temp. (°C): **3.6** Corrected Temp. (°C): **3.3, 1.4, 2.7** On Ice: **3.4, 3.0, 1.2**

# Coolers: **20-3** Correction Factor (%): **1635**

Tracking Number: **4/10/24**

Date/Time: **4/10/24**

Received by/Company: **JAPACE** (Signature)

Received by/Company: **Eric Brown** (Signature)

Received by/Company: **Eric Brown** (Signature)

Received by/Company: **Eric Brown** (Signature)

Received by/Company: **Eric Brown** (Signature)

Delivered by: [ ] In-Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other

Page: **2** of **4**

ENV-FRM-CORO-0019\_v02\_110123 ©

60450682

Burns & McDonnell Engineering  
 9400 Ward Parkway  
 Kansas City, Missouri 64114  
 Phone: (816) 333-9400 Fax: (816) 822-3494  
 Attention: Justin Carter

Laboratory: Pace  
 Address:  
 City/State/ZIP:  
 Telephone:

Document Control No.:

Lab. Reference No. or Episode No.:

Project Number: Kc water Treatment WT (170011)

Site Name:

Sample Type

Group or SWMU Name	Sample Number		Sample Event		Sample-Depth (ft-feet)	Sample Collected		Matrix			Remarks
	Point	Designator	Round	Year		Date	Time	Liquid	Solid	Gas	

<u>SW04/SW-1</u>						<u>4/10/24</u>	<u>1310</u>	<u>X</u>			
<u>DUP-02</u>						<u>↓</u>	<u>---</u>	<u>X</u>			
<u>SW03/SW-1</u>							<u>1350</u>	<u>X</u>			

Number of Containers

Parameter/Method Code	Number of Containers
<u>4500 Alkalinity</u>	<u>X</u>
<u>4500 O2 Oxygen, Dissolved</u>	<u>X</u>
<u>4500CN Chloride, Total</u>	<u>X</u>
<u>4500S Nitrate, Total</u>	<u>X</u>
<u>4500S Nitrite, Total</u>	<u>X</u>
<u>6020/7470 Metals, Total</u>	<u>X</u>
<u>6020/7470 Metals, Spec List</u>	<u>X</u>
<u>8081 Pesticides/8321 Herbicides</u>	<u>X</u>

Sampler (signature): <u>Eric Brown</u>	Sampler (signature): <u>Eric Brown</u>
Relinquished By (signature): <u>Justin Carter</u>	Relinquished By (signature): <u>Justin Carter</u>
Date/Time: <u>4/10/24 1630</u>	Date/Time: <u>4/10/24 1630</u>

Received By (signature): <u>JAPAC</u>	Received By (signature): <u>JAPAC</u>
Date/Time: <u>4/10/24 1630</u>	Date/Time: <u>4/10/24 1630</u>

Special Instructions: Short Hold-48 hr nitrate/nitrite

Ice Present in Container: Yes  No

Temperature Upon Receipt: 30

Laboratory Comments:

# Internal Transfer Chain of Custody

B103



Rush Multiplier      X  
 Samples Pre-Logged into eCOC

State Of Origin: MO  
 Cert. Needed:  Yes  No

Workorder: 60450682    Workorder Name: KC Water Treatment WT

Owner Received Date: 4/10/2024    Results Requested By: 4/25/2024

Report To		Subcontract To		Requested Analysis																						
Alice Spiller Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665		Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858		<div style="float: right; text-align: right;"> <p>L725210 LAB USE ONLY</p> <p>-01 -02 -03 -04 -05 -06 -07</p> </div>																						
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	HNO3	Unpreserved	Preserved Containers				6020/7470 TAL metals+Mo*see list	808 Pesticides	8321 or 8151 Herbicides												
1	SW07/SW-1	RQS	4/10/2024 08:20	60450682001	Water	3	6							X	X	X										
2	SW06/SW-1	PS	4/10/2024 10:20	60450682002	Water	1	2							X	X	X										
3	RINSATE-24-04-10	PS	4/10/2024 10:30	60450682003	Water	1	2							X	X	X										
4	SW05/SW-1	PS	4/10/2024 11:15	60450682004	Water	1	2							X	X	X										
5	SW04/SW-1	PS	4/10/2024 13:10	60450682005	Water	1	2							X	X	X										
6	DUP-02	PS	4/10/2024 00:00	60450682006	Water	1	2							X	X	X										
7	NSW03/SW-1	PS	4/10/2024 13:50	60450682007	Water	1	2							X	X	X										

Transfers					Comments				
Released By	Date/Time	Received By	Date/Time		KS sample location: 60-R28-S4				
<i>MC: [Signature]</i>	4-11-24 1700	<i>C. BODEN</i>	04-12-24 0900		list* Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn				
1									
2									
3									

Cooler Temperature on Receipt      °C    Custody Seal Y or N    Received on Ice Y or N    Samples Intact Y or N

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

Sample Receipt Checklist

COC Seal Present/Intact:  Y  N    If Applicable

COC Signed/Accurate:  Y  N    VOA Zero Headspace:  Y  N

Bottles arrive intact:  Y  N    Pres. Correct/Check:  Y  N

Correct bottles used:  Y  N

Sufficient volume sent:  Y  N

RA Screen <0.5 mR/hr:  Y  N

PH-10BDH5021 TRC-235216  
 CR6-20221V



U1725210

<u>Tracking Numbers</u>	<u>Temperature</u>
714U 2377 4379	0.7+0.1=0.8 DPA7
714U 2377 4380	0.1+0.1=0.2 DPA7

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date



April 24, 2024

Justin Carter  
Burns & McDonnell  
9400 Ward Parkway  
Kansas City, MO 64114

RE: Project: KC Water Treatment Sediment  
Pace Project No.: 60450758

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on April 10, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller  
alice.spiller@pacelabs.com  
(913)599-5665  
PM Lab Management

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL  
Jacquelin Lee, Burns & McDonnell



## REPORT OF LABORATORY ANALYSIS

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### CERTIFICATIONS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

#### Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219  
 Arkansas Inorganic Drinking Water Certification  
 Arkansas Certification #: 88-00679  
 Colorado Division of Oil and Public Safety  
 Illinois Certification #: 2000302023-6  
 Iowa Certification #: 118  
 Kansas Field Laboratory Certification #: E-92587

Kansas/NELAP Certification #: E-10116  
 Louisiana Certification #: 03055  
 Missouri Inorganic Drinking Water Certification  
 Nevada Certification #: KS000212024-1  
 Oklahoma Certification #: 2023-073  
 Texas Certification #: T104704407-23-17  
 Utah Certification #: KS000212022-13

#### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122  
 Alabama Certification #: 40660  
 Alaska Certification 17-026  
 Arizona Certification #: AZ0612  
 Arkansas Certification #: 88-0469  
 California Certification #: 2932  
 Canada Certification #: 1461.01  
 Colorado Certification #: TN00003  
 Connecticut Certification #: PH-0197  
 DOD Certification: #1461.01  
 EPA# TN00003  
 Florida Certification #: E87487  
 Georgia DW Certification #: 923  
 Georgia Certification: NELAP  
 Idaho Certification #: TN00003  
 Illinois Certification #: 200008  
 Indiana Certification #: C-TN-01  
 Iowa Certification #: 364  
 Kansas Certification #: E-10277  
 Kentucky UST Certification #: 16  
 Kentucky Certification #: 90010  
 Louisiana Certification #: AI30792  
 Louisiana DW Certification #: LA180010  
 Maine Certification #: TN0002  
 Maryland Certification #: 324  
 Massachusetts Certification #: M-TN003  
 Michigan Certification #: 9958  
 Minnesota Certification #: 047-999-395  
 Mississippi Certification #: TN00003  
 Missouri Certification #: 340  
 Montana Certification #: CERT0086  
 Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34  
 New Hampshire Certification #: 2975  
 New Jersey Certification #: TN002  
 New Mexico DW Certification  
 New York Certification #: 11742  
 North Carolina Aquatic Toxicity Certification #: 41  
 North Carolina Drinking Water Certification #: 21704  
 North Carolina Environmental Certificate #: 375  
 North Dakota Certification #: R-140  
 Ohio VAP Certification #: CL0069  
 Oklahoma Certification #: 9915  
 Oregon Certification #: TN200002  
 Pennsylvania Certification #: 68-02979  
 Rhode Island Certification #: LAO00356  
 South Carolina Certification #: 84004  
 South Dakota Certification  
 Tennessee DW/Chem/Micro Certification #: 2006  
 Texas Certification #: T 104704245-17-14  
 Texas Mold Certification #: LAB0152  
 USDA Soil Permit #: P330-15-00234  
 Utah Certification #: TN00003  
 Virginia Certification #: VT2006  
 Vermont Dept. of Health: ID# VT-2006  
 Virginia Certification #: 460132  
 Washington Certification #: C847  
 West Virginia Certification #: 233  
 Wisconsin Certification #: 998093910  
 Wyoming UST Certification #: via A2LA 2926.01  
 A2LA-ISO 17025 Certification #: 1461.01  
 A2LA-ISO 17025 Certification #: 1461.02  
 AIHA-LAP/LLC EMLAP Certification #:100789

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60450758001	SD07/SD-1	Solid	04/10/24 08:50	04/10/24 16:35
60450758002	SD06/SD-1	Solid	04/10/24 10:10	04/10/24 16:35
60450758003	SD05/SD-1	Solid	04/10/24 11:30	04/10/24 16:35
60450758004	SD04/SD-1	Solid	04/10/24 13:10	04/10/24 16:35
60450758005	SD03/SD-1	Solid	04/10/24 14:00	04/10/24 16:35
60450758006	DUP-03	Solid	04/10/24 00:00	04/10/24 16:35

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60450758001	SD07/SD-1	EPA 8081B	MEW	23	PAN
		EPA 8151A	NWH	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN
		EPA 7471B	NDL	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K
		60450758002	SD06/SD-1	EPA 8081B	MEW
EPA 8151A	NWH			11	PAN
EPA 8082	JDS			8	PASI-K
EPA 6020B	JPD			23	PAN
EPA 7471B	NDL			1	PAN
EPA 8270	WFG			73	PASI-K
EPA 8270	WDC			5	PASI-K
EPA 8260C	RAD			68	PASI-K
EPA 8260	RAD			4	PASI-K
ASTM D2974	DWC			1	PASI-K
SM 2540G	CMB			1	PAN
EPA 350.1	RKA			1	PASI-K
SM 4500-CN-E	ECF			1	PASI-K
EPA 9056	PL			2	PASI-K
60450758003	SD05/SD-1			EPA 8081B	MEW
		EPA 8151A	NWH	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN
		EPA 7471B	NDL	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K

### REPORT OF LABORATORY ANALYSIS

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**SAMPLE ANALYTE COUNT**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60450758004	SD04/SD-1	ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K
		EPA 8081B	MEW	23	PAN
		EPA 8151A	NWH	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN
		EPA 7471B	NDL	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
60450758005	SD03/SD-1	ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K
		EPA 8081B	MEW	23	PAN
		EPA 8151A	NWH	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN
		EPA 7471B	NDL	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
60450758006	DUP-03	ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K
		EPA 8081B	MEW	23	PAN
		EPA 8151A	NWH	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	JPD	23	PAN

**REPORT OF LABORATORY ANALYSIS**

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### SAMPLE ANALYTE COUNT

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7471B	NDL	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K

PAN = Pace National - Mt. Juliet

PASI-K = Pace Analytical Services - Kansas City

### REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

---

**Method:** EPA 8081B

**Description:** Pesticides (GC) 8081B

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

6 samples were analyzed for EPA 8081B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

---

**Method:** EPA 8151A

**Description:** Chlorinated Herb. (GC) 8151A

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

6 samples were analyzed for EPA 8151A by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 2266157

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): L1725334-01

R1: RPD value was outside control limits.

- MSD (Lab ID: R4060023-4)
  - 2,4,5-T
  - 2,4,5-TP (Silvex)
  - 2,4-DB
  - Dichlorprop
  - Dinoseb

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

---

**Method:** EPA 8082

**Description:** 8082 GCS PCB SW

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

6 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

---

**Method:** EPA 6020B

**Description:** Metals (ICPMS) 6020B

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

6 samples were analyzed for EPA 6020B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 2266490

B: Analyte was detected in the associated method blank.

- R4059304-1 (Lab ID: R4059304-1)
- Antimony

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 2266490

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450758001

R1: RPD value was outside control limits.

- MSD (Lab ID: R4059304-7)
- Manganese

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

---

**Method:** EPA 7471B

**Description:** Mercury 7471B

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

6 samples were analyzed for EPA 7471B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

---

**Method:** EPA 8270

**Description:** 8270 MSSV Semivolatiles

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

### General Information:

6 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

QC Batch: 890829

P3: Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.

- SD06/SD-1 (Lab ID: 60450758002)
- SD07/SD-1 (Lab ID: 60450758001)

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890829

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450758001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3525699)
  - Hexachlorocyclopentadiene
- MSD (Lab ID: 3525700)
  - 2,4-Dinitrophenol

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

---

**Method:** EPA 8270

**Description:** 8270 MSSV Semivolatiles

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

QC Batch: 890829

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450758001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Hexachlorocyclopentadiene

### Additional Comments:

Analyte Comments:

QC Batch: 890829

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- SD05/SD-1 (Lab ID: 60450758003)
  - Nitrobenzene-d5 (S)

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

---

**Method:** EPA 8270

**Description:** 8270 MSSV DRO/ORO

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

6 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

---

**Method:** EPA 8260C

**Description:** 8260C MSV 5035A Low Level

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

6 samples were analyzed for EPA 8260C by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 5035A/5030B with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

---

**Method:** EPA 8260

**Description:** 8260 MSV GRO and Oxygenates

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

6 samples were analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 5035 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

---

**Method:** SM 2540G

**Description:** Total Solids 2540 G-2011

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

6 samples were analyzed for SM 2540G by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

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**Method:** EPA 350.1

**Description:** 350.1 Ammonia

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

6 samples were analyzed for EPA 350.1 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

---

**Method:** SM 4500-CN-E

**Description:** 4500CNE Cyanide, Total

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

6 samples were analyzed for SM 4500-CN-E by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with SM 4500-CN-E with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

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**Method:** EPA 9056

**Description:** 9056 IC Anions

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

### General Information:

6 samples were analyzed for EPA 9056 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 9056 with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890759

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450713001,60450758001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3525509)
  - Nitrate as N
  - Nitrite as N
- MSD (Lab ID: 3525510)
  - Nitrate as N

R1: RPD value was outside control limits.

- MSD (Lab ID: 3525510)
  - Nitrite as N

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD07/SD-1 Lab ID: 60450758001 Collected: 04/10/24 08:50 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00469	mg/kg	0.0250	0.00469	1	04/17/24 06:14	04/17/24 14:38	309-00-2	
alpha-BHC	<0.00459	mg/kg	0.0250	0.00459	1	04/17/24 06:14	04/17/24 14:38	319-84-6	
beta-BHC	<0.00473	mg/kg	0.0250	0.00473	1	04/17/24 06:14	04/17/24 14:38	319-85-7	
delta-BHC	<0.00432	mg/kg	0.0250	0.00432	1	04/17/24 06:14	04/17/24 14:38	319-86-8	
gamma-BHC (Lindane)	<0.00429	mg/kg	0.0250	0.00429	1	04/17/24 06:14	04/17/24 14:38	58-89-9	
Chlordane (Technical)	<0.129	mg/kg	0.374	0.129	1	04/17/24 06:14	04/17/24 14:38	57-74-9	
4,4'-DDD	<0.00462	mg/kg	0.0250	0.00462	1	04/17/24 06:14	04/17/24 14:38	72-54-8	
4,4'-DDE	<0.00457	mg/kg	0.0250	0.00457	1	04/17/24 06:14	04/17/24 14:38	72-55-9	
4,4'-DDT	<0.00783	mg/kg	0.0250	0.00783	1	04/17/24 06:14	04/17/24 14:38	50-29-3	
Dieldrin	<0.00429	mg/kg	0.0250	0.00429	1	04/17/24 06:14	04/17/24 14:38	60-57-1	
Endosulfan I	<0.00453	mg/kg	0.0250	0.00453	1	04/17/24 06:14	04/17/24 14:38	959-98-8	
Endosulfan II	<0.00418	mg/kg	0.0250	0.00418	1	04/17/24 06:14	04/17/24 14:38	33213-65-9	
Endosulfan sulfate	<0.00454	mg/kg	0.0250	0.00454	1	04/17/24 06:14	04/17/24 14:38	1031-07-8	
Endrin	<0.00437	mg/kg	0.0250	0.00437	1	04/17/24 06:14	04/17/24 14:38	72-20-8	
Endrin aldehyde	<0.00423	mg/kg	0.0250	0.00423	1	04/17/24 06:14	04/17/24 14:38	7421-93-4	
Endrin ketone	<0.00887	mg/kg	0.0250	0.00887	1	04/17/24 06:14	04/17/24 14:38	53494-70-5	
Hexachlorobenzene	<0.00432	mg/kg	0.0250	0.00432	1	04/17/24 06:14	04/17/24 14:38	118-74-1	
Heptachlor	<0.00534	mg/kg	0.0250	0.00534	1	04/17/24 06:14	04/17/24 14:38	76-44-8	
Heptachlor epoxide	<0.00423	mg/kg	0.0250	0.00423	1	04/17/24 06:14	04/17/24 14:38	1024-57-3	
Methoxychlor	<0.00604	mg/kg	0.0250	0.00604	1	04/17/24 06:14	04/17/24 14:38	72-43-5	
Toxaphene	<0.155	mg/kg	0.499	0.155	1	04/17/24 06:14	04/17/24 14:38	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	61.6	%	10.0-135		1	04/17/24 06:14	04/17/24 14:38	2051-24-3	
Tetrachloro-m-xylene (S)	71.5	%	10.0-139		1	04/17/24 06:14	04/17/24 14:38	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00876	mg/kg	0.0874	0.00876	1	04/15/24 07:02	04/17/24 20:56	94-75-7	
Dalapon	<0.0141	mg/kg	0.0874	0.0141	1	04/15/24 07:02	04/17/24 20:56	127-20-8	ML
2,4-DB	<0.0371	mg/kg	0.0874	0.0371	1	04/15/24 07:02	04/17/24 20:56	94-82-6	
Dicamba	<0.0196	mg/kg	0.0874	0.0196	1	04/15/24 07:02	04/17/24 20:56	1918-00-9	
Dichlorprop	<0.0306	mg/kg	0.0874	0.0306	1	04/15/24 07:02	04/17/24 20:56	120-36-5	
Dinoseb	<0.00870	mg/kg	0.0874	0.00870	1	04/15/24 07:02	04/17/24 20:56	88-85-7	
MCPA	<0.553	mg/kg	8.11	0.553	1	04/15/24 07:02	04/17/24 20:56	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.458	mg/kg	8.11	0.458	1	04/15/24 07:02	04/17/24 20:56	93-65-2	
2,4,5-T	<0.0106	mg/kg	0.0874	0.0106	1	04/15/24 07:02	04/17/24 20:56	93-76-5	
2,4,5-TP (Silvex)	<0.0134	mg/kg	0.0874	0.0134	1	04/15/24 07:02	04/17/24 20:56	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	61.4	%	22.0-132		1	04/15/24 07:02	04/17/24 20:56	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.9	ug/kg	40.3	10.9	1	04/17/24 20:36	04/18/24 22:57	12674-11-2	
PCB-1221 (Aroclor 1221)	<13.5	ug/kg	40.3	13.5	1	04/17/24 20:36	04/18/24 22:57	11104-28-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD07/SD-1 Lab ID: 60450758001 Collected: 04/10/24 08:50 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<13.5	ug/kg	40.3	13.5	1	04/17/24 20:36	04/18/24 22:57	11141-16-5	
PCB-1242 (Aroclor 1242)	<13.5	ug/kg	40.3	13.5	1	04/17/24 20:36	04/18/24 22:57	53469-21-9	
PCB-1248 (Aroclor 1248)	<13.5	ug/kg	40.3	13.5	1	04/17/24 20:36	04/18/24 22:57	12672-29-6	
PCB-1254 (Aroclor 1254)	<13.5	ug/kg	40.3	13.5	1	04/17/24 20:36	04/18/24 22:57	11097-69-1	
PCB-1260 (Aroclor 1260)	<13.5	ug/kg	40.3	13.5	1	04/17/24 20:36	04/18/24 22:57	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	91	%	20-120		1	04/17/24 20:36	04/18/24 22:57	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3051									
Pace National - Mt. Juliet									
Aluminum	4290	mg/kg	62.4	8.61	5	04/16/24 09:55	04/18/24 13:52	7429-90-5	MH
Antimony	0.499J	mg/kg	3.74	0.207	5	04/16/24 09:55	04/18/24 13:52	7440-36-0	B,J,ML
Arsenic	6.94	mg/kg	1.25	0.125	5	04/16/24 09:55	04/18/24 13:52	7440-38-2	
Barium	90.4	mg/kg	3.12	0.190	5	04/16/24 09:55	04/18/24 13:52	7440-39-3	
Beryllium	0.405J	mg/kg	3.12	0.172	5	04/16/24 09:55	04/18/24 13:52	7440-41-7	J
Cadmium	0.529J	mg/kg	1.25	0.107	5	04/16/24 09:55	04/18/24 13:52	7440-43-9	J
Calcium	151000	mg/kg	624	94.2	5	04/16/24 09:55	04/18/24 13:52	7440-70-2	P6,PH
Chromium	9.96	mg/kg	6.24	0.369	5	04/16/24 09:55	04/18/24 13:52	7440-47-3	
Cobalt	6.82	mg/kg	1.25	0.0577	5	04/16/24 09:55	04/18/24 13:52	7440-48-4	
Copper	12.4	mg/kg	6.24	0.165	5	04/16/24 09:55	04/18/24 13:52	7440-50-8	
Iron	12400	mg/kg	62.4	11.2	5	04/16/24 09:55	04/18/24 13:52	7439-89-6	P6,PH
Lead	14.6	mg/kg	2.50	0.124	5	04/16/24 09:55	04/18/24 13:52	7439-92-1	
Magnesium	5490	mg/kg	624	57.3	5	04/16/24 09:55	04/18/24 13:52	7439-95-4	P6,PH
Manganese	831	mg/kg	3.12	0.335	5	04/16/24 09:55	04/18/24 13:52	7439-96-5	P6,R1
Molybdenum	0.962J	mg/kg	3.12	0.126	5	04/16/24 09:55	04/18/24 13:52	7439-98-7	J
Nickel	21.5	mg/kg	3.12	0.246	5	04/16/24 09:55	04/18/24 13:52	7440-02-0	
Potassium	940	mg/kg	624	84.9	5	04/16/24 09:55	04/18/24 13:52	7440-09-7	
Selenium	1.21J	mg/kg	3.12	0.225	5	04/16/24 09:55	04/18/24 13:52	7782-49-2	J
Silver	<0.108	mg/kg	0.624	0.108	5	04/16/24 09:55	04/18/24 13:52	7440-22-4	
Sodium	204J	mg/kg	624	95.5	5	04/16/24 09:55	04/18/24 13:52	7440-23-5	J,PH
Thallium	0.149J	mg/kg	2.50	0.0811	5	04/16/24 09:55	04/18/24 13:52	7440-28-0	J
Vanadium	12.9	mg/kg	3.12	0.233	5	04/16/24 09:55	04/18/24 13:52	7440-62-2	
Zinc	62.8	mg/kg	31.2	0.924	5	04/16/24 09:55	04/18/24 13:52	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	0.0339J	mg/kg	0.0499	0.0225	1	04/14/24 16:42	04/15/24 12:41	7439-97-6	J
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<174	ug/kg	810	174	1	04/17/24 09:39	04/22/24 11:49	83-32-9	
Acenaphthylene	<133	ug/kg	810	133	1	04/17/24 09:39	04/22/24 11:49	208-96-8	
Anthracene	<169	ug/kg	810	169	1	04/17/24 09:39	04/22/24 11:49	120-12-7	
Benzo(a)anthracene	<171	ug/kg	810	171	1	04/17/24 09:39	04/22/24 11:49	56-55-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD07/SD-1 Lab ID: 60450758001 Collected: 04/10/24 08:50 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<174	ug/kg	810	174	1	04/17/24 09:39	04/22/24 11:49	50-32-8	
Benzo(b)fluoranthene	<198	ug/kg	810	198	1	04/17/24 09:39	04/22/24 11:49	205-99-2	
Benzo(g,h,i)perylene	<141	ug/kg	810	141	1	04/17/24 09:39	04/22/24 11:49	191-24-2	
Benzo(k)fluoranthene	<174	ug/kg	810	174	1	04/17/24 09:39	04/22/24 11:49	207-08-9	
Benzoic Acid	<442	ug/kg	4100	442	1	04/17/24 09:39	04/22/24 11:49	65-85-0	
Benzyl alcohol	<149	ug/kg	1620	149	1	04/17/24 09:39	04/22/24 11:49	100-51-6	
4-Bromophenylphenyl ether	<175	ug/kg	810	175	1	04/17/24 09:39	04/22/24 11:49	101-55-3	
Butylbenzylphthalate	<165	ug/kg	810	165	1	04/17/24 09:39	04/22/24 11:49	85-68-7	
Carbazole	<167	ug/kg	810	167	1	04/17/24 09:39	04/22/24 11:49	86-74-8	
4-Chloro-3-methylphenol	<170	ug/kg	1620	170	1	04/17/24 09:39	04/22/24 11:49	59-50-7	
4-Chloroaniline	<127	ug/kg	1620	127	1	04/17/24 09:39	04/22/24 11:49	106-47-8	
bis(2-Chloroethoxy)methane	<161	ug/kg	810	161	1	04/17/24 09:39	04/22/24 11:49	111-91-1	
bis(2-Chloroethyl) ether	<163	ug/kg	810	163	1	04/17/24 09:39	04/22/24 11:49	111-44-4	
bis(2-Chloroisopropyl) ether	<175	ug/kg	810	175	1	04/17/24 09:39	04/22/24 11:49	108-60-1	
2-Chloronaphthalene	<171	ug/kg	810	171	1	04/17/24 09:39	04/22/24 11:49	91-58-7	
2-Chlorophenol	<165	ug/kg	810	165	1	04/17/24 09:39	04/22/24 11:49	95-57-8	
4-Chlorophenylphenyl ether	<174	ug/kg	810	174	1	04/17/24 09:39	04/22/24 11:49	7005-72-3	
Chrysene	<180	ug/kg	810	180	1	04/17/24 09:39	04/22/24 11:49	218-01-9	
Dibenz(a,h)anthracene	<146	ug/kg	810	146	1	04/17/24 09:39	04/22/24 11:49	53-70-3	
Dibenzofuran	<173	ug/kg	810	173	1	04/17/24 09:39	04/22/24 11:49	132-64-9	
1,2-Dichlorobenzene	<161	ug/kg	810	161	1	04/17/24 09:39	04/22/24 11:49	95-50-1	
1,3-Dichlorobenzene	<158	ug/kg	810	158	1	04/17/24 09:39	04/22/24 11:49	541-73-1	
1,4-Dichlorobenzene	<156	ug/kg	810	156	1	04/17/24 09:39	04/22/24 11:49	106-46-7	
3,3'-Dichlorobenzidine	<79.5	ug/kg	1620	79.5	1	04/17/24 09:39	04/22/24 11:49	91-94-1	
2,4-Dichlorophenol	<162	ug/kg	810	162	1	04/17/24 09:39	04/22/24 11:49	120-83-2	
Diethylphthalate	<185	ug/kg	810	185	1	04/17/24 09:39	04/22/24 11:49	84-66-2	
2,4-Dimethylphenol	<118	ug/kg	810	118	1	04/17/24 09:39	04/22/24 11:49	105-67-9	
Dimethylphthalate	<168	ug/kg	810	168	1	04/17/24 09:39	04/22/24 11:49	131-11-3	
Di-n-butylphthalate	<192	ug/kg	810	192	1	04/17/24 09:39	04/22/24 11:49	84-74-2	
4,6-Dinitro-2-methylphenol	<140	ug/kg	4100	140	1	04/17/24 09:39	04/22/24 11:49	534-52-1	
2,4-Dinitrophenol	<245	ug/kg	4100	245	1	04/17/24 09:39	04/22/24 11:49	51-28-5	M1
2,4-Dinitrotoluene	<182	ug/kg	810	182	1	04/17/24 09:39	04/22/24 11:49	121-14-2	
2,6-Dinitrotoluene	<158	ug/kg	810	158	1	04/17/24 09:39	04/22/24 11:49	606-20-2	
Di-n-octylphthalate	<197	ug/kg	810	197	1	04/17/24 09:39	04/22/24 11:49	117-84-0	
bis(2-Ethylhexyl)phthalate	<182	ug/kg	810	182	1	04/17/24 09:39	04/22/24 11:49	117-81-7	
Fluoranthene	<178	ug/kg	810	178	1	04/17/24 09:39	04/22/24 11:49	206-44-0	
Fluorene	<172	ug/kg	810	172	1	04/17/24 09:39	04/22/24 11:49	86-73-7	
Hexachloro-1,3-butadiene	<174	ug/kg	810	174	1	04/17/24 09:39	04/22/24 11:49	87-68-3	
Hexachlorobenzene	<169	ug/kg	810	169	1	04/17/24 09:39	04/22/24 11:49	118-74-1	
Hexachlorocyclopentadiene	<498	ug/kg	810	498	1	04/17/24 09:39	04/22/24 11:49	77-47-4	M1
Hexachloroethane	<148	ug/kg	810	148	1	04/17/24 09:39	04/22/24 11:49	67-72-1	
Indeno(1,2,3-cd)pyrene	<166	ug/kg	810	166	1	04/17/24 09:39	04/22/24 11:49	193-39-5	
Isophorone	<157	ug/kg	810	157	1	04/17/24 09:39	04/22/24 11:49	78-59-1	
2-Methylnaphthalene	<164	ug/kg	810	164	1	04/17/24 09:39	04/22/24 11:49	91-57-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD07/SD-1 Lab ID: 60450758001 Collected: 04/10/24 08:50 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<147	ug/kg	810	147	1	04/17/24 09:39	04/22/24 11:49	95-48-7	
3&4-Methylphenol(m&p Cresol)	<150	ug/kg	810	150	1	04/17/24 09:39	04/22/24 11:49	15831-10-4	
Naphthalene	<174	ug/kg	810	174	1	04/17/24 09:39	04/22/24 11:49	91-20-3	
2-Nitroaniline	<134	ug/kg	1620	134	1	04/17/24 09:39	04/22/24 11:49	88-74-4	
3-Nitroaniline	<126	ug/kg	1620	126	1	04/17/24 09:39	04/22/24 11:49	99-09-2	
4-Nitroaniline	<139	ug/kg	1620	139	1	04/17/24 09:39	04/22/24 11:49	100-01-6	
Nitrobenzene	<172	ug/kg	810	172	1	04/17/24 09:39	04/22/24 11:49	98-95-3	
2-Nitrophenol	<127	ug/kg	810	127	1	04/17/24 09:39	04/22/24 11:49	88-75-5	
4-Nitrophenol	<119	ug/kg	4100	119	1	04/17/24 09:39	04/22/24 11:49	100-02-7	
N-Nitroso-di-n-propylamine	<154	ug/kg	810	154	1	04/17/24 09:39	04/22/24 11:49	621-64-7	
N-Nitrosodiphenylamine	<161	ug/kg	810	161	1	04/17/24 09:39	04/22/24 11:49	86-30-6	
Pentachlorophenol	<268	ug/kg	4100	268	1	04/17/24 09:39	04/22/24 11:49	87-86-5	
Phenanthrene	<173	ug/kg	810	173	1	04/17/24 09:39	04/22/24 11:49	85-01-8	
Phenol	<152	ug/kg	810	152	1	04/17/24 09:39	04/22/24 11:49	108-95-2	
Pyrene	<173	ug/kg	810	173	1	04/17/24 09:39	04/22/24 11:49	129-00-0	
Pyridine	<120	ug/kg	810	120	1	04/17/24 09:39	04/22/24 11:49	110-86-1	
1,2,4-Trichlorobenzene	<170	ug/kg	810	170	1	04/17/24 09:39	04/22/24 11:49	120-82-1	
2,4,5-Trichlorophenol	<166	ug/kg	810	166	1	04/17/24 09:39	04/22/24 11:49	95-95-4	
2,4,6-Trichlorophenol	<150	ug/kg	810	150	1	04/17/24 09:39	04/22/24 11:49	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	84	%	30-120		1	04/17/24 09:39	04/22/24 11:49	4165-60-0	P3
2-Fluorobiphenyl (S)	74	%	40-120		1	04/17/24 09:39	04/22/24 11:49	321-60-8	
Terphenyl-d14 (S)	81	%	45-120		1	04/17/24 09:39	04/22/24 11:49	1718-51-0	
Phenol-d6 (S)	85	%	40-120		1	04/17/24 09:39	04/22/24 11:49	13127-88-3	
2-Fluorophenol (S)	84	%	40-120		1	04/17/24 09:39	04/22/24 11:49	367-12-4	
2,4,6-Tribromophenol (S)	79	%	35-120		1	04/17/24 09:39	04/22/24 11:49	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	77.5	mg/kg	18.5	6.3	1	04/11/24 16:15	04/15/24 12:18		
TPH-DRO	27.5	mg/kg	18.5	6.3	1	04/11/24 16:15	04/15/24 12:18		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	76	%	35-120		1	04/11/24 16:15	04/15/24 12:18	4165-60-0	
2-Fluorobiphenyl (S)	81	%	50-120		1	04/11/24 16:15	04/15/24 12:18	321-60-8	
Terphenyl-d14 (S)	83	%	45-120		1	04/11/24 16:15	04/15/24 12:18	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<87.4	ug/kg	91.6	87.4	1	04/12/24 09:46	04/12/24 13:35	67-64-1	
Benzene	<0.66	ug/kg	7.3	0.66	1	04/12/24 09:46	04/12/24 13:35	71-43-2	
Bromobenzene	<0.90	ug/kg	7.3	0.90	1	04/12/24 09:46	04/12/24 13:35	108-86-1	
Bromochloromethane	<1.1	ug/kg	7.3	1.1	1	04/12/24 09:46	04/12/24 13:35	74-97-5	
Bromodichloromethane	<1.2	ug/kg	18.9	1.2	1	04/12/24 09:46	04/12/24 13:35	75-27-4	
Bromoform	<0.56	ug/kg	18.9	0.56	1	04/12/24 09:46	04/12/24 13:35	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD07/SD-1 Lab ID: 60450758001 Collected: 04/10/24 08:50 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Bromomethane	<9.0	ug/kg	18.9	9.0	1	04/12/24 09:46	04/12/24 13:35	74-83-9	
2-Butanone (MEK)	<46.4	ug/kg	91.6	46.4	1	04/12/24 09:46	04/12/24 13:35	78-93-3	
n-Butylbenzene	<0.70	ug/kg	7.3	0.70	1	04/12/24 09:46	04/12/24 13:35	104-51-8	
sec-Butylbenzene	<0.72	ug/kg	7.3	0.72	1	04/12/24 09:46	04/12/24 13:35	135-98-8	
tert-Butylbenzene	<0.47	ug/kg	7.3	0.47	1	04/12/24 09:46	04/12/24 13:35	98-06-6	
Carbon disulfide	19.2	ug/kg	7.3	3.4	1	04/12/24 09:46	04/12/24 13:35	75-15-0	
Carbon tetrachloride	<2.4	ug/kg	7.3	2.4	1	04/12/24 09:46	04/12/24 13:35	56-23-5	
Chlorobenzene	<0.42	ug/kg	7.3	0.42	1	04/12/24 09:46	04/12/24 13:35	108-90-7	
Chloroethane	<12.0	ug/kg	36.3	12.0	1	04/12/24 09:46	04/12/24 13:35	75-00-3	
Chloroform	<2.7	ug/kg	7.3	2.7	1	04/12/24 09:46	04/12/24 13:35	67-66-3	
Chloromethane	<1.8	ug/kg	18.9	1.8	1	04/12/24 09:46	04/12/24 13:35	74-87-3	
2-Chlorotoluene	<1.0	ug/kg	7.3	1.0	1	04/12/24 09:46	04/12/24 13:35	95-49-8	
4-Chlorotoluene	<0.57	ug/kg	7.3	0.57	1	04/12/24 09:46	04/12/24 13:35	106-43-4	
1,2-Dibromo-3-chloropropane	<4.8	ug/kg	18.9	4.8	1	04/12/24 09:46	04/12/24 13:35	96-12-8	
Dibromochloromethane	<0.44	ug/kg	7.3	0.44	1	04/12/24 09:46	04/12/24 13:35	124-48-1	
1,2-Dibromoethane (EDB)	<0.76	ug/kg	7.3	0.76	1	04/12/24 09:46	04/12/24 13:35	106-93-4	
Dibromomethane	<2.1	ug/kg	7.3	2.1	1	04/12/24 09:46	04/12/24 13:35	74-95-3	
1,2-Dichlorobenzene	<1.2	ug/kg	7.3	1.2	1	04/12/24 09:46	04/12/24 13:35	95-50-1	
1,3-Dichlorobenzene	1.2J	ug/kg	7.3	0.92	1	04/12/24 09:46	04/12/24 13:35	541-73-1	
1,4-Dichlorobenzene	<1.3	ug/kg	7.3	1.3	1	04/12/24 09:46	04/12/24 13:35	106-46-7	
Dichlorodifluoromethane	<1.4	ug/kg	18.9	1.4	1	04/12/24 09:46	04/12/24 13:35	75-71-8	
1,1-Dichloroethane	<1.7	ug/kg	7.3	1.7	1	04/12/24 09:46	04/12/24 13:35	75-34-3	
1,2-Dichloroethane	<1.4	ug/kg	7.3	1.4	1	04/12/24 09:46	04/12/24 13:35	107-06-2	
1,2-Dichloroethene (Total)	<2.7	ug/kg	14.5	2.7	1	04/12/24 09:46	04/12/24 13:35	540-59-0	
1,1-Dichloroethene	<3.0	ug/kg	7.3	3.0	1	04/12/24 09:46	04/12/24 13:35	75-35-4	
cis-1,2-Dichloroethene	<1.4	ug/kg	7.3	1.4	1	04/12/24 09:46	04/12/24 13:35	156-59-2	
trans-1,2-Dichloroethene	<1.6	ug/kg	7.3	1.6	1	04/12/24 09:46	04/12/24 13:35	156-60-5	
1,2-Dichloropropane	<1.5	ug/kg	7.3	1.5	1	04/12/24 09:46	04/12/24 13:35	78-87-5	
1,3-Dichloropropane	<0.28	ug/kg	7.3	0.28	1	04/12/24 09:46	04/12/24 13:35	142-28-9	
2,2-Dichloropropane	<2.2	ug/kg	7.3	2.2	1	04/12/24 09:46	04/12/24 13:35	594-20-7	
1,1-Dichloropropene	<1.6	ug/kg	7.3	1.6	1	04/12/24 09:46	04/12/24 13:35	563-58-6	
cis-1,3-Dichloropropene	<1.1	ug/kg	7.3	1.1	1	04/12/24 09:46	04/12/24 13:35	10061-01-5	
trans-1,3-Dichloropropene	<0.87	ug/kg	7.3	0.87	1	04/12/24 09:46	04/12/24 13:35	10061-02-6	
Ethylbenzene	<1.3	ug/kg	7.3	1.3	1	04/12/24 09:46	04/12/24 13:35	100-41-4	
Hexachloro-1,3-butadiene	<1.3	ug/kg	7.3	1.3	1	04/12/24 09:46	04/12/24 13:35	87-68-3	
2-Hexanone	<15.1	ug/kg	91.6	15.1	1	04/12/24 09:46	04/12/24 13:35	591-78-6	
Isopropylbenzene (Cumene)	<0.46	ug/kg	7.3	0.46	1	04/12/24 09:46	04/12/24 13:35	98-82-8	
p-Isopropyltoluene	2.7J	ug/kg	7.3	0.63	1	04/12/24 09:46	04/12/24 13:35	99-87-6	
Methylene Chloride	<28.2	ug/kg	36.3	28.2	1	04/12/24 09:46	04/12/24 13:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	<10.2	ug/kg	91.6	10.2	1	04/12/24 09:46	04/12/24 13:35	108-10-1	
Methyl-tert-butyl ether	<1.4	ug/kg	7.3	1.4	1	04/12/24 09:46	04/12/24 13:35	1634-04-4	
Naphthalene	<1.1	ug/kg	14.5	1.1	1	04/12/24 09:46	04/12/24 13:35	91-20-3	
n-Propylbenzene	<0.88	ug/kg	7.3	0.88	1	04/12/24 09:46	04/12/24 13:35	103-65-1	
Styrene	<0.59	ug/kg	7.3	0.59	1	04/12/24 09:46	04/12/24 13:35	100-42-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD07/SD-1 Lab ID: 60450758001 Collected: 04/10/24 08:50 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<1.0	ug/kg	7.3	1.0	1	04/12/24 09:46	04/12/24 13:35	630-20-6	
1,1,2,2-Tetrachloroethane	<1.0	ug/kg	7.3	1.0	1	04/12/24 09:46	04/12/24 13:35	79-34-5	
Tetrachloroethene	<0.77	ug/kg	7.3	0.77	1	04/12/24 09:46	04/12/24 13:35	127-18-4	
Toluene	<6.5	ug/kg	29.1	6.5	1	04/12/24 09:46	04/12/24 13:35	108-88-3	
1,2,3-Trichlorobenzene	<0.85	ug/kg	7.3	0.85	1	04/12/24 09:46	04/12/24 13:35	87-61-6	
1,2,4-Trichlorobenzene	<0.71	ug/kg	7.3	0.71	1	04/12/24 09:46	04/12/24 13:35	120-82-1	
1,1,1-Trichloroethane	<1.5	ug/kg	7.3	1.5	1	04/12/24 09:46	04/12/24 13:35	71-55-6	
1,1,2-Trichloroethane	<1.0	ug/kg	7.3	1.0	1	04/12/24 09:46	04/12/24 13:35	79-00-5	
Trichloroethene	<2.7	ug/kg	7.3	2.7	1	04/12/24 09:46	04/12/24 13:35	79-01-6	
Trichlorofluoromethane	<14.0	ug/kg	18.9	14.0	1	04/12/24 09:46	04/12/24 13:35	75-69-4	
1,2,3-Trichloropropane	<2.2	ug/kg	7.3	2.2	1	04/12/24 09:46	04/12/24 13:35	96-18-4	
1,2,4-Trimethylbenzene	1.4J	ug/kg	7.3	1.0	1	04/12/24 09:46	04/12/24 13:35	95-63-6	
1,3,5-Trimethylbenzene	<0.63	ug/kg	7.3	0.63	1	04/12/24 09:46	04/12/24 13:35	108-67-8	
Vinyl chloride	<1.3	ug/kg	18.9	1.3	1	04/12/24 09:46	04/12/24 13:35	75-01-4	
Xylene (Total)	<5.3	ug/kg	21.8	5.3	1	04/12/24 09:46	04/12/24 13:35	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	104	%	80-120		1	04/12/24 09:46	04/12/24 13:35	2037-26-5	
4-Bromofluorobenzene (S)	99	%	83-119		1	04/12/24 09:46	04/12/24 13:35	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1	04/12/24 09:46	04/12/24 13:35	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.066	mg/kg	0.49	0.066	1	04/16/24 17:07	04/16/24 21:06		
<b>Surrogates</b>									
Toluene-d8 (S)	106	%	78-122		1	04/16/24 17:07	04/16/24 21:06	2037-26-5	
4-Bromofluorobenzene (S)	116	%	69-133		1	04/16/24 17:07	04/16/24 21:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/16/24 17:07	04/16/24 21:06	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	19.1	%	0.50	0.50	1		04/12/24 13:40		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	80.1	%			1	04/13/24 13:02	04/13/24 13:14		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<0.95	mg/kg	1.2	0.95	1	04/15/24 09:34	04/16/24 15:56	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.16	mg/kg	0.20	0.16	1	04/18/24 08:30	04/18/24 12:11	57-12-5	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD07/SD-1 Lab ID: 60450758001 Collected: 04/10/24 08:50 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<6.9	mg/kg	12.2	6.9	10	04/17/24 16:50	04/19/24 13:20	14797-55-8	
Nitrite as N	<6.4	mg/kg	12.2	6.4	10	04/17/24 16:50	04/19/24 13:20	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD06/SD-1 Lab ID: 60450758002 Collected: 04/10/24 10:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00510	mg/kg	0.0271	0.00510	1	04/17/24 06:14	04/17/24 15:47	309-00-2	
alpha-BHC	<0.00499	mg/kg	0.0271	0.00499	1	04/17/24 06:14	04/17/24 15:47	319-84-6	
beta-BHC	<0.00514	mg/kg	0.0271	0.00514	1	04/17/24 06:14	04/17/24 15:47	319-85-7	
delta-BHC	<0.00470	mg/kg	0.0271	0.00470	1	04/17/24 06:14	04/17/24 15:47	319-86-8	
gamma-BHC (Lindane)	<0.00467	mg/kg	0.0271	0.00467	1	04/17/24 06:14	04/17/24 15:47	58-89-9	
Chlordane (Technical)	<0.140	mg/kg	0.407	0.140	1	04/17/24 06:14	04/17/24 15:47	57-74-9	
4,4'-DDD	<0.00502	mg/kg	0.0271	0.00502	1	04/17/24 06:14	04/17/24 15:47	72-54-8	
4,4'-DDE	<0.00497	mg/kg	0.0271	0.00497	1	04/17/24 06:14	04/17/24 15:47	72-55-9	
4,4'-DDT	<0.00851	mg/kg	0.0271	0.00851	1	04/17/24 06:14	04/17/24 15:47	50-29-3	
Dieldrin	<0.00467	mg/kg	0.0271	0.00467	1	04/17/24 06:14	04/17/24 15:47	60-57-1	
Endosulfan I	<0.00493	mg/kg	0.0271	0.00493	1	04/17/24 06:14	04/17/24 15:47	959-98-8	
Endosulfan II	<0.00455	mg/kg	0.0271	0.00455	1	04/17/24 06:14	04/17/24 15:47	33213-65-9	
Endosulfan sulfate	<0.00494	mg/kg	0.0271	0.00494	1	04/17/24 06:14	04/17/24 15:47	1031-07-8	
Endrin	<0.00475	mg/kg	0.0271	0.00475	1	04/17/24 06:14	04/17/24 15:47	72-20-8	
Endrin aldehyde	<0.00460	mg/kg	0.0271	0.00460	1	04/17/24 06:14	04/17/24 15:47	7421-93-4	
Endrin ketone	<0.00965	mg/kg	0.0271	0.00965	1	04/17/24 06:14	04/17/24 15:47	53494-70-5	
Hexachlorobenzene	<0.00470	mg/kg	0.0271	0.00470	1	04/17/24 06:14	04/17/24 15:47	118-74-1	
Heptachlor	<0.00581	mg/kg	0.0271	0.00581	1	04/17/24 06:14	04/17/24 15:47	76-44-8	
Heptachlor epoxide	<0.00460	mg/kg	0.0271	0.00460	1	04/17/24 06:14	04/17/24 15:47	1024-57-3	
Methoxychlor	<0.00657	mg/kg	0.0271	0.00657	1	04/17/24 06:14	04/17/24 15:47	72-43-5	
Toxaphene	<0.168	mg/kg	0.543	0.168	1	04/17/24 06:14	04/17/24 15:47	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	77.4	%	10.0-135		1	04/17/24 06:14	04/17/24 15:47	2051-24-3	
Tetrachloro-m-xylene (S)	95.1	%	10.0-139		1	04/17/24 06:14	04/17/24 15:47	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00953	mg/kg	0.0950	0.00953	1	04/17/24 14:29	04/19/24 16:31	94-75-7	
Dalapon	<0.0153	mg/kg	0.0950	0.0153	1	04/17/24 14:29	04/19/24 16:31	127-20-8	
2,4-DB	<0.0403	mg/kg	0.0950	0.0403	1	04/17/24 14:29	04/19/24 16:31	94-82-6	
Dicamba	<0.0213	mg/kg	0.0950	0.0213	1	04/17/24 14:29	04/19/24 16:31	1918-00-9	
Dichlorprop	<0.0333	mg/kg	0.0950	0.0333	1	04/17/24 14:29	04/19/24 16:31	120-36-5	
Dinoseb	<0.00946	mg/kg	0.0950	0.00946	1	04/17/24 14:29	04/19/24 16:31	88-85-7	
MCPA	<0.601	mg/kg	8.82	0.601	1	04/17/24 14:29	04/19/24 16:31	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.498	mg/kg	8.82	0.498	1	04/17/24 14:29	04/19/24 16:31	93-65-2	
2,4,5-T	<0.0116	mg/kg	0.0950	0.0116	1	04/17/24 14:29	04/19/24 16:31	93-76-5	
2,4,5-TP (Silvex)	<0.0145	mg/kg	0.0950	0.0145	1	04/17/24 14:29	04/19/24 16:31	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	49.9	%	22.0-132		1	04/17/24 14:29	04/19/24 16:31	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<11.9	ug/kg	44.0	11.9	1	04/17/24 20:36	04/18/24 23:41	12674-11-2	
PCB-1221 (Aroclor 1221)	<14.8	ug/kg	44.0	14.8	1	04/17/24 20:36	04/18/24 23:41	11104-28-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD06/SD-1 Lab ID: 60450758002 Collected: 04/10/24 10:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<14.8	ug/kg	44.0	14.8	1	04/17/24 20:36	04/18/24 23:41	11141-16-5	
PCB-1242 (Aroclor 1242)	<14.8	ug/kg	44.0	14.8	1	04/17/24 20:36	04/18/24 23:41	53469-21-9	
PCB-1248 (Aroclor 1248)	<14.8	ug/kg	44.0	14.8	1	04/17/24 20:36	04/18/24 23:41	12672-29-6	
PCB-1254 (Aroclor 1254)	<14.8	ug/kg	44.0	14.8	1	04/17/24 20:36	04/18/24 23:41	11097-69-1	
PCB-1260 (Aroclor 1260)	<14.8	ug/kg	44.0	14.8	1	04/17/24 20:36	04/18/24 23:41	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	89	%	20-120		1	04/17/24 20:36	04/18/24 23:41	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3051									
Pace National - Mt. Juliet									
Aluminum	4510	mg/kg	67.9	9.36	5	04/16/24 09:55	04/18/24 14:15	7429-90-5	
Antimony	0.485J	mg/kg	4.07	0.225	5	04/16/24 09:55	04/18/24 14:15	7440-36-0	B,J
Arsenic	8.93	mg/kg	1.36	0.136	5	04/16/24 09:55	04/18/24 14:15	7440-38-2	
Barium	124	mg/kg	3.39	0.206	5	04/16/24 09:55	04/18/24 14:15	7440-39-3	
Beryllium	0.485J	mg/kg	3.39	0.187	5	04/16/24 09:55	04/18/24 14:15	7440-41-7	J
Cadmium	0.518J	mg/kg	1.36	0.116	5	04/16/24 09:55	04/18/24 14:15	7440-43-9	J
Calcium	149000	mg/kg	679	102	5	04/16/24 09:55	04/18/24 14:15	7440-70-2	
Chromium	11.2	mg/kg	6.79	0.402	5	04/16/24 09:55	04/18/24 14:15	7440-47-3	
Cobalt	9.09	mg/kg	1.36	0.0627	5	04/16/24 09:55	04/18/24 14:15	7440-48-4	
Copper	12.6	mg/kg	6.79	0.179	5	04/16/24 09:55	04/18/24 14:15	7440-50-8	
Iron	16700	mg/kg	67.9	12.1	5	04/16/24 09:55	04/18/24 14:15	7439-89-6	
Lead	15.3	mg/kg	2.71	0.134	5	04/16/24 09:55	04/18/24 14:15	7439-92-1	
Magnesium	5580	mg/kg	679	62.3	5	04/16/24 09:55	04/18/24 14:15	7439-95-4	
Manganese	1520	mg/kg	3.39	0.364	5	04/16/24 09:55	04/18/24 14:15	7439-96-5	
Molybdenum	1.20J	mg/kg	3.39	0.137	5	04/16/24 09:55	04/18/24 14:15	7439-98-7	J
Nickel	21.9	mg/kg	3.39	0.267	5	04/16/24 09:55	04/18/24 14:15	7440-02-0	
Potassium	837	mg/kg	679	92.3	5	04/16/24 09:55	04/18/24 14:15	7440-09-7	
Selenium	1.14J	mg/kg	3.39	0.244	5	04/16/24 09:55	04/18/24 14:15	7782-49-2	J
Silver	<0.117	mg/kg	0.679	0.117	5	04/16/24 09:55	04/18/24 14:15	7440-22-4	
Sodium	164J	mg/kg	679	104	5	04/16/24 09:55	04/18/24 14:15	7440-23-5	J
Thallium	0.171J	mg/kg	2.71	0.0882	5	04/16/24 09:55	04/18/24 14:15	7440-28-0	J
Vanadium	14.2	mg/kg	3.39	0.254	5	04/16/24 09:55	04/18/24 14:15	7440-62-2	
Zinc	76.6	mg/kg	33.9	1.00	5	04/16/24 09:55	04/18/24 14:15	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0244	mg/kg	0.0543	0.0244	1	04/14/24 16:42	04/15/24 13:13	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<191	ug/kg	891	191	1	04/17/24 09:39	04/22/24 12:54	83-32-9	
Acenaphthylene	<146	ug/kg	891	146	1	04/17/24 09:39	04/22/24 12:54	208-96-8	
Anthracene	<186	ug/kg	891	186	1	04/17/24 09:39	04/22/24 12:54	120-12-7	
Benzo(a)anthracene	<189	ug/kg	891	189	1	04/17/24 09:39	04/22/24 12:54	56-55-3	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD06/SD-1 Lab ID: 60450758002 Collected: 04/10/24 10:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<192	ug/kg	891	192	1	04/17/24 09:39	04/22/24 12:54	50-32-8	
Benzo(b)fluoranthene	<217	ug/kg	891	217	1	04/17/24 09:39	04/22/24 12:54	205-99-2	
Benzo(g,h,i)perylene	<155	ug/kg	891	155	1	04/17/24 09:39	04/22/24 12:54	191-24-2	
Benzo(k)fluoranthene	<192	ug/kg	891	192	1	04/17/24 09:39	04/22/24 12:54	207-08-9	
Benzoic Acid	<486	ug/kg	4510	486	1	04/17/24 09:39	04/22/24 12:54	65-85-0	
Benzyl alcohol	<164	ug/kg	1780	164	1	04/17/24 09:39	04/22/24 12:54	100-51-6	
4-Bromophenylphenyl ether	<192	ug/kg	891	192	1	04/17/24 09:39	04/22/24 12:54	101-55-3	
Butylbenzylphthalate	<181	ug/kg	891	181	1	04/17/24 09:39	04/22/24 12:54	85-68-7	
Carbazole	<183	ug/kg	891	183	1	04/17/24 09:39	04/22/24 12:54	86-74-8	
4-Chloro-3-methylphenol	<187	ug/kg	1780	187	1	04/17/24 09:39	04/22/24 12:54	59-50-7	
4-Chloroaniline	<140	ug/kg	1780	140	1	04/17/24 09:39	04/22/24 12:54	106-47-8	
bis(2-Chloroethoxy)methane	<177	ug/kg	891	177	1	04/17/24 09:39	04/22/24 12:54	111-91-1	
bis(2-Chloroethyl) ether	<180	ug/kg	891	180	1	04/17/24 09:39	04/22/24 12:54	111-44-4	
bis(2-Chloroisopropyl) ether	<193	ug/kg	891	193	1	04/17/24 09:39	04/22/24 12:54	108-60-1	
2-Chloronaphthalene	<188	ug/kg	891	188	1	04/17/24 09:39	04/22/24 12:54	91-58-7	
2-Chlorophenol	<182	ug/kg	891	182	1	04/17/24 09:39	04/22/24 12:54	95-57-8	
4-Chlorophenylphenyl ether	<191	ug/kg	891	191	1	04/17/24 09:39	04/22/24 12:54	7005-72-3	
Chrysene	<199	ug/kg	891	199	1	04/17/24 09:39	04/22/24 12:54	218-01-9	
Dibenz(a,h)anthracene	<160	ug/kg	891	160	1	04/17/24 09:39	04/22/24 12:54	53-70-3	
Dibenzofuran	<190	ug/kg	891	190	1	04/17/24 09:39	04/22/24 12:54	132-64-9	
1,2-Dichlorobenzene	<177	ug/kg	891	177	1	04/17/24 09:39	04/22/24 12:54	95-50-1	
1,3-Dichlorobenzene	<174	ug/kg	891	174	1	04/17/24 09:39	04/22/24 12:54	541-73-1	
1,4-Dichlorobenzene	<172	ug/kg	891	172	1	04/17/24 09:39	04/22/24 12:54	106-46-7	
3,3'-Dichlorobenzidine	<87.5	ug/kg	1780	87.5	1	04/17/24 09:39	04/22/24 12:54	91-94-1	
2,4-Dichlorophenol	<179	ug/kg	891	179	1	04/17/24 09:39	04/22/24 12:54	120-83-2	
Diethylphthalate	<204	ug/kg	891	204	1	04/17/24 09:39	04/22/24 12:54	84-66-2	
2,4-Dimethylphenol	<130	ug/kg	891	130	1	04/17/24 09:39	04/22/24 12:54	105-67-9	
Dimethylphthalate	<185	ug/kg	891	185	1	04/17/24 09:39	04/22/24 12:54	131-11-3	
Di-n-butylphthalate	<211	ug/kg	891	211	1	04/17/24 09:39	04/22/24 12:54	84-74-2	
4,6-Dinitro-2-methylphenol	<154	ug/kg	4510	154	1	04/17/24 09:39	04/22/24 12:54	534-52-1	
2,4-Dinitrophenol	<269	ug/kg	4510	269	1	04/17/24 09:39	04/22/24 12:54	51-28-5	
2,4-Dinitrotoluene	<201	ug/kg	891	201	1	04/17/24 09:39	04/22/24 12:54	121-14-2	
2,6-Dinitrotoluene	<174	ug/kg	891	174	1	04/17/24 09:39	04/22/24 12:54	606-20-2	
Di-n-octylphthalate	<217	ug/kg	891	217	1	04/17/24 09:39	04/22/24 12:54	117-84-0	
bis(2-Ethylhexyl)phthalate	<200	ug/kg	891	200	1	04/17/24 09:39	04/22/24 12:54	117-81-7	
Fluoranthene	<196	ug/kg	891	196	1	04/17/24 09:39	04/22/24 12:54	206-44-0	
Fluorene	<190	ug/kg	891	190	1	04/17/24 09:39	04/22/24 12:54	86-73-7	
Hexachloro-1,3-butadiene	<191	ug/kg	891	191	1	04/17/24 09:39	04/22/24 12:54	87-68-3	
Hexachlorobenzene	<186	ug/kg	891	186	1	04/17/24 09:39	04/22/24 12:54	118-74-1	
Hexachlorocyclopentadiene	<548	ug/kg	891	548	1	04/17/24 09:39	04/22/24 12:54	77-47-4	
Hexachloroethane	<163	ug/kg	891	163	1	04/17/24 09:39	04/22/24 12:54	67-72-1	
Indeno(1,2,3-cd)pyrene	<182	ug/kg	891	182	1	04/17/24 09:39	04/22/24 12:54	193-39-5	
Isophorone	<172	ug/kg	891	172	1	04/17/24 09:39	04/22/24 12:54	78-59-1	
2-Methylnaphthalene	<181	ug/kg	891	181	1	04/17/24 09:39	04/22/24 12:54	91-57-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD06/SD-1 Lab ID: 60450758002 Collected: 04/10/24 10:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<162	ug/kg	891	162	1	04/17/24 09:39	04/22/24 12:54	95-48-7	
3&4-Methylphenol(m&p Cresol)	<166	ug/kg	891	166	1	04/17/24 09:39	04/22/24 12:54	15831-10-4	
Naphthalene	<192	ug/kg	891	192	1	04/17/24 09:39	04/22/24 12:54	91-20-3	
2-Nitroaniline	<148	ug/kg	1780	148	1	04/17/24 09:39	04/22/24 12:54	88-74-4	
3-Nitroaniline	<139	ug/kg	1780	139	1	04/17/24 09:39	04/22/24 12:54	99-09-2	
4-Nitroaniline	<153	ug/kg	1780	153	1	04/17/24 09:39	04/22/24 12:54	100-01-6	
Nitrobenzene	<189	ug/kg	891	189	1	04/17/24 09:39	04/22/24 12:54	98-95-3	
2-Nitrophenol	<139	ug/kg	891	139	1	04/17/24 09:39	04/22/24 12:54	88-75-5	
4-Nitrophenol	<131	ug/kg	4510	131	1	04/17/24 09:39	04/22/24 12:54	100-02-7	
N-Nitroso-di-n-propylamine	<170	ug/kg	891	170	1	04/17/24 09:39	04/22/24 12:54	621-64-7	
N-Nitrosodiphenylamine	<177	ug/kg	891	177	1	04/17/24 09:39	04/22/24 12:54	86-30-6	
Pentachlorophenol	<294	ug/kg	4510	294	1	04/17/24 09:39	04/22/24 12:54	87-86-5	
Phenanthrene	<190	ug/kg	891	190	1	04/17/24 09:39	04/22/24 12:54	85-01-8	
Phenol	<168	ug/kg	891	168	1	04/17/24 09:39	04/22/24 12:54	108-95-2	
Pyrene	<190	ug/kg	891	190	1	04/17/24 09:39	04/22/24 12:54	129-00-0	
Pyridine	<132	ug/kg	891	132	1	04/17/24 09:39	04/22/24 12:54	110-86-1	
1,2,4-Trichlorobenzene	<187	ug/kg	891	187	1	04/17/24 09:39	04/22/24 12:54	120-82-1	
2,4,5-Trichlorophenol	<183	ug/kg	891	183	1	04/17/24 09:39	04/22/24 12:54	95-95-4	
2,4,6-Trichlorophenol	<165	ug/kg	891	165	1	04/17/24 09:39	04/22/24 12:54	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	74	%	30-120		1	04/17/24 09:39	04/22/24 12:54	4165-60-0	P3
2-Fluorobiphenyl (S)	63	%	40-120		1	04/17/24 09:39	04/22/24 12:54	321-60-8	
Terphenyl-d14 (S)	66	%	45-120		1	04/17/24 09:39	04/22/24 12:54	1718-51-0	
Phenol-d6 (S)	71	%	40-120		1	04/17/24 09:39	04/22/24 12:54	13127-88-3	
2-Fluorophenol (S)	69	%	40-120		1	04/17/24 09:39	04/22/24 12:54	367-12-4	
2,4,6-Tribromophenol (S)	68	%	35-120		1	04/17/24 09:39	04/22/24 12:54	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	92.5	mg/kg	20.2	6.9	1	04/11/24 16:15	04/15/24 13:16		
TPH-DRO	41.8	mg/kg	20.2	6.9	1	04/11/24 16:15	04/15/24 13:16		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	79	%	35-120		1	04/11/24 16:15	04/15/24 13:16	4165-60-0	
2-Fluorobiphenyl (S)	87	%	50-120		1	04/11/24 16:15	04/15/24 13:16	321-60-8	
Terphenyl-d14 (S)	87	%	45-120		1	04/11/24 16:15	04/15/24 13:16	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<89.6	ug/kg	94.0	89.6	1	04/12/24 09:46	04/12/24 13:55	67-64-1	
Benzene	<0.68	ug/kg	7.5	0.68	1	04/12/24 09:46	04/12/24 13:55	71-43-2	
Bromobenzene	<0.93	ug/kg	7.5	0.93	1	04/12/24 09:46	04/12/24 13:55	108-86-1	
Bromochloromethane	<1.1	ug/kg	7.5	1.1	1	04/12/24 09:46	04/12/24 13:55	74-97-5	
Bromodichloromethane	<1.3	ug/kg	19.4	1.3	1	04/12/24 09:46	04/12/24 13:55	75-27-4	
Bromoform	<0.58	ug/kg	19.4	0.58	1	04/12/24 09:46	04/12/24 13:55	75-25-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD06/SD-1 Lab ID: 60450758002 Collected: 04/10/24 10:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<9.2	ug/kg	19.4	9.2	1	04/12/24 09:46	04/12/24 13:55	74-83-9	
2-Butanone (MEK)	<47.6	ug/kg	94.0	47.6	1	04/12/24 09:46	04/12/24 13:55	78-93-3	
n-Butylbenzene	<0.72	ug/kg	7.5	0.72	1	04/12/24 09:46	04/12/24 13:55	104-51-8	
sec-Butylbenzene	<0.74	ug/kg	7.5	0.74	1	04/12/24 09:46	04/12/24 13:55	135-98-8	
tert-Butylbenzene	<0.48	ug/kg	7.5	0.48	1	04/12/24 09:46	04/12/24 13:55	98-06-6	
Carbon disulfide	10.7	ug/kg	7.5	3.4	1	04/12/24 09:46	04/12/24 13:55	75-15-0	
Carbon tetrachloride	<2.5	ug/kg	7.5	2.5	1	04/12/24 09:46	04/12/24 13:55	56-23-5	
Chlorobenzene	<0.44	ug/kg	7.5	0.44	1	04/12/24 09:46	04/12/24 13:55	108-90-7	
Chloroethane	<12.4	ug/kg	37.3	12.4	1	04/12/24 09:46	04/12/24 13:55	75-00-3	
Chloroform	<2.7	ug/kg	7.5	2.7	1	04/12/24 09:46	04/12/24 13:55	67-66-3	
Chloromethane	<1.8	ug/kg	19.4	1.8	1	04/12/24 09:46	04/12/24 13:55	74-87-3	
2-Chlorotoluene	<1.0	ug/kg	7.5	1.0	1	04/12/24 09:46	04/12/24 13:55	95-49-8	
4-Chlorotoluene	<0.59	ug/kg	7.5	0.59	1	04/12/24 09:46	04/12/24 13:55	106-43-4	
1,2-Dibromo-3-chloropropane	<5.0	ug/kg	19.4	5.0	1	04/12/24 09:46	04/12/24 13:55	96-12-8	
Dibromochloromethane	<0.45	ug/kg	7.5	0.45	1	04/12/24 09:46	04/12/24 13:55	124-48-1	
1,2-Dibromoethane (EDB)	<0.78	ug/kg	7.5	0.78	1	04/12/24 09:46	04/12/24 13:55	106-93-4	
Dibromomethane	<2.2	ug/kg	7.5	2.2	1	04/12/24 09:46	04/12/24 13:55	74-95-3	
1,2-Dichlorobenzene	<1.2	ug/kg	7.5	1.2	1	04/12/24 09:46	04/12/24 13:55	95-50-1	
1,3-Dichlorobenzene	<0.94	ug/kg	7.5	0.94	1	04/12/24 09:46	04/12/24 13:55	541-73-1	
1,4-Dichlorobenzene	<1.3	ug/kg	7.5	1.3	1	04/12/24 09:46	04/12/24 13:55	106-46-7	
Dichlorodifluoromethane	<1.4	ug/kg	19.4	1.4	1	04/12/24 09:46	04/12/24 13:55	75-71-8	
1,1-Dichloroethane	<1.7	ug/kg	7.5	1.7	1	04/12/24 09:46	04/12/24 13:55	75-34-3	
1,2-Dichloroethane	<1.4	ug/kg	7.5	1.4	1	04/12/24 09:46	04/12/24 13:55	107-06-2	
1,2-Dichloroethene (Total)	<2.8	ug/kg	14.9	2.8	1	04/12/24 09:46	04/12/24 13:55	540-59-0	
1,1-Dichloroethene	<3.0	ug/kg	7.5	3.0	1	04/12/24 09:46	04/12/24 13:55	75-35-4	
cis-1,2-Dichloroethene	<1.4	ug/kg	7.5	1.4	1	04/12/24 09:46	04/12/24 13:55	156-59-2	
trans-1,2-Dichloroethene	<1.7	ug/kg	7.5	1.7	1	04/12/24 09:46	04/12/24 13:55	156-60-5	
1,2-Dichloropropane	<1.6	ug/kg	7.5	1.6	1	04/12/24 09:46	04/12/24 13:55	78-87-5	
1,3-Dichloropropane	332	ug/kg	7.5	0.29	1	04/12/24 09:46	04/12/24 13:55	142-28-9	
2,2-Dichloropropane	<2.3	ug/kg	7.5	2.3	1	04/12/24 09:46	04/12/24 13:55	594-20-7	
1,1-Dichloropropene	<1.6	ug/kg	7.5	1.6	1	04/12/24 09:46	04/12/24 13:55	563-58-6	
cis-1,3-Dichloropropene	<1.1	ug/kg	7.5	1.1	1	04/12/24 09:46	04/12/24 13:55	10061-01-5	
trans-1,3-Dichloropropene	<0.90	ug/kg	7.5	0.90	1	04/12/24 09:46	04/12/24 13:55	10061-02-6	
Ethylbenzene	<1.3	ug/kg	7.5	1.3	1	04/12/24 09:46	04/12/24 13:55	100-41-4	
Hexachloro-1,3-butadiene	<1.3	ug/kg	7.5	1.3	1	04/12/24 09:46	04/12/24 13:55	87-68-3	
2-Hexanone	<15.5	ug/kg	94.0	15.5	1	04/12/24 09:46	04/12/24 13:55	591-78-6	
Isopropylbenzene (Cumene)	<0.47	ug/kg	7.5	0.47	1	04/12/24 09:46	04/12/24 13:55	98-82-8	
p-Isopropyltoluene	<0.65	ug/kg	7.5	0.65	1	04/12/24 09:46	04/12/24 13:55	99-87-6	
Methylene Chloride	<28.9	ug/kg	37.3	28.9	1	04/12/24 09:46	04/12/24 13:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	<10.4	ug/kg	94.0	10.4	1	04/12/24 09:46	04/12/24 13:55	108-10-1	
Methyl-tert-butyl ether	<1.4	ug/kg	7.5	1.4	1	04/12/24 09:46	04/12/24 13:55	1634-04-4	
Naphthalene	<1.1	ug/kg	14.9	1.1	1	04/12/24 09:46	04/12/24 13:55	91-20-3	
n-Propylbenzene	<0.91	ug/kg	7.5	0.91	1	04/12/24 09:46	04/12/24 13:55	103-65-1	
Styrene	<0.60	ug/kg	7.5	0.60	1	04/12/24 09:46	04/12/24 13:55	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD06/SD-1 Lab ID: 60450758002 Collected: 04/10/24 10:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<1.1	ug/kg	7.5	1.1	1	04/12/24 09:46	04/12/24 13:55	630-20-6	
1,1,2,2-Tetrachloroethane	<1.0	ug/kg	7.5	1.0	1	04/12/24 09:46	04/12/24 13:55	79-34-5	
Tetrachloroethene	<0.80	ug/kg	7.5	0.80	1	04/12/24 09:46	04/12/24 13:55	127-18-4	
Toluene	<6.6	ug/kg	29.8	6.6	1	04/12/24 09:46	04/12/24 13:55	108-88-3	
1,2,3-Trichlorobenzene	<0.87	ug/kg	7.5	0.87	1	04/12/24 09:46	04/12/24 13:55	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/kg	7.5	0.73	1	04/12/24 09:46	04/12/24 13:55	120-82-1	
1,1,1-Trichloroethane	<1.5	ug/kg	7.5	1.5	1	04/12/24 09:46	04/12/24 13:55	71-55-6	
1,1,2-Trichloroethane	<1.1	ug/kg	7.5	1.1	1	04/12/24 09:46	04/12/24 13:55	79-00-5	
Trichloroethene	<2.8	ug/kg	7.5	2.8	1	04/12/24 09:46	04/12/24 13:55	79-01-6	
Trichlorofluoromethane	<14.3	ug/kg	19.4	14.3	1	04/12/24 09:46	04/12/24 13:55	75-69-4	
1,2,3-Trichloropropane	<2.3	ug/kg	7.5	2.3	1	04/12/24 09:46	04/12/24 13:55	96-18-4	
1,2,4-Trimethylbenzene	<1.0	ug/kg	7.5	1.0	1	04/12/24 09:46	04/12/24 13:55	95-63-6	
1,3,5-Trimethylbenzene	<0.65	ug/kg	7.5	0.65	1	04/12/24 09:46	04/12/24 13:55	108-67-8	
Vinyl chloride	<1.4	ug/kg	19.4	1.4	1	04/12/24 09:46	04/12/24 13:55	75-01-4	
Xylene (Total)	<5.5	ug/kg	22.4	5.5	1	04/12/24 09:46	04/12/24 13:55	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	108	%	80-120		1	04/12/24 09:46	04/12/24 13:55	2037-26-5	
4-Bromofluorobenzene (S)	100	%	83-119		1	04/12/24 09:46	04/12/24 13:55	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1	04/12/24 09:46	04/12/24 13:55	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.077	mg/kg	0.56	0.077	1	04/16/24 17:07	04/16/24 21:22		
<b>Surrogates</b>									
Toluene-d8 (S)	106	%	78-122		1	04/16/24 17:07	04/16/24 21:22	2037-26-5	
4-Bromofluorobenzene (S)	113	%	69-133		1	04/16/24 17:07	04/16/24 21:22	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1	04/16/24 17:07	04/16/24 21:22	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	26.6	%	0.50	0.50	1		04/12/24 13:40		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	73.7	%			1	04/13/24 13:02	04/13/24 13:14		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<1.0	mg/kg	1.3	1.0	1	04/15/24 09:34	04/16/24 16:02	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.16	mg/kg	0.19	0.16	1	04/18/24 08:30	04/18/24 12:14	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD06/SD-1 Lab ID: 60450758002 Collected: 04/10/24 10:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<7.7	mg/kg	13.6	7.7	10	04/17/24 16:50	04/19/24 14:49	14797-55-8	
Nitrite as N	<7.1	mg/kg	13.6	7.1	10	04/17/24 16:50	04/19/24 14:49	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD05/SD-1 Lab ID: 60450758003 Collected: 04/10/24 11:30 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00486	mg/kg	0.0258	0.00486	1	04/17/24 06:14	04/17/24 13:39	309-00-2	
alpha-BHC	<0.00475	mg/kg	0.0258	0.00475	1	04/17/24 06:14	04/17/24 13:39	319-84-6	
beta-BHC	<0.00490	mg/kg	0.0258	0.00490	1	04/17/24 06:14	04/17/24 13:39	319-85-7	
delta-BHC	<0.00447	mg/kg	0.0258	0.00447	1	04/17/24 06:14	04/17/24 13:39	319-86-8	
gamma-BHC (Lindane)	<0.00444	mg/kg	0.0258	0.00444	1	04/17/24 06:14	04/17/24 13:39	58-89-9	
Chlordane (Technical)	<0.133	mg/kg	0.388	0.133	1	04/17/24 06:14	04/17/24 13:39	57-74-9	
4,4'-DDD	<0.00478	mg/kg	0.0258	0.00478	1	04/17/24 06:14	04/17/24 13:39	72-54-8	
4,4'-DDE	<0.00473	mg/kg	0.0258	0.00473	1	04/17/24 06:14	04/17/24 13:39	72-55-9	
4,4'-DDT	<0.00810	mg/kg	0.0258	0.00810	1	04/17/24 06:14	04/17/24 13:39	50-29-3	
Dieldrin	<0.00444	mg/kg	0.0258	0.00444	1	04/17/24 06:14	04/17/24 13:39	60-57-1	
Endosulfan I	<0.00469	mg/kg	0.0258	0.00469	1	04/17/24 06:14	04/17/24 13:39	959-98-8	
Endosulfan II	<0.00433	mg/kg	0.0258	0.00433	1	04/17/24 06:14	04/17/24 13:39	33213-65-9	
Endosulfan sulfate	<0.00470	mg/kg	0.0258	0.00470	1	04/17/24 06:14	04/17/24 13:39	1031-07-8	
Endrin	<0.00452	mg/kg	0.0258	0.00452	1	04/17/24 06:14	04/17/24 13:39	72-20-8	
Endrin aldehyde	<0.00438	mg/kg	0.0258	0.00438	1	04/17/24 06:14	04/17/24 13:39	7421-93-4	
Endrin ketone	<0.00918	mg/kg	0.0258	0.00918	1	04/17/24 06:14	04/17/24 13:39	53494-70-5	
Hexachlorobenzene	<0.00447	mg/kg	0.0258	0.00447	1	04/17/24 06:14	04/17/24 13:39	118-74-1	
Heptachlor	<0.00553	mg/kg	0.0258	0.00553	1	04/17/24 06:14	04/17/24 13:39	76-44-8	
Heptachlor epoxide	<0.00438	mg/kg	0.0258	0.00438	1	04/17/24 06:14	04/17/24 13:39	1024-57-3	
Methoxychlor	<0.00625	mg/kg	0.0258	0.00625	1	04/17/24 06:14	04/17/24 13:39	72-43-5	
Toxaphene	<0.160	mg/kg	0.517	0.160	1	04/17/24 06:14	04/17/24 13:39	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	98.8	%	10.0-135		1	04/17/24 06:14	04/17/24 13:39	2051-24-3	
Tetrachloro-m-xylene (S)	110	%	10.0-139		1	04/17/24 06:14	04/17/24 13:39	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00907	mg/kg	0.0904	0.00907	1	04/17/24 14:29	04/19/24 16:41	94-75-7	
Dalapon	<0.0146	mg/kg	0.0904	0.0146	1	04/17/24 14:29	04/19/24 16:41	127-20-8	
2,4-DB	<0.0384	mg/kg	0.0904	0.0384	1	04/17/24 14:29	04/19/24 16:41	94-82-6	
Dicamba	<0.0203	mg/kg	0.0904	0.0203	1	04/17/24 14:29	04/19/24 16:41	1918-00-9	
Dichlorprop	<0.0316	mg/kg	0.0904	0.0316	1	04/17/24 14:29	04/19/24 16:41	120-36-5	
Dinoseb	<0.00900	mg/kg	0.0904	0.00900	1	04/17/24 14:29	04/19/24 16:41	88-85-7	
MCPA	<0.572	mg/kg	8.40	0.572	1	04/17/24 14:29	04/19/24 16:41	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.474	mg/kg	8.40	0.474	1	04/17/24 14:29	04/19/24 16:41	93-65-2	
2,4,5-T	<0.0110	mg/kg	0.0904	0.0110	1	04/17/24 14:29	04/19/24 16:41	93-76-5	
2,4,5-TP (Silvex)	<0.0138	mg/kg	0.0904	0.0138	1	04/17/24 14:29	04/19/24 16:41	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	37.7	%	22.0-132		1	04/17/24 14:29	04/19/24 16:41	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<11.7	ug/kg	43.5	11.7	1	04/17/24 20:36	04/19/24 00:11	12674-11-2	
PCB-1221 (Aroclor 1221)	<14.6	ug/kg	43.5	14.6	1	04/17/24 20:36	04/19/24 00:11	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD05/SD-1 Lab ID: 60450758003 Collected: 04/10/24 11:30 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<14.6	ug/kg	43.5	14.6	1	04/17/24 20:36	04/19/24 00:11	11141-16-5	
PCB-1242 (Aroclor 1242)	<14.6	ug/kg	43.5	14.6	1	04/17/24 20:36	04/19/24 00:11	53469-21-9	
PCB-1248 (Aroclor 1248)	<14.6	ug/kg	43.5	14.6	1	04/17/24 20:36	04/19/24 00:11	12672-29-6	
PCB-1254 (Aroclor 1254)	<14.6	ug/kg	43.5	14.6	1	04/17/24 20:36	04/19/24 00:11	11097-69-1	
PCB-1260 (Aroclor 1260)	<14.6	ug/kg	43.5	14.6	1	04/17/24 20:36	04/19/24 00:11	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	86	%	20-120		1	04/17/24 20:36	04/19/24 00:11	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3051									
Pace National - Mt. Juliet									
Aluminum	3030	mg/kg	64.6	8.91	5	04/16/24 09:55	04/18/24 14:18	7429-90-5	
Antimony	0.349J	mg/kg	3.88	0.214	5	04/16/24 09:55	04/18/24 14:18	7440-36-0	B,J
Arsenic	8.31	mg/kg	1.29	0.129	5	04/16/24 09:55	04/18/24 14:18	7440-38-2	
Barium	34.9	mg/kg	3.23	0.196	5	04/16/24 09:55	04/18/24 14:18	7440-39-3	
Beryllium	0.323J	mg/kg	3.23	0.178	5	04/16/24 09:55	04/18/24 14:18	7440-41-7	J
Cadmium	0.580J	mg/kg	1.29	0.110	5	04/16/24 09:55	04/18/24 14:18	7440-43-9	J
Calcium	254000	mg/kg	646	97.5	5	04/16/24 09:55	04/18/24 14:18	7440-70-2	
Chromium	8.84	mg/kg	6.46	0.382	5	04/16/24 09:55	04/18/24 14:18	7440-47-3	
Cobalt	5.06	mg/kg	1.29	0.0597	5	04/16/24 09:55	04/18/24 14:18	7440-48-4	
Copper	12.9	mg/kg	6.46	0.171	5	04/16/24 09:55	04/18/24 14:18	7440-50-8	
Iron	13300	mg/kg	64.6	11.6	5	04/16/24 09:55	04/18/24 14:18	7439-89-6	
Lead	14.9	mg/kg	2.58	0.128	5	04/16/24 09:55	04/18/24 14:18	7439-92-1	
Magnesium	7020	mg/kg	646	59.3	5	04/16/24 09:55	04/18/24 14:18	7439-95-4	
Manganese	836	mg/kg	3.23	0.346	5	04/16/24 09:55	04/18/24 14:18	7439-96-5	
Molybdenum	1.30J	mg/kg	3.23	0.130	5	04/16/24 09:55	04/18/24 14:18	7439-98-7	J
Nickel	24.4	mg/kg	3.23	0.254	5	04/16/24 09:55	04/18/24 14:18	7440-02-0	
Potassium	851	mg/kg	646	87.8	5	04/16/24 09:55	04/18/24 14:18	7440-09-7	
Selenium	1.69J	mg/kg	3.23	0.233	5	04/16/24 09:55	04/18/24 14:18	7782-49-2	J
Silver	0.208J	mg/kg	0.646	0.112	5	04/16/24 09:55	04/18/24 14:18	7440-22-4	J
Sodium	191J	mg/kg	646	98.8	5	04/16/24 09:55	04/18/24 14:18	7440-23-5	J
Thallium	0.112J	mg/kg	2.58	0.0840	5	04/16/24 09:55	04/18/24 14:18	7440-28-0	J
Vanadium	8.28	mg/kg	3.23	0.242	5	04/16/24 09:55	04/18/24 14:18	7440-62-2	
Zinc	83.1	mg/kg	32.3	0.956	5	04/16/24 09:55	04/18/24 14:18	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0233	mg/kg	0.0517	0.0233	1	04/14/24 16:42	04/15/24 13:15	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<185	ug/kg	862	185	2	04/17/24 09:39	04/22/24 04:14	83-32-9	
Acenaphthylene	<141	ug/kg	862	141	2	04/17/24 09:39	04/22/24 04:14	208-96-8	
Anthracene	<180	ug/kg	862	180	2	04/17/24 09:39	04/22/24 04:14	120-12-7	
Benzo(a)anthracene	<182	ug/kg	862	182	2	04/17/24 09:39	04/22/24 04:14	56-55-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD05/SD-1 Lab ID: 60450758003 Collected: 04/10/24 11:30 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>		Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Benzo(a)pyrene	<185	ug/kg	862	185	2	04/17/24 09:39	04/22/24 04:14	50-32-8	
Benzo(b)fluoranthene	<210	ug/kg	862	210	2	04/17/24 09:39	04/22/24 04:14	205-99-2	
Benzo(g,h,i)perylene	<150	ug/kg	862	150	2	04/17/24 09:39	04/22/24 04:14	191-24-2	
Benzo(k)fluoranthene	<185	ug/kg	862	185	2	04/17/24 09:39	04/22/24 04:14	207-08-9	
Benzoic Acid	<470	ug/kg	4360	470	2	04/17/24 09:39	04/22/24 04:14	65-85-0	
Benzyl alcohol	<158	ug/kg	1720	158	2	04/17/24 09:39	04/22/24 04:14	100-51-6	
4-Bromophenylphenyl ether	<186	ug/kg	862	186	2	04/17/24 09:39	04/22/24 04:14	101-55-3	
Butylbenzylphthalate	<176	ug/kg	862	176	2	04/17/24 09:39	04/22/24 04:14	85-68-7	
Carbazole	<177	ug/kg	862	177	2	04/17/24 09:39	04/22/24 04:14	86-74-8	
4-Chloro-3-methylphenol	<181	ug/kg	1720	181	2	04/17/24 09:39	04/22/24 04:14	59-50-7	
4-Chloroaniline	<135	ug/kg	1720	135	2	04/17/24 09:39	04/22/24 04:14	106-47-8	
bis(2-Chloroethoxy)methane	<171	ug/kg	862	171	2	04/17/24 09:39	04/22/24 04:14	111-91-1	
bis(2-Chloroethyl) ether	<174	ug/kg	862	174	2	04/17/24 09:39	04/22/24 04:14	111-44-4	
bis(2-Chloroisopropyl) ether	<187	ug/kg	862	187	2	04/17/24 09:39	04/22/24 04:14	108-60-1	
2-Chloronaphthalene	<182	ug/kg	862	182	2	04/17/24 09:39	04/22/24 04:14	91-58-7	
2-Chlorophenol	<176	ug/kg	862	176	2	04/17/24 09:39	04/22/24 04:14	95-57-8	
4-Chlorophenylphenyl ether	<185	ug/kg	862	185	2	04/17/24 09:39	04/22/24 04:14	7005-72-3	
Chrysene	<192	ug/kg	862	192	2	04/17/24 09:39	04/22/24 04:14	218-01-9	
Dibenz(a,h)anthracene	<155	ug/kg	862	155	2	04/17/24 09:39	04/22/24 04:14	53-70-3	
Dibenzofuran	<184	ug/kg	862	184	2	04/17/24 09:39	04/22/24 04:14	132-64-9	
1,2-Dichlorobenzene	<172	ug/kg	862	172	2	04/17/24 09:39	04/22/24 04:14	95-50-1	
1,3-Dichlorobenzene	<169	ug/kg	862	169	2	04/17/24 09:39	04/22/24 04:14	541-73-1	
1,4-Dichlorobenzene	<166	ug/kg	862	166	2	04/17/24 09:39	04/22/24 04:14	106-46-7	
3,3'-Dichlorobenzidine	<84.6	ug/kg	1720	84.6	2	04/17/24 09:39	04/22/24 04:14	91-94-1	
2,4-Dichlorophenol	<173	ug/kg	862	173	2	04/17/24 09:39	04/22/24 04:14	120-83-2	
Diethylphthalate	<197	ug/kg	862	197	2	04/17/24 09:39	04/22/24 04:14	84-66-2	
2,4-Dimethylphenol	<125	ug/kg	862	125	2	04/17/24 09:39	04/22/24 04:14	105-67-9	
Dimethylphthalate	<179	ug/kg	862	179	2	04/17/24 09:39	04/22/24 04:14	131-11-3	
Di-n-butylphthalate	<204	ug/kg	862	204	2	04/17/24 09:39	04/22/24 04:14	84-74-2	
4,6-Dinitro-2-methylphenol	<149	ug/kg	4360	149	2	04/17/24 09:39	04/22/24 04:14	534-52-1	
2,4-Dinitrophenol	<260	ug/kg	4360	260	2	04/17/24 09:39	04/22/24 04:14	51-28-5	
2,4-Dinitrotoluene	<194	ug/kg	862	194	2	04/17/24 09:39	04/22/24 04:14	121-14-2	
2,6-Dinitrotoluene	<168	ug/kg	862	168	2	04/17/24 09:39	04/22/24 04:14	606-20-2	
Di-n-octylphthalate	<210	ug/kg	862	210	2	04/17/24 09:39	04/22/24 04:14	117-84-0	
bis(2-Ethylhexyl)phthalate	<194	ug/kg	862	194	2	04/17/24 09:39	04/22/24 04:14	117-81-7	
Fluoranthene	<190	ug/kg	862	190	2	04/17/24 09:39	04/22/24 04:14	206-44-0	
Fluorene	<183	ug/kg	862	183	2	04/17/24 09:39	04/22/24 04:14	86-73-7	
Hexachloro-1,3-butadiene	<185	ug/kg	862	185	2	04/17/24 09:39	04/22/24 04:14	87-68-3	
Hexachlorobenzene	<180	ug/kg	862	180	2	04/17/24 09:39	04/22/24 04:14	118-74-1	
Hexachlorocyclopentadiene	<530	ug/kg	862	530	2	04/17/24 09:39	04/22/24 04:14	77-47-4	
Hexachloroethane	<158	ug/kg	862	158	2	04/17/24 09:39	04/22/24 04:14	67-72-1	
Indeno(1,2,3-cd)pyrene	<176	ug/kg	862	176	2	04/17/24 09:39	04/22/24 04:14	193-39-5	
Isophorone	<167	ug/kg	862	167	2	04/17/24 09:39	04/22/24 04:14	78-59-1	
2-Methylnaphthalene	<175	ug/kg	862	175	2	04/17/24 09:39	04/22/24 04:14	91-57-6	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD05/SD-1 Lab ID: 60450758003 Collected: 04/10/24 11:30 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<157	ug/kg	862	157	2	04/17/24 09:39	04/22/24 04:14	95-48-7	
3&4-Methylphenol(m&p Cresol)	<160	ug/kg	862	160	2	04/17/24 09:39	04/22/24 04:14	15831-10-4	
Naphthalene	<185	ug/kg	862	185	2	04/17/24 09:39	04/22/24 04:14	91-20-3	
2-Nitroaniline	<143	ug/kg	1720	143	2	04/17/24 09:39	04/22/24 04:14	88-74-4	
3-Nitroaniline	<134	ug/kg	1720	134	2	04/17/24 09:39	04/22/24 04:14	99-09-2	
4-Nitroaniline	<148	ug/kg	1720	148	2	04/17/24 09:39	04/22/24 04:14	100-01-6	
Nitrobenzene	<183	ug/kg	862	183	2	04/17/24 09:39	04/22/24 04:14	98-95-3	
2-Nitrophenol	<135	ug/kg	862	135	2	04/17/24 09:39	04/22/24 04:14	88-75-5	
4-Nitrophenol	<127	ug/kg	4360	127	2	04/17/24 09:39	04/22/24 04:14	100-02-7	
N-Nitroso-di-n-propylamine	<164	ug/kg	862	164	2	04/17/24 09:39	04/22/24 04:14	621-64-7	
N-Nitrosodiphenylamine	<171	ug/kg	862	171	2	04/17/24 09:39	04/22/24 04:14	86-30-6	
Pentachlorophenol	<285	ug/kg	4360	285	2	04/17/24 09:39	04/22/24 04:14	87-86-5	
Phenanthrene	<184	ug/kg	862	184	2	04/17/24 09:39	04/22/24 04:14	85-01-8	
Phenol	<162	ug/kg	862	162	2	04/17/24 09:39	04/22/24 04:14	108-95-2	
Pyrene	<184	ug/kg	862	184	2	04/17/24 09:39	04/22/24 04:14	129-00-0	
Pyridine	<128	ug/kg	862	128	2	04/17/24 09:39	04/22/24 04:14	110-86-1	
1,2,4-Trichlorobenzene	<181	ug/kg	862	181	2	04/17/24 09:39	04/22/24 04:14	120-82-1	
2,4,5-Trichlorophenol	<177	ug/kg	862	177	2	04/17/24 09:39	04/22/24 04:14	95-95-4	
2,4,6-Trichlorophenol	<159	ug/kg	862	159	2	04/17/24 09:39	04/22/24 04:14	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	76	%	30-120		2	04/17/24 09:39	04/22/24 04:14	4165-60-0	D3
2-Fluorobiphenyl (S)	68	%	40-120		2	04/17/24 09:39	04/22/24 04:14	321-60-8	
Terphenyl-d14 (S)	69	%	45-120		2	04/17/24 09:39	04/22/24 04:14	1718-51-0	
Phenol-d6 (S)	76	%	40-120		2	04/17/24 09:39	04/22/24 04:14	13127-88-3	
2-Fluorophenol (S)	75	%	40-120		2	04/17/24 09:39	04/22/24 04:14	367-12-4	
2,4,6-Tribromophenol (S)	71	%	35-120		2	04/17/24 09:39	04/22/24 04:14	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	86.1	mg/kg	19.4	6.6	1	04/11/24 16:15	04/15/24 13:36		
TPH-DRO	38.1	mg/kg	19.4	6.6	1	04/11/24 16:15	04/15/24 13:36		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	70	%	35-120		1	04/11/24 16:15	04/15/24 13:36	4165-60-0	
2-Fluorobiphenyl (S)	73	%	50-120		1	04/11/24 16:15	04/15/24 13:36	321-60-8	
Terphenyl-d14 (S)	62	%	45-120		1	04/11/24 16:15	04/15/24 13:36	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<86.4	ug/kg	90.6	86.4	1	04/12/24 09:46	04/12/24 14:16	67-64-1	
Benzene	<0.66	ug/kg	7.2	0.66	1	04/12/24 09:46	04/12/24 14:16	71-43-2	
Bromobenzene	<0.89	ug/kg	7.2	0.89	1	04/12/24 09:46	04/12/24 14:16	108-86-1	
Bromochloromethane	<1.1	ug/kg	7.2	1.1	1	04/12/24 09:46	04/12/24 14:16	74-97-5	
Bromodichloromethane	<1.2	ug/kg	18.7	1.2	1	04/12/24 09:46	04/12/24 14:16	75-27-4	
Bromoform	<0.56	ug/kg	18.7	0.56	1	04/12/24 09:46	04/12/24 14:16	75-25-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD05/SD-1 Lab ID: 60450758003 Collected: 04/10/24 11:30 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Bromomethane	<8.9	ug/kg	18.7	8.9	1	04/12/24 09:46	04/12/24 14:16	74-83-9	
2-Butanone (MEK)	<45.9	ug/kg	90.6	45.9	1	04/12/24 09:46	04/12/24 14:16	78-93-3	
n-Butylbenzene	<0.69	ug/kg	7.2	0.69	1	04/12/24 09:46	04/12/24 14:16	104-51-8	
sec-Butylbenzene	1.4J	ug/kg	7.2	0.71	1	04/12/24 09:46	04/12/24 14:16	135-98-8	
tert-Butylbenzene	<0.47	ug/kg	7.2	0.47	1	04/12/24 09:46	04/12/24 14:16	98-06-6	
Carbon disulfide	5.9J	ug/kg	7.2	3.3	1	04/12/24 09:46	04/12/24 14:16	75-15-0	
Carbon tetrachloride	<2.4	ug/kg	7.2	2.4	1	04/12/24 09:46	04/12/24 14:16	56-23-5	
Chlorobenzene	<0.42	ug/kg	7.2	0.42	1	04/12/24 09:46	04/12/24 14:16	108-90-7	
Chloroethane	<11.9	ug/kg	36.0	11.9	1	04/12/24 09:46	04/12/24 14:16	75-00-3	
Chloroform	<2.6	ug/kg	7.2	2.6	1	04/12/24 09:46	04/12/24 14:16	67-66-3	
Chloromethane	<1.8	ug/kg	18.7	1.8	1	04/12/24 09:46	04/12/24 14:16	74-87-3	
2-Chlorotoluene	<1.0	ug/kg	7.2	1.0	1	04/12/24 09:46	04/12/24 14:16	95-49-8	
4-Chlorotoluene	<0.57	ug/kg	7.2	0.57	1	04/12/24 09:46	04/12/24 14:16	106-43-4	
1,2-Dibromo-3-chloropropane	<4.8	ug/kg	18.7	4.8	1	04/12/24 09:46	04/12/24 14:16	96-12-8	
Dibromochloromethane	<0.43	ug/kg	7.2	0.43	1	04/12/24 09:46	04/12/24 14:16	124-48-1	
1,2-Dibromoethane (EDB)	<0.76	ug/kg	7.2	0.76	1	04/12/24 09:46	04/12/24 14:16	106-93-4	
Dibromomethane	<2.1	ug/kg	7.2	2.1	1	04/12/24 09:46	04/12/24 14:16	74-95-3	
1,2-Dichlorobenzene	<1.2	ug/kg	7.2	1.2	1	04/12/24 09:46	04/12/24 14:16	95-50-1	
1,3-Dichlorobenzene	<0.91	ug/kg	7.2	0.91	1	04/12/24 09:46	04/12/24 14:16	541-73-1	
1,4-Dichlorobenzene	<1.3	ug/kg	7.2	1.3	1	04/12/24 09:46	04/12/24 14:16	106-46-7	
Dichlorodifluoromethane	<1.4	ug/kg	18.7	1.4	1	04/12/24 09:46	04/12/24 14:16	75-71-8	
1,1-Dichloroethane	<1.7	ug/kg	7.2	1.7	1	04/12/24 09:46	04/12/24 14:16	75-34-3	
1,2-Dichloroethane	<1.4	ug/kg	7.2	1.4	1	04/12/24 09:46	04/12/24 14:16	107-06-2	
1,2-Dichloroethene (Total)	<2.7	ug/kg	14.4	2.7	1	04/12/24 09:46	04/12/24 14:16	540-59-0	
1,1-Dichloroethene	<2.9	ug/kg	7.2	2.9	1	04/12/24 09:46	04/12/24 14:16	75-35-4	
cis-1,2-Dichloroethene	<1.3	ug/kg	7.2	1.3	1	04/12/24 09:46	04/12/24 14:16	156-59-2	
trans-1,2-Dichloroethene	<1.6	ug/kg	7.2	1.6	1	04/12/24 09:46	04/12/24 14:16	156-60-5	
1,2-Dichloropropane	<1.5	ug/kg	7.2	1.5	1	04/12/24 09:46	04/12/24 14:16	78-87-5	
1,3-Dichloropropane	<0.28	ug/kg	7.2	0.28	1	04/12/24 09:46	04/12/24 14:16	142-28-9	
2,2-Dichloropropane	<2.2	ug/kg	7.2	2.2	1	04/12/24 09:46	04/12/24 14:16	594-20-7	
1,1-Dichloropropene	<1.6	ug/kg	7.2	1.6	1	04/12/24 09:46	04/12/24 14:16	563-58-6	
cis-1,3-Dichloropropene	<1.1	ug/kg	7.2	1.1	1	04/12/24 09:46	04/12/24 14:16	10061-01-5	
trans-1,3-Dichloropropene	<0.86	ug/kg	7.2	0.86	1	04/12/24 09:46	04/12/24 14:16	10061-02-6	
Ethylbenzene	<1.2	ug/kg	7.2	1.2	1	04/12/24 09:46	04/12/24 14:16	100-41-4	
Hexachloro-1,3-butadiene	<1.3	ug/kg	7.2	1.3	1	04/12/24 09:46	04/12/24 14:16	87-68-3	
2-Hexanone	<15.0	ug/kg	90.6	15.0	1	04/12/24 09:46	04/12/24 14:16	591-78-6	
Isopropylbenzene (Cumene)	<0.45	ug/kg	7.2	0.45	1	04/12/24 09:46	04/12/24 14:16	98-82-8	
p-Isopropyltoluene	9.5	ug/kg	7.2	0.63	1	04/12/24 09:46	04/12/24 14:16	99-87-6	
Methylene Chloride	<27.9	ug/kg	36.0	27.9	1	04/12/24 09:46	04/12/24 14:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	<10.1	ug/kg	90.6	10.1	1	04/12/24 09:46	04/12/24 14:16	108-10-1	
Methyl-tert-butyl ether	<1.4	ug/kg	7.2	1.4	1	04/12/24 09:46	04/12/24 14:16	1634-04-4	
Naphthalene	8.7J	ug/kg	14.4	1.0	1	04/12/24 09:46	04/12/24 14:16	91-20-3	
n-Propylbenzene	1.2J	ug/kg	7.2	0.87	1	04/12/24 09:46	04/12/24 14:16	103-65-1	
Styrene	<0.58	ug/kg	7.2	0.58	1	04/12/24 09:46	04/12/24 14:16	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD05/SD-1 Lab ID: 60450758003 Collected: 04/10/24 11:30 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<1.0	ug/kg	7.2	1.0	1	04/12/24 09:46	04/12/24 14:16	630-20-6	
1,1,2,2-Tetrachloroethane	<1.0	ug/kg	7.2	1.0	1	04/12/24 09:46	04/12/24 14:16	79-34-5	
Tetrachloroethene	<0.77	ug/kg	7.2	0.77	1	04/12/24 09:46	04/12/24 14:16	127-18-4	
Toluene	<6.4	ug/kg	28.8	6.4	1	04/12/24 09:46	04/12/24 14:16	108-88-3	
1,2,3-Trichlorobenzene	<0.84	ug/kg	7.2	0.84	1	04/12/24 09:46	04/12/24 14:16	87-61-6	
1,2,4-Trichlorobenzene	<0.70	ug/kg	7.2	0.70	1	04/12/24 09:46	04/12/24 14:16	120-82-1	
1,1,1-Trichloroethane	<1.5	ug/kg	7.2	1.5	1	04/12/24 09:46	04/12/24 14:16	71-55-6	
1,1,2-Trichloroethane	<1.0	ug/kg	7.2	1.0	1	04/12/24 09:46	04/12/24 14:16	79-00-5	
Trichloroethene	<2.7	ug/kg	7.2	2.7	1	04/12/24 09:46	04/12/24 14:16	79-01-6	
Trichlorofluoromethane	<13.8	ug/kg	18.7	13.8	1	04/12/24 09:46	04/12/24 14:16	75-69-4	
1,2,3-Trichloropropane	<2.2	ug/kg	7.2	2.2	1	04/12/24 09:46	04/12/24 14:16	96-18-4	
1,2,4-Trimethylbenzene	5.5J	ug/kg	7.2	0.99	1	04/12/24 09:46	04/12/24 14:16	95-63-6	
1,3,5-Trimethylbenzene	2.3J	ug/kg	7.2	0.62	1	04/12/24 09:46	04/12/24 14:16	108-67-8	
Vinyl chloride	<1.3	ug/kg	18.7	1.3	1	04/12/24 09:46	04/12/24 14:16	75-01-4	
Xylene (Total)	<5.3	ug/kg	21.6	5.3	1	04/12/24 09:46	04/12/24 14:16	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	112	%	80-120		1	04/12/24 09:46	04/12/24 14:16	2037-26-5	
4-Bromofluorobenzene (S)	103	%	83-119		1	04/12/24 09:46	04/12/24 14:16	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1	04/12/24 09:46	04/12/24 14:16	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.059	mg/kg	0.44	0.059	1	04/17/24 10:00	04/17/24 13:59		
<b>Surrogates</b>									
Toluene-d8 (S)	108	%	78-122		1	04/17/24 10:00	04/17/24 13:59	2037-26-5	
4-Bromofluorobenzene (S)	120	%	69-133		1	04/17/24 10:00	04/17/24 13:59	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1	04/17/24 10:00	04/17/24 13:59	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	24.4	%	0.50	0.50	1		04/12/24 13:40		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	77.4	%			1	04/13/24 13:02	04/13/24 13:14		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	<1.1	mg/kg	1.4	1.1	1	04/15/24 09:34	04/16/24 16:03	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.15	mg/kg	0.19	0.15	1	04/18/24 08:30	04/18/24 12:17	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD05/SD-1 Lab ID: 60450758003 Collected: 04/10/24 11:30 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<7.4	mg/kg	13.2	7.4	10	04/17/24 16:50	04/19/24 15:04	14797-55-8	
Nitrite as N	<6.9	mg/kg	13.2	6.9	10	04/17/24 16:50	04/19/24 15:04	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD04/SD-1 Lab ID: 60450758004 Collected: 04/10/24 13:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00485	mg/kg	0.0258	0.00485	1	04/17/24 06:14	04/17/24 13:49	309-00-2	
alpha-BHC	<0.00475	mg/kg	0.0258	0.00475	1	04/17/24 06:14	04/17/24 13:49	319-84-6	
beta-BHC	<0.00489	mg/kg	0.0258	0.00489	1	04/17/24 06:14	04/17/24 13:49	319-85-7	
delta-BHC	<0.00446	mg/kg	0.0258	0.00446	1	04/17/24 06:14	04/17/24 13:49	319-86-8	
gamma-BHC (Lindane)	<0.00444	mg/kg	0.0258	0.00444	1	04/17/24 06:14	04/17/24 13:49	58-89-9	
Chlordane (Technical)	<0.133	mg/kg	0.387	0.133	1	04/17/24 06:14	04/17/24 13:49	57-74-9	
4,4'-DDD	<0.00477	mg/kg	0.0258	0.00477	1	04/17/24 06:14	04/17/24 13:49	72-54-8	
4,4'-DDE	<0.00472	mg/kg	0.0258	0.00472	1	04/17/24 06:14	04/17/24 13:49	72-55-9	
4,4'-DDT	<0.00809	mg/kg	0.0258	0.00809	1	04/17/24 06:14	04/17/24 13:49	50-29-3	
Dieldrin	<0.00444	mg/kg	0.0258	0.00444	1	04/17/24 06:14	04/17/24 13:49	60-57-1	
Endosulfan I	<0.00468	mg/kg	0.0258	0.00468	1	04/17/24 06:14	04/17/24 13:49	959-98-8	
Endosulfan II	<0.00432	mg/kg	0.0258	0.00432	1	04/17/24 06:14	04/17/24 13:49	33213-65-9	
Endosulfan sulfate	<0.00470	mg/kg	0.0258	0.00470	1	04/17/24 06:14	04/17/24 13:49	1031-07-8	
Endrin	<0.00452	mg/kg	0.0258	0.00452	1	04/17/24 06:14	04/17/24 13:49	72-20-8	
Endrin aldehyde	<0.00437	mg/kg	0.0258	0.00437	1	04/17/24 06:14	04/17/24 13:49	7421-93-4	
Endrin ketone	<0.00917	mg/kg	0.0258	0.00917	1	04/17/24 06:14	04/17/24 13:49	53494-70-5	
Hexachlorobenzene	<0.00446	mg/kg	0.0258	0.00446	1	04/17/24 06:14	04/17/24 13:49	118-74-1	
Heptachlor	<0.00552	mg/kg	0.0258	0.00552	1	04/17/24 06:14	04/17/24 13:49	76-44-8	
Heptachlor epoxide	<0.00437	mg/kg	0.0258	0.00437	1	04/17/24 06:14	04/17/24 13:49	1024-57-3	
Methoxychlor	<0.00624	mg/kg	0.0258	0.00624	1	04/17/24 06:14	04/17/24 13:49	72-43-5	
Toxaphene	<0.160	mg/kg	0.516	0.160	1	04/17/24 06:14	04/17/24 13:49	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	63.1	%	10.0-135		1	04/17/24 06:14	04/17/24 13:49	2051-24-3	
Tetrachloro-m-xylene (S)	74.8	%	10.0-139		1	04/17/24 06:14	04/17/24 13:49	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00906	mg/kg	0.0903	0.00906	1	04/17/24 14:29	04/19/24 16:52	94-75-7	
Dalapon	<0.0146	mg/kg	0.0903	0.0146	1	04/17/24 14:29	04/19/24 16:52	127-20-8	
2,4-DB	<0.0383	mg/kg	0.0903	0.0383	1	04/17/24 14:29	04/19/24 16:52	94-82-6	
Dicamba	<0.0203	mg/kg	0.0903	0.0203	1	04/17/24 14:29	04/19/24 16:52	1918-00-9	
Dichlorprop	<0.0316	mg/kg	0.0903	0.0316	1	04/17/24 14:29	04/19/24 16:52	120-36-5	
Dinoseb	<0.00899	mg/kg	0.0903	0.00899	1	04/17/24 14:29	04/19/24 16:52	88-85-7	
MCPA	<0.572	mg/kg	8.39	0.572	1	04/17/24 14:29	04/19/24 16:52	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.473	mg/kg	8.39	0.473	1	04/17/24 14:29	04/19/24 16:52	93-65-2	
2,4,5-T	<0.0110	mg/kg	0.0903	0.0110	1	04/17/24 14:29	04/19/24 16:52	93-76-5	
2,4,5-TP (Silvex)	<0.0138	mg/kg	0.0903	0.0138	1	04/17/24 14:29	04/19/24 16:52	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	37.2	%	22.0-132		1	04/17/24 14:29	04/19/24 16:52	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.9	ug/kg	40.5	10.9	1	04/17/24 20:36	04/19/24 00:26	12674-11-2	
PCB-1221 (Aroclor 1221)	<13.6	ug/kg	40.5	13.6	1	04/17/24 20:36	04/19/24 00:26	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD04/SD-1 Lab ID: 60450758004 Collected: 04/10/24 13:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<13.6	ug/kg	40.5	13.6	1	04/17/24 20:36	04/19/24 00:26	11141-16-5	
PCB-1242 (Aroclor 1242)	<13.6	ug/kg	40.5	13.6	1	04/17/24 20:36	04/19/24 00:26	53469-21-9	
PCB-1248 (Aroclor 1248)	<13.6	ug/kg	40.5	13.6	1	04/17/24 20:36	04/19/24 00:26	12672-29-6	
PCB-1254 (Aroclor 1254)	<13.6	ug/kg	40.5	13.6	1	04/17/24 20:36	04/19/24 00:26	11097-69-1	
PCB-1260 (Aroclor 1260)	<13.6	ug/kg	40.5	13.6	1	04/17/24 20:36	04/19/24 00:26	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	87	%	20-120		1	04/17/24 20:36	04/19/24 00:26	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3051									
Pace National - Mt. Juliet									
Aluminum	1900	mg/kg	64.5	8.90	5	04/16/24 09:55	04/18/24 14:40	7429-90-5	
Antimony	0.395J	mg/kg	3.87	0.214	5	04/16/24 09:55	04/18/24 14:40	7440-36-0	B,J
Arsenic	5.46	mg/kg	1.29	0.129	5	04/16/24 09:55	04/18/24 14:40	7440-38-2	
Barium	33.6	mg/kg	3.23	0.196	5	04/16/24 09:55	04/18/24 14:40	7440-39-3	
Beryllium	0.279J	mg/kg	3.23	0.178	5	04/16/24 09:55	04/18/24 14:40	7440-41-7	J
Cadmium	0.134J	mg/kg	1.29	0.110	5	04/16/24 09:55	04/18/24 14:40	7440-43-9	J
Calcium	245000	mg/kg	645	97.4	5	04/16/24 09:55	04/18/24 14:40	7440-70-2	
Chromium	4.98J	mg/kg	6.45	0.382	5	04/16/24 09:55	04/18/24 14:40	7440-47-3	J
Cobalt	3.39	mg/kg	1.29	0.0596	5	04/16/24 09:55	04/18/24 14:40	7440-48-4	
Copper	5.92J	mg/kg	6.45	0.170	5	04/16/24 09:55	04/18/24 14:40	7440-50-8	J
Iron	9460	mg/kg	64.5	11.5	5	04/16/24 09:55	04/18/24 14:40	7439-89-6	
Lead	5.46	mg/kg	2.58	0.128	5	04/16/24 09:55	04/18/24 14:40	7439-92-1	
Magnesium	5760	mg/kg	645	59.2	5	04/16/24 09:55	04/18/24 14:40	7439-95-4	
Manganese	651	mg/kg	3.23	0.346	5	04/16/24 09:55	04/18/24 14:40	7439-96-5	
Molybdenum	0.644J	mg/kg	3.23	0.130	5	04/16/24 09:55	04/18/24 14:40	7439-98-7	J
Nickel	10.7	mg/kg	3.23	0.254	5	04/16/24 09:55	04/18/24 14:40	7440-02-0	
Potassium	578J	mg/kg	645	87.7	5	04/16/24 09:55	04/18/24 14:40	7440-09-7	J
Selenium	0.398J	mg/kg	3.23	0.232	5	04/16/24 09:55	04/18/24 14:40	7782-49-2	J
Silver	<0.112	mg/kg	0.645	0.112	5	04/16/24 09:55	04/18/24 14:40	7440-22-4	
Sodium	159J	mg/kg	645	98.7	5	04/16/24 09:55	04/18/24 14:40	7440-23-5	J
Thallium	0.135J	mg/kg	2.58	0.0839	5	04/16/24 09:55	04/18/24 14:40	7440-28-0	J
Vanadium	6.01	mg/kg	3.23	0.241	5	04/16/24 09:55	04/18/24 14:40	7440-62-2	
Zinc	24.8J	mg/kg	32.3	0.955	5	04/16/24 09:55	04/18/24 14:40	7440-66-6	J
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0232	mg/kg	0.0516	0.0232	1	04/14/24 16:42	04/15/24 13:18	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<86.9	ug/kg	405	86.9	1	04/17/24 09:39	04/22/24 04:36	83-32-9	
Acenaphthylene	<66.2	ug/kg	405	66.2	1	04/17/24 09:39	04/22/24 04:36	208-96-8	
Anthracene	<84.6	ug/kg	405	84.6	1	04/17/24 09:39	04/22/24 04:36	120-12-7	
Benzo(a)anthracene	<85.6	ug/kg	405	85.6	1	04/17/24 09:39	04/22/24 04:36	56-55-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD04/SD-1 Lab ID: 60450758004 Collected: 04/10/24 13:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<87.0	ug/kg	405	87.0	1	04/17/24 09:39	04/22/24 04:36	50-32-8	
Benzo(b)fluoranthene	<98.7	ug/kg	405	98.7	1	04/17/24 09:39	04/22/24 04:36	205-99-2	
Benzo(g,h,i)perylene	<70.3	ug/kg	405	70.3	1	04/17/24 09:39	04/22/24 04:36	191-24-2	
Benzo(k)fluoranthene	<87.0	ug/kg	405	87.0	1	04/17/24 09:39	04/22/24 04:36	207-08-9	
Benzoic Acid	<221	ug/kg	2050	221	1	04/17/24 09:39	04/22/24 04:36	65-85-0	
Benzyl alcohol	<74.3	ug/kg	809	74.3	1	04/17/24 09:39	04/22/24 04:36	100-51-6	
4-Bromophenylphenyl ether	<87.3	ug/kg	405	87.3	1	04/17/24 09:39	04/22/24 04:36	101-55-3	
Butylbenzylphthalate	<82.4	ug/kg	405	82.4	1	04/17/24 09:39	04/22/24 04:36	85-68-7	
Carbazole	<83.2	ug/kg	405	83.2	1	04/17/24 09:39	04/22/24 04:36	86-74-8	
4-Chloro-3-methylphenol	<84.8	ug/kg	809	84.8	1	04/17/24 09:39	04/22/24 04:36	59-50-7	
4-Chloroaniline	<63.4	ug/kg	809	63.4	1	04/17/24 09:39	04/22/24 04:36	106-47-8	
bis(2-Chloroethoxy)methane	<80.4	ug/kg	405	80.4	1	04/17/24 09:39	04/22/24 04:36	111-91-1	
bis(2-Chloroethyl) ether	<81.7	ug/kg	405	81.7	1	04/17/24 09:39	04/22/24 04:36	111-44-4	
bis(2-Chloroisopropyl) ether	<87.7	ug/kg	405	87.7	1	04/17/24 09:39	04/22/24 04:36	108-60-1	
2-Chloronaphthalene	<85.2	ug/kg	405	85.2	1	04/17/24 09:39	04/22/24 04:36	91-58-7	
2-Chlorophenol	<82.6	ug/kg	405	82.6	1	04/17/24 09:39	04/22/24 04:36	95-57-8	
4-Chlorophenylphenyl ether	<86.8	ug/kg	405	86.8	1	04/17/24 09:39	04/22/24 04:36	7005-72-3	
Chrysene	<90.1	ug/kg	405	90.1	1	04/17/24 09:39	04/22/24 04:36	218-01-9	
Dibenz(a,h)anthracene	<72.7	ug/kg	405	72.7	1	04/17/24 09:39	04/22/24 04:36	53-70-3	
Dibenzofuran	<86.4	ug/kg	405	86.4	1	04/17/24 09:39	04/22/24 04:36	132-64-9	
1,2-Dichlorobenzene	<80.5	ug/kg	405	80.5	1	04/17/24 09:39	04/22/24 04:36	95-50-1	
1,3-Dichlorobenzene	<79.1	ug/kg	405	79.1	1	04/17/24 09:39	04/22/24 04:36	541-73-1	
1,4-Dichlorobenzene	<78.0	ug/kg	405	78.0	1	04/17/24 09:39	04/22/24 04:36	106-46-7	
3,3'-Dichlorobenzidine	<39.7	ug/kg	809	39.7	1	04/17/24 09:39	04/22/24 04:36	91-94-1	
2,4-Dichlorophenol	<81.0	ug/kg	405	81.0	1	04/17/24 09:39	04/22/24 04:36	120-83-2	
Diethylphthalate	<92.4	ug/kg	405	92.4	1	04/17/24 09:39	04/22/24 04:36	84-66-2	
2,4-Dimethylphenol	<58.8	ug/kg	405	58.8	1	04/17/24 09:39	04/22/24 04:36	105-67-9	
Dimethylphthalate	<84.0	ug/kg	405	84.0	1	04/17/24 09:39	04/22/24 04:36	131-11-3	
Di-n-butylphthalate	<95.8	ug/kg	405	95.8	1	04/17/24 09:39	04/22/24 04:36	84-74-2	
4,6-Dinitro-2-methylphenol	<70.0	ug/kg	2050	70.0	1	04/17/24 09:39	04/22/24 04:36	534-52-1	
2,4-Dinitrophenol	<122	ug/kg	2050	122	1	04/17/24 09:39	04/22/24 04:36	51-28-5	
2,4-Dinitrotoluene	<91.1	ug/kg	405	91.1	1	04/17/24 09:39	04/22/24 04:36	121-14-2	
2,6-Dinitrotoluene	<78.8	ug/kg	405	78.8	1	04/17/24 09:39	04/22/24 04:36	606-20-2	
Di-n-octylphthalate	<98.4	ug/kg	405	98.4	1	04/17/24 09:39	04/22/24 04:36	117-84-0	
bis(2-Ethylhexyl)phthalate	<90.8	ug/kg	405	90.8	1	04/17/24 09:39	04/22/24 04:36	117-81-7	
Fluoranthene	<89.1	ug/kg	405	89.1	1	04/17/24 09:39	04/22/24 04:36	206-44-0	
Fluorene	<86.1	ug/kg	405	86.1	1	04/17/24 09:39	04/22/24 04:36	86-73-7	
Hexachloro-1,3-butadiene	<86.7	ug/kg	405	86.7	1	04/17/24 09:39	04/22/24 04:36	87-68-3	
Hexachlorobenzene	<84.6	ug/kg	405	84.6	1	04/17/24 09:39	04/22/24 04:36	118-74-1	
Hexachlorocyclopentadiene	<249	ug/kg	405	249	1	04/17/24 09:39	04/22/24 04:36	77-47-4	
Hexachloroethane	<74.2	ug/kg	405	74.2	1	04/17/24 09:39	04/22/24 04:36	67-72-1	
Indeno(1,2,3-cd)pyrene	<82.8	ug/kg	405	82.8	1	04/17/24 09:39	04/22/24 04:36	193-39-5	
Isophorone	<78.2	ug/kg	405	78.2	1	04/17/24 09:39	04/22/24 04:36	78-59-1	
2-Methylnaphthalene	<82.0	ug/kg	405	82.0	1	04/17/24 09:39	04/22/24 04:36	91-57-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD04/SD-1 Lab ID: 60450758004 Collected: 04/10/24 13:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<73.7	ug/kg	405	73.7	1	04/17/24 09:39	04/22/24 04:36	95-48-7	
3&4-Methylphenol(m&p Cresol)	<75.2	ug/kg	405	75.2	1	04/17/24 09:39	04/22/24 04:36	15831-10-4	
Naphthalene	<87.0	ug/kg	405	87.0	1	04/17/24 09:39	04/22/24 04:36	91-20-3	
2-Nitroaniline	<67.1	ug/kg	809	67.1	1	04/17/24 09:39	04/22/24 04:36	88-74-4	
3-Nitroaniline	<63.0	ug/kg	809	63.0	1	04/17/24 09:39	04/22/24 04:36	99-09-2	
4-Nitroaniline	<69.3	ug/kg	809	69.3	1	04/17/24 09:39	04/22/24 04:36	100-01-6	
Nitrobenzene	<85.7	ug/kg	405	85.7	1	04/17/24 09:39	04/22/24 04:36	98-95-3	
2-Nitrophenol	<63.3	ug/kg	405	63.3	1	04/17/24 09:39	04/22/24 04:36	88-75-5	
4-Nitrophenol	<59.6	ug/kg	2050	59.6	1	04/17/24 09:39	04/22/24 04:36	100-02-7	
N-Nitroso-di-n-propylamine	<77.1	ug/kg	405	77.1	1	04/17/24 09:39	04/22/24 04:36	621-64-7	
N-Nitrosodiphenylamine	<80.4	ug/kg	405	80.4	1	04/17/24 09:39	04/22/24 04:36	86-30-6	
Pentachlorophenol	<134	ug/kg	2050	134	1	04/17/24 09:39	04/22/24 04:36	87-86-5	
Phenanthrene	<86.4	ug/kg	405	86.4	1	04/17/24 09:39	04/22/24 04:36	85-01-8	
Phenol	<76.1	ug/kg	405	76.1	1	04/17/24 09:39	04/22/24 04:36	108-95-2	
Pyrene	<86.3	ug/kg	405	86.3	1	04/17/24 09:39	04/22/24 04:36	129-00-0	
Pyridine	<60.0	ug/kg	405	60.0	1	04/17/24 09:39	04/22/24 04:36	110-86-1	
1,2,4-Trichlorobenzene	<84.7	ug/kg	405	84.7	1	04/17/24 09:39	04/22/24 04:36	120-82-1	
2,4,5-Trichlorophenol	<82.9	ug/kg	405	82.9	1	04/17/24 09:39	04/22/24 04:36	95-95-4	
2,4,6-Trichlorophenol	<74.8	ug/kg	405	74.8	1	04/17/24 09:39	04/22/24 04:36	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	83	%	30-120		1	04/17/24 09:39	04/22/24 04:36	4165-60-0	
2-Fluorobiphenyl (S)	73	%	40-120		1	04/17/24 09:39	04/22/24 04:36	321-60-8	
Terphenyl-d14 (S)	75	%	45-120		1	04/17/24 09:39	04/22/24 04:36	1718-51-0	
Phenol-d6 (S)	82	%	40-120		1	04/17/24 09:39	04/22/24 04:36	13127-88-3	
2-Fluorophenol (S)	81	%	40-120		1	04/17/24 09:39	04/22/24 04:36	367-12-4	
2,4,6-Tribromophenol (S)	82	%	35-120		1	04/17/24 09:39	04/22/24 04:36	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	69.1	mg/kg	18.2	6.2	1	04/11/24 16:15	04/15/24 13:55		
TPH-DRO	39.4	mg/kg	18.2	6.2	1	04/11/24 16:15	04/15/24 13:55		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	81	%	35-120		1	04/11/24 16:15	04/15/24 13:55	4165-60-0	
2-Fluorobiphenyl (S)	82	%	50-120		1	04/11/24 16:15	04/15/24 13:55	321-60-8	
Terphenyl-d14 (S)	78	%	45-120		1	04/11/24 16:15	04/15/24 13:55	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<133	ug/kg	139	133	1	04/12/24 09:46	04/12/24 14:35	67-64-1	
Benzene	<1.0	ug/kg	11.1	1.0	1	04/12/24 09:46	04/12/24 14:35	71-43-2	
Bromobenzene	<1.4	ug/kg	11.1	1.4	1	04/12/24 09:46	04/12/24 14:35	108-86-1	
Bromochloromethane	<1.6	ug/kg	11.1	1.6	1	04/12/24 09:46	04/12/24 14:35	74-97-5	
Bromodichloromethane	<1.9	ug/kg	28.8	1.9	1	04/12/24 09:46	04/12/24 14:35	75-27-4	
Bromoform	<0.86	ug/kg	28.8	0.86	1	04/12/24 09:46	04/12/24 14:35	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD04/SD-1 Lab ID: 60450758004 Collected: 04/10/24 13:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Bromomethane	<13.7	ug/kg	28.8	13.7	1	04/12/24 09:46	04/12/24 14:35	74-83-9	
2-Butanone (MEK)	<70.6	ug/kg	139	70.6	1	04/12/24 09:46	04/12/24 14:35	78-93-3	
n-Butylbenzene	<1.1	ug/kg	11.1	1.1	1	04/12/24 09:46	04/12/24 14:35	104-51-8	
sec-Butylbenzene	<1.1	ug/kg	11.1	1.1	1	04/12/24 09:46	04/12/24 14:35	135-98-8	
tert-Butylbenzene	<0.72	ug/kg	11.1	0.72	1	04/12/24 09:46	04/12/24 14:35	98-06-6	
Carbon disulfide	<5.1	ug/kg	11.1	5.1	1	04/12/24 09:46	04/12/24 14:35	75-15-0	
Carbon tetrachloride	<3.7	ug/kg	11.1	3.7	1	04/12/24 09:46	04/12/24 14:35	56-23-5	
Chlorobenzene	<0.65	ug/kg	11.1	0.65	1	04/12/24 09:46	04/12/24 14:35	108-90-7	
Chloroethane	<18.4	ug/kg	55.4	18.4	1	04/12/24 09:46	04/12/24 14:35	75-00-3	
Chloroform	<4.1	ug/kg	11.1	4.1	1	04/12/24 09:46	04/12/24 14:35	67-66-3	
Chloromethane	<2.7	ug/kg	28.8	2.7	1	04/12/24 09:46	04/12/24 14:35	74-87-3	
2-Chlorotoluene	<1.5	ug/kg	11.1	1.5	1	04/12/24 09:46	04/12/24 14:35	95-49-8	
4-Chlorotoluene	<0.87	ug/kg	11.1	0.87	1	04/12/24 09:46	04/12/24 14:35	106-43-4	
1,2-Dibromo-3-chloropropane	<7.4	ug/kg	28.8	7.4	1	04/12/24 09:46	04/12/24 14:35	96-12-8	
Dibromochloromethane	<0.67	ug/kg	11.1	0.67	1	04/12/24 09:46	04/12/24 14:35	124-48-1	
1,2-Dibromoethane (EDB)	<1.2	ug/kg	11.1	1.2	1	04/12/24 09:46	04/12/24 14:35	106-93-4	
Dibromomethane	<3.3	ug/kg	11.1	3.3	1	04/12/24 09:46	04/12/24 14:35	74-95-3	
1,2-Dichlorobenzene	<1.9	ug/kg	11.1	1.9	1	04/12/24 09:46	04/12/24 14:35	95-50-1	
1,3-Dichlorobenzene	<1.4	ug/kg	11.1	1.4	1	04/12/24 09:46	04/12/24 14:35	541-73-1	
1,4-Dichlorobenzene	<1.9	ug/kg	11.1	1.9	1	04/12/24 09:46	04/12/24 14:35	106-46-7	
Dichlorodifluoromethane	<2.1	ug/kg	28.8	2.1	1	04/12/24 09:46	04/12/24 14:35	75-71-8	
1,1-Dichloroethane	<2.5	ug/kg	11.1	2.5	1	04/12/24 09:46	04/12/24 14:35	75-34-3	
1,2-Dichloroethane	<2.1	ug/kg	11.1	2.1	1	04/12/24 09:46	04/12/24 14:35	107-06-2	
1,2-Dichloroethene (Total)	<4.2	ug/kg	22.1	4.2	1	04/12/24 09:46	04/12/24 14:35	540-59-0	
1,1-Dichloroethene	<4.5	ug/kg	11.1	4.5	1	04/12/24 09:46	04/12/24 14:35	75-35-4	
cis-1,2-Dichloroethene	<2.1	ug/kg	11.1	2.1	1	04/12/24 09:46	04/12/24 14:35	156-59-2	
trans-1,2-Dichloroethene	<2.5	ug/kg	11.1	2.5	1	04/12/24 09:46	04/12/24 14:35	156-60-5	
1,2-Dichloropropane	<2.3	ug/kg	11.1	2.3	1	04/12/24 09:46	04/12/24 14:35	78-87-5	
1,3-Dichloropropane	<0.43	ug/kg	11.1	0.43	1	04/12/24 09:46	04/12/24 14:35	142-28-9	
2,2-Dichloropropane	<3.3	ug/kg	11.1	3.3	1	04/12/24 09:46	04/12/24 14:35	594-20-7	
1,1-Dichloropropene	<2.4	ug/kg	11.1	2.4	1	04/12/24 09:46	04/12/24 14:35	563-58-6	
cis-1,3-Dichloropropene	<1.7	ug/kg	11.1	1.7	1	04/12/24 09:46	04/12/24 14:35	10061-01-5	
trans-1,3-Dichloropropene	<1.3	ug/kg	11.1	1.3	1	04/12/24 09:46	04/12/24 14:35	10061-02-6	
Ethylbenzene	<1.9	ug/kg	11.1	1.9	1	04/12/24 09:46	04/12/24 14:35	100-41-4	
Hexachloro-1,3-butadiene	<2.0	ug/kg	11.1	2.0	1	04/12/24 09:46	04/12/24 14:35	87-68-3	
2-Hexanone	<23.0	ug/kg	139	23.0	1	04/12/24 09:46	04/12/24 14:35	591-78-6	
Isopropylbenzene (Cumene)	<0.70	ug/kg	11.1	0.70	1	04/12/24 09:46	04/12/24 14:35	98-82-8	
p-Isopropyltoluene	<0.96	ug/kg	11.1	0.96	1	04/12/24 09:46	04/12/24 14:35	99-87-6	
Methylene Chloride	<43.0	ug/kg	55.4	43.0	1	04/12/24 09:46	04/12/24 14:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	<15.5	ug/kg	139	15.5	1	04/12/24 09:46	04/12/24 14:35	108-10-1	
Methyl-tert-butyl ether	<2.1	ug/kg	11.1	2.1	1	04/12/24 09:46	04/12/24 14:35	1634-04-4	
Naphthalene	<1.6	ug/kg	22.1	1.6	1	04/12/24 09:46	04/12/24 14:35	91-20-3	
n-Propylbenzene	<1.3	ug/kg	11.1	1.3	1	04/12/24 09:46	04/12/24 14:35	103-65-1	
Styrene	<0.89	ug/kg	11.1	0.89	1	04/12/24 09:46	04/12/24 14:35	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD04/SD-1 Lab ID: 60450758004 Collected: 04/10/24 13:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
1,1,1,2-Tetrachloroethane	<1.6	ug/kg	11.1	1.6	1	04/12/24 09:46	04/12/24 14:35	630-20-6	
1,1,2,2-Tetrachloroethane	<1.6	ug/kg	11.1	1.6	1	04/12/24 09:46	04/12/24 14:35	79-34-5	
Tetrachloroethene	<1.2	ug/kg	11.1	1.2	1	04/12/24 09:46	04/12/24 14:35	127-18-4	
Toluene	<9.9	ug/kg	44.3	9.9	1	04/12/24 09:46	04/12/24 14:35	108-88-3	
1,2,3-Trichlorobenzene	<1.3	ug/kg	11.1	1.3	1	04/12/24 09:46	04/12/24 14:35	87-61-6	
1,2,4-Trichlorobenzene	<1.1	ug/kg	11.1	1.1	1	04/12/24 09:46	04/12/24 14:35	120-82-1	
1,1,1-Trichloroethane	<2.3	ug/kg	11.1	2.3	1	04/12/24 09:46	04/12/24 14:35	71-55-6	
1,1,2-Trichloroethane	<1.6	ug/kg	11.1	1.6	1	04/12/24 09:46	04/12/24 14:35	79-00-5	
Trichloroethene	<4.2	ug/kg	11.1	4.2	1	04/12/24 09:46	04/12/24 14:35	79-01-6	
Trichlorofluoromethane	<21.3	ug/kg	28.8	21.3	1	04/12/24 09:46	04/12/24 14:35	75-69-4	
1,2,3-Trichloropropane	<3.4	ug/kg	11.1	3.4	1	04/12/24 09:46	04/12/24 14:35	96-18-4	
1,2,4-Trimethylbenzene	<1.5	ug/kg	11.1	1.5	1	04/12/24 09:46	04/12/24 14:35	95-63-6	
1,3,5-Trimethylbenzene	<0.96	ug/kg	11.1	0.96	1	04/12/24 09:46	04/12/24 14:35	108-67-8	
Vinyl chloride	<2.1	ug/kg	28.8	2.1	1	04/12/24 09:46	04/12/24 14:35	75-01-4	
Xylene (Total)	<8.1	ug/kg	33.2	8.1	1	04/12/24 09:46	04/12/24 14:35	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	107	%	80-120		1	04/12/24 09:46	04/12/24 14:35	2037-26-5	
4-Bromofluorobenzene (S)	100	%	83-119		1	04/12/24 09:46	04/12/24 14:35	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/12/24 09:46	04/12/24 14:35	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City							
TPH-GRO	<0.069	mg/kg	0.51	0.069	1	04/16/24 17:07	04/16/24 21:53		
<b>Surrogates</b>									
Toluene-d8 (S)	101	%	78-122		1	04/16/24 17:07	04/16/24 21:53	2037-26-5	
4-Bromofluorobenzene (S)	103	%	69-133		1	04/16/24 17:07	04/16/24 21:53	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/16/24 17:07	04/16/24 21:53	2199-69-1	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	19.0	%	0.50	0.50	1		04/12/24 13:41		
<b>Total Solids 2540 G-2011</b>		Analytical Method: SM 2540G Preparation Method: SM 2540 G Pace National - Mt. Juliet							
Total Solids	77.5	%			1	04/13/24 13:02	04/13/24 13:14		
<b>350.1 Ammonia</b>		Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Kansas City							
Nitrogen, Ammonia	1.6	mg/kg	1.3	0.99	1	04/15/24 09:34	04/16/24 16:07	7664-41-7	
<b>4500CNE Cyanide, Total</b>		Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City							
Cyanide	<0.14	mg/kg	0.17	0.14	1	04/18/24 08:30	04/18/24 12:18	57-12-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD04/SD-1 Lab ID: 60450758004 Collected: 04/10/24 13:10 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<6.9	mg/kg	12.3	6.9	10	04/17/24 16:50	04/19/24 15:19	14797-55-8	
Nitrite as N	<6.4	mg/kg	12.3	6.4	10	04/17/24 16:50	04/19/24 15:19	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD03/SD-1 Lab ID: 60450758005 Collected: 04/10/24 14:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00451	mg/kg	0.0240	0.00451	1	04/17/24 06:14	04/17/24 13:59	309-00-2	
alpha-BHC	<0.00441	mg/kg	0.0240	0.00441	1	04/17/24 06:14	04/17/24 13:59	319-84-6	
beta-BHC	<0.00454	mg/kg	0.0240	0.00454	1	04/17/24 06:14	04/17/24 13:59	319-85-7	
delta-BHC	<0.00415	mg/kg	0.0240	0.00415	1	04/17/24 06:14	04/17/24 13:59	319-86-8	
gamma-BHC (Lindane)	<0.00412	mg/kg	0.0240	0.00412	1	04/17/24 06:14	04/17/24 13:59	58-89-9	
Chlordane (Technical)	<0.123	mg/kg	0.360	0.123	1	04/17/24 06:14	04/17/24 13:59	57-74-9	
4,4'-DDD	<0.00444	mg/kg	0.0240	0.00444	1	04/17/24 06:14	04/17/24 13:59	72-54-8	
4,4'-DDE	<0.00439	mg/kg	0.0240	0.00439	1	04/17/24 06:14	04/17/24 13:59	72-55-9	
4,4'-DDT	<0.00752	mg/kg	0.0240	0.00752	1	04/17/24 06:14	04/17/24 13:59	50-29-3	
Dieldrin	<0.00412	mg/kg	0.0240	0.00412	1	04/17/24 06:14	04/17/24 13:59	60-57-1	
Endosulfan I	<0.00435	mg/kg	0.0240	0.00435	1	04/17/24 06:14	04/17/24 13:59	959-98-8	
Endosulfan II	<0.00402	mg/kg	0.0240	0.00402	1	04/17/24 06:14	04/17/24 13:59	33213-65-9	
Endosulfan sulfate	<0.00436	mg/kg	0.0240	0.00436	1	04/17/24 06:14	04/17/24 13:59	1031-07-8	
Endrin	<0.00420	mg/kg	0.0240	0.00420	1	04/17/24 06:14	04/17/24 13:59	72-20-8	
Endrin aldehyde	<0.00406	mg/kg	0.0240	0.00406	1	04/17/24 06:14	04/17/24 13:59	7421-93-4	
Endrin ketone	<0.00852	mg/kg	0.0240	0.00852	1	04/17/24 06:14	04/17/24 13:59	53494-70-5	
Hexachlorobenzene	<0.00415	mg/kg	0.0240	0.00415	1	04/17/24 06:14	04/17/24 13:59	118-74-1	
Heptachlor	<0.00513	mg/kg	0.0240	0.00513	1	04/17/24 06:14	04/17/24 13:59	76-44-8	
Heptachlor epoxide	<0.00406	mg/kg	0.0240	0.00406	1	04/17/24 06:14	04/17/24 13:59	1024-57-3	
Methoxychlor	<0.00580	mg/kg	0.0240	0.00580	1	04/17/24 06:14	04/17/24 13:59	72-43-5	
Toxaphene	<0.149	mg/kg	0.480	0.149	1	04/17/24 06:14	04/17/24 13:59	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	68.6	%	10.0-135		1	04/17/24 06:14	04/17/24 13:59	2051-24-3	
Tetrachloro-m-xylene (S)	76.5	%	10.0-139		1	04/17/24 06:14	04/17/24 13:59	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00842	mg/kg	0.0839	0.00842	1	04/17/24 14:29	04/19/24 17:32	94-75-7	
Dalapon	<0.0135	mg/kg	0.0839	0.0135	1	04/17/24 14:29	04/19/24 17:32	127-20-8	
2,4-DB	<0.0356	mg/kg	0.0839	0.0356	1	04/17/24 14:29	04/19/24 17:32	94-82-6	
Dicamba	<0.0188	mg/kg	0.0839	0.0188	1	04/17/24 14:29	04/19/24 17:32	1918-00-9	
Dichlorprop	<0.0294	mg/kg	0.0839	0.0294	1	04/17/24 14:29	04/19/24 17:32	120-36-5	
Dinoseb	<0.00836	mg/kg	0.0839	0.00836	1	04/17/24 14:29	04/19/24 17:32	88-85-7	
MCPA	<0.531	mg/kg	7.79	0.531	1	04/17/24 14:29	04/19/24 17:32	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.440	mg/kg	7.79	0.440	1	04/17/24 14:29	04/19/24 17:32	93-65-2	
2,4,5-T	<0.0102	mg/kg	0.0839	0.0102	1	04/17/24 14:29	04/19/24 17:32	93-76-5	
2,4,5-TP (Silvex)	<0.0128	mg/kg	0.0839	0.0128	1	04/17/24 14:29	04/19/24 17:32	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	48.8	%	22.0-132		1	04/17/24 14:29	04/19/24 17:32	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<11.7	ug/kg	43.4	11.7	1	04/17/24 20:36	04/19/24 00:41	12674-11-2	
PCB-1221 (Aroclor 1221)	<14.6	ug/kg	43.4	14.6	1	04/17/24 20:36	04/19/24 00:41	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD03/SD-1 Lab ID: 60450758005 Collected: 04/10/24 14:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<14.6	ug/kg	43.4	14.6	1	04/17/24 20:36	04/19/24 00:41	11141-16-5	
PCB-1242 (Aroclor 1242)	<14.6	ug/kg	43.4	14.6	1	04/17/24 20:36	04/19/24 00:41	53469-21-9	
PCB-1248 (Aroclor 1248)	<14.6	ug/kg	43.4	14.6	1	04/17/24 20:36	04/19/24 00:41	12672-29-6	
PCB-1254 (Aroclor 1254)	<14.6	ug/kg	43.4	14.6	1	04/17/24 20:36	04/19/24 00:41	11097-69-1	
PCB-1260 (Aroclor 1260)	<14.6	ug/kg	43.4	14.6	1	04/17/24 20:36	04/19/24 00:41	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	92	%	20-120		1	04/17/24 20:36	04/19/24 00:41	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3051									
Pace National - Mt. Juliet									
Aluminum	1780	mg/kg	59.9	8.27	5	04/16/24 09:55	04/18/24 14:43	7429-90-5	
Antimony	0.290J	mg/kg	3.60	0.199	5	04/16/24 09:55	04/18/24 14:43	7440-36-0	B,J
Arsenic	4.54	mg/kg	1.20	0.120	5	04/16/24 09:55	04/18/24 14:43	7440-38-2	
Barium	24.5	mg/kg	3.00	0.182	5	04/16/24 09:55	04/18/24 14:43	7440-39-3	
Beryllium	0.216J	mg/kg	3.00	0.165	5	04/16/24 09:55	04/18/24 14:43	7440-41-7	J
Cadmium	0.140J	mg/kg	1.20	0.103	5	04/16/24 09:55	04/18/24 14:43	7440-43-9	J
Calcium	264000	mg/kg	599	90.5	5	04/16/24 09:55	04/18/24 14:43	7440-70-2	
Chromium	4.25J	mg/kg	5.99	0.355	5	04/16/24 09:55	04/18/24 14:43	7440-47-3	J
Cobalt	2.60	mg/kg	1.20	0.0554	5	04/16/24 09:55	04/18/24 14:43	7440-48-4	
Copper	4.82J	mg/kg	5.99	0.158	5	04/16/24 09:55	04/18/24 14:43	7440-50-8	J
Iron	8190	mg/kg	59.9	10.7	5	04/16/24 09:55	04/18/24 14:43	7439-89-6	
Lead	4.54	mg/kg	2.40	0.119	5	04/16/24 09:55	04/18/24 14:43	7439-92-1	
Magnesium	6090	mg/kg	599	55.0	5	04/16/24 09:55	04/18/24 14:43	7439-95-4	
Manganese	691	mg/kg	3.00	0.321	5	04/16/24 09:55	04/18/24 14:43	7439-96-5	
Molybdenum	0.518J	mg/kg	3.00	0.121	5	04/16/24 09:55	04/18/24 14:43	7439-98-7	J
Nickel	8.91	mg/kg	3.00	0.236	5	04/16/24 09:55	04/18/24 14:43	7440-02-0	
Potassium	589J	mg/kg	599	81.5	5	04/16/24 09:55	04/18/24 14:43	7440-09-7	J
Selenium	0.325J	mg/kg	3.00	0.216	5	04/16/24 09:55	04/18/24 14:43	7782-49-2	J
Silver	<0.104	mg/kg	0.599	0.104	5	04/16/24 09:55	04/18/24 14:43	7440-22-4	
Sodium	184J	mg/kg	599	91.7	5	04/16/24 09:55	04/18/24 14:43	7440-23-5	J
Thallium	<0.0779	mg/kg	2.40	0.0779	5	04/16/24 09:55	04/18/24 14:43	7440-28-0	
Vanadium	5.30	mg/kg	3.00	0.224	5	04/16/24 09:55	04/18/24 14:43	7440-62-2	
Zinc	17.6J	mg/kg	30.0	0.887	5	04/16/24 09:55	04/18/24 14:43	7440-66-6	J
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0216	mg/kg	0.0480	0.0216	1	04/14/24 16:42	04/15/24 13:20	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<94.0	ug/kg	438	94.0	1	04/17/24 09:39	04/22/24 04:57	83-32-9	
Acenaphthylene	<71.6	ug/kg	438	71.6	1	04/17/24 09:39	04/22/24 04:57	208-96-8	
Anthracene	<91.5	ug/kg	438	91.5	1	04/17/24 09:39	04/22/24 04:57	120-12-7	
Benzo(a)anthracene	<92.5	ug/kg	438	92.5	1	04/17/24 09:39	04/22/24 04:57	56-55-3	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD03/SD-1 Lab ID: 60450758005 Collected: 04/10/24 14:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>		Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Benzo(a)pyrene	<94.1	ug/kg	438	94.1	1	04/17/24 09:39	04/22/24 04:57	50-32-8	
Benzo(b)fluoranthene	<107	ug/kg	438	107	1	04/17/24 09:39	04/22/24 04:57	205-99-2	
Benzo(g,h,i)perylene	<76.0	ug/kg	438	76.0	1	04/17/24 09:39	04/22/24 04:57	191-24-2	
Benzo(k)fluoranthene	<94.1	ug/kg	438	94.1	1	04/17/24 09:39	04/22/24 04:57	207-08-9	
Benzoic Acid	<239	ug/kg	2210	239	1	04/17/24 09:39	04/22/24 04:57	65-85-0	
Benzyl alcohol	<80.3	ug/kg	875	80.3	1	04/17/24 09:39	04/22/24 04:57	100-51-6	
4-Bromophenylphenyl ether	<94.4	ug/kg	438	94.4	1	04/17/24 09:39	04/22/24 04:57	101-55-3	
Butylbenzylphthalate	<89.1	ug/kg	438	89.1	1	04/17/24 09:39	04/22/24 04:57	85-68-7	
Carbazole	<90.0	ug/kg	438	90.0	1	04/17/24 09:39	04/22/24 04:57	86-74-8	
4-Chloro-3-methylphenol	<91.8	ug/kg	875	91.8	1	04/17/24 09:39	04/22/24 04:57	59-50-7	
4-Chloroaniline	<68.5	ug/kg	875	68.5	1	04/17/24 09:39	04/22/24 04:57	106-47-8	
bis(2-Chloroethoxy)methane	<87.0	ug/kg	438	87.0	1	04/17/24 09:39	04/22/24 04:57	111-91-1	
bis(2-Chloroethyl) ether	<88.3	ug/kg	438	88.3	1	04/17/24 09:39	04/22/24 04:57	111-44-4	
bis(2-Chloroisopropyl) ether	<94.8	ug/kg	438	94.8	1	04/17/24 09:39	04/22/24 04:57	108-60-1	
2-Chloronaphthalene	<92.1	ug/kg	438	92.1	1	04/17/24 09:39	04/22/24 04:57	91-58-7	
2-Chlorophenol	<89.4	ug/kg	438	89.4	1	04/17/24 09:39	04/22/24 04:57	95-57-8	
4-Chlorophenylphenyl ether	<93.9	ug/kg	438	93.9	1	04/17/24 09:39	04/22/24 04:57	7005-72-3	
Chrysene	<97.5	ug/kg	438	97.5	1	04/17/24 09:39	04/22/24 04:57	218-01-9	
Dibenz(a,h)anthracene	<78.6	ug/kg	438	78.6	1	04/17/24 09:39	04/22/24 04:57	53-70-3	
Dibenzofuran	<93.5	ug/kg	438	93.5	1	04/17/24 09:39	04/22/24 04:57	132-64-9	
1,2-Dichlorobenzene	<87.1	ug/kg	438	87.1	1	04/17/24 09:39	04/22/24 04:57	95-50-1	
1,3-Dichlorobenzene	<85.5	ug/kg	438	85.5	1	04/17/24 09:39	04/22/24 04:57	541-73-1	
1,4-Dichlorobenzene	<84.3	ug/kg	438	84.3	1	04/17/24 09:39	04/22/24 04:57	106-46-7	
3,3'-Dichlorobenzidine	<43.0	ug/kg	875	43.0	1	04/17/24 09:39	04/22/24 04:57	91-94-1	
2,4-Dichlorophenol	<87.6	ug/kg	438	87.6	1	04/17/24 09:39	04/22/24 04:57	120-83-2	
Diethylphthalate	<100	ug/kg	438	100	1	04/17/24 09:39	04/22/24 04:57	84-66-2	
2,4-Dimethylphenol	<63.6	ug/kg	438	63.6	1	04/17/24 09:39	04/22/24 04:57	105-67-9	
Dimethylphthalate	<90.8	ug/kg	438	90.8	1	04/17/24 09:39	04/22/24 04:57	131-11-3	
Di-n-butylphthalate	<104	ug/kg	438	104	1	04/17/24 09:39	04/22/24 04:57	84-74-2	
4,6-Dinitro-2-methylphenol	<75.7	ug/kg	2210	75.7	1	04/17/24 09:39	04/22/24 04:57	534-52-1	
2,4-Dinitrophenol	<132	ug/kg	2210	132	1	04/17/24 09:39	04/22/24 04:57	51-28-5	
2,4-Dinitrotoluene	<98.5	ug/kg	438	98.5	1	04/17/24 09:39	04/22/24 04:57	121-14-2	
2,6-Dinitrotoluene	<85.3	ug/kg	438	85.3	1	04/17/24 09:39	04/22/24 04:57	606-20-2	
Di-n-octylphthalate	<106	ug/kg	438	106	1	04/17/24 09:39	04/22/24 04:57	117-84-0	
bis(2-Ethylhexyl)phthalate	<98.2	ug/kg	438	98.2	1	04/17/24 09:39	04/22/24 04:57	117-81-7	
Fluoranthene	<96.4	ug/kg	438	96.4	1	04/17/24 09:39	04/22/24 04:57	206-44-0	
Fluorene	<93.1	ug/kg	438	93.1	1	04/17/24 09:39	04/22/24 04:57	86-73-7	
Hexachloro-1,3-butadiene	<93.7	ug/kg	438	93.7	1	04/17/24 09:39	04/22/24 04:57	87-68-3	
Hexachlorobenzene	<91.5	ug/kg	438	91.5	1	04/17/24 09:39	04/22/24 04:57	118-74-1	
Hexachlorocyclopentadiene	<269	ug/kg	438	269	1	04/17/24 09:39	04/22/24 04:57	77-47-4	
Hexachloroethane	<80.2	ug/kg	438	80.2	1	04/17/24 09:39	04/22/24 04:57	67-72-1	
Indeno(1,2,3-cd)pyrene	<89.5	ug/kg	438	89.5	1	04/17/24 09:39	04/22/24 04:57	193-39-5	
Isophorone	<84.6	ug/kg	438	84.6	1	04/17/24 09:39	04/22/24 04:57	78-59-1	
2-Methylnaphthalene	<88.7	ug/kg	438	88.7	1	04/17/24 09:39	04/22/24 04:57	91-57-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD03/SD-1 Lab ID: 60450758005 Collected: 04/10/24 14:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<79.7	ug/kg	438	79.7	1	04/17/24 09:39	04/22/24 04:57	95-48-7	
3&4-Methylphenol(m&p Cresol)	<81.3	ug/kg	438	81.3	1	04/17/24 09:39	04/22/24 04:57	15831-10-4	
Naphthalene	<94.1	ug/kg	438	94.1	1	04/17/24 09:39	04/22/24 04:57	91-20-3	
2-Nitroaniline	<72.5	ug/kg	875	72.5	1	04/17/24 09:39	04/22/24 04:57	88-74-4	
3-Nitroaniline	<68.2	ug/kg	875	68.2	1	04/17/24 09:39	04/22/24 04:57	99-09-2	
4-Nitroaniline	<74.9	ug/kg	875	74.9	1	04/17/24 09:39	04/22/24 04:57	100-01-6	
Nitrobenzene	<92.7	ug/kg	438	92.7	1	04/17/24 09:39	04/22/24 04:57	98-95-3	
2-Nitrophenol	<68.4	ug/kg	438	68.4	1	04/17/24 09:39	04/22/24 04:57	88-75-5	
4-Nitrophenol	<64.4	ug/kg	2210	64.4	1	04/17/24 09:39	04/22/24 04:57	100-02-7	
N-Nitroso-di-n-propylamine	<83.4	ug/kg	438	83.4	1	04/17/24 09:39	04/22/24 04:57	621-64-7	
N-Nitrosodiphenylamine	<87.0	ug/kg	438	87.0	1	04/17/24 09:39	04/22/24 04:57	86-30-6	
Pentachlorophenol	<145	ug/kg	2210	145	1	04/17/24 09:39	04/22/24 04:57	87-86-5	
Phenanthrene	<93.5	ug/kg	438	93.5	1	04/17/24 09:39	04/22/24 04:57	85-01-8	
Phenol	<82.3	ug/kg	438	82.3	1	04/17/24 09:39	04/22/24 04:57	108-95-2	
Pyrene	<93.3	ug/kg	438	93.3	1	04/17/24 09:39	04/22/24 04:57	129-00-0	
Pyridine	<64.8	ug/kg	438	64.8	1	04/17/24 09:39	04/22/24 04:57	110-86-1	
1,2,4-Trichlorobenzene	<91.6	ug/kg	438	91.6	1	04/17/24 09:39	04/22/24 04:57	120-82-1	
2,4,5-Trichlorophenol	<89.6	ug/kg	438	89.6	1	04/17/24 09:39	04/22/24 04:57	95-95-4	
2,4,6-Trichlorophenol	<80.9	ug/kg	438	80.9	1	04/17/24 09:39	04/22/24 04:57	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	86	%	30-120		1	04/17/24 09:39	04/22/24 04:57	4165-60-0	
2-Fluorobiphenyl (S)	75	%	40-120		1	04/17/24 09:39	04/22/24 04:57	321-60-8	
Terphenyl-d14 (S)	78	%	45-120		1	04/17/24 09:39	04/22/24 04:57	1718-51-0	
Phenol-d6 (S)	85	%	40-120		1	04/17/24 09:39	04/22/24 04:57	13127-88-3	
2-Fluorophenol (S)	84	%	40-120		1	04/17/24 09:39	04/22/24 04:57	367-12-4	
2,4,6-Tribromophenol (S)	85	%	35-120		1	04/17/24 09:39	04/22/24 04:57	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	8.5J	mg/kg	19.7	6.7	1	04/11/24 16:15	04/16/24 17:44		
TPH-DRO	<6.7	mg/kg	19.7	6.7	1	04/11/24 16:15	04/16/24 17:44		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	83	%	35-120		1	04/11/24 16:15	04/16/24 17:44	4165-60-0	
2-Fluorobiphenyl (S)	86	%	50-120		1	04/11/24 16:15	04/16/24 17:44	321-60-8	
Terphenyl-d14 (S)	84	%	45-120		1	04/11/24 16:15	04/16/24 17:44	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<95.2	ug/kg	99.8	95.2	1	04/12/24 09:46	04/12/24 14:56	67-64-1	
Benzene	<0.72	ug/kg	7.9	0.72	1	04/12/24 09:46	04/12/24 14:56	71-43-2	
Bromobenzene	<0.98	ug/kg	7.9	0.98	1	04/12/24 09:46	04/12/24 14:56	108-86-1	
Bromochloromethane	<1.2	ug/kg	7.9	1.2	1	04/12/24 09:46	04/12/24 14:56	74-97-5	
Bromodichloromethane	<1.3	ug/kg	20.6	1.3	1	04/12/24 09:46	04/12/24 14:56	75-27-4	
Bromoform	<0.61	ug/kg	20.6	0.61	1	04/12/24 09:46	04/12/24 14:56	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD03/SD-1 Lab ID: 60450758005 Collected: 04/10/24 14:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<9.8	ug/kg	20.6	9.8	1	04/12/24 09:46	04/12/24 14:56	74-83-9	
2-Butanone (MEK)	<50.5	ug/kg	99.8	50.5	1	04/12/24 09:46	04/12/24 14:56	78-93-3	
n-Butylbenzene	<0.76	ug/kg	7.9	0.76	1	04/12/24 09:46	04/12/24 14:56	104-51-8	
sec-Butylbenzene	<0.78	ug/kg	7.9	0.78	1	04/12/24 09:46	04/12/24 14:56	135-98-8	
tert-Butylbenzene	<0.51	ug/kg	7.9	0.51	1	04/12/24 09:46	04/12/24 14:56	98-06-6	
Carbon disulfide	<3.7	ug/kg	7.9	3.7	1	04/12/24 09:46	04/12/24 14:56	75-15-0	
Carbon tetrachloride	<2.6	ug/kg	7.9	2.6	1	04/12/24 09:46	04/12/24 14:56	56-23-5	
Chlorobenzene	<0.46	ug/kg	7.9	0.46	1	04/12/24 09:46	04/12/24 14:56	108-90-7	
Chloroethane	<13.1	ug/kg	39.6	13.1	1	04/12/24 09:46	04/12/24 14:56	75-00-3	
Chloroform	3.4J	ug/kg	7.9	2.9	1	04/12/24 09:46	04/12/24 14:56	67-66-3	
Chloromethane	<1.9	ug/kg	20.6	1.9	1	04/12/24 09:46	04/12/24 14:56	74-87-3	
2-Chlorotoluene	<1.1	ug/kg	7.9	1.1	1	04/12/24 09:46	04/12/24 14:56	95-49-8	
4-Chlorotoluene	<0.62	ug/kg	7.9	0.62	1	04/12/24 09:46	04/12/24 14:56	106-43-4	
1,2-Dibromo-3-chloropropane	<5.3	ug/kg	20.6	5.3	1	04/12/24 09:46	04/12/24 14:56	96-12-8	
Dibromochloromethane	<0.48	ug/kg	7.9	0.48	1	04/12/24 09:46	04/12/24 14:56	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/kg	7.9	0.83	1	04/12/24 09:46	04/12/24 14:56	106-93-4	
Dibromomethane	<2.3	ug/kg	7.9	2.3	1	04/12/24 09:46	04/12/24 14:56	74-95-3	
1,2-Dichlorobenzene	<1.3	ug/kg	7.9	1.3	1	04/12/24 09:46	04/12/24 14:56	95-50-1	
1,3-Dichlorobenzene	<1.0	ug/kg	7.9	1.0	1	04/12/24 09:46	04/12/24 14:56	541-73-1	
1,4-Dichlorobenzene	<1.4	ug/kg	7.9	1.4	1	04/12/24 09:46	04/12/24 14:56	106-46-7	
Dichlorodifluoromethane	<1.5	ug/kg	20.6	1.5	1	04/12/24 09:46	04/12/24 14:56	75-71-8	
1,1-Dichloroethane	<1.8	ug/kg	7.9	1.8	1	04/12/24 09:46	04/12/24 14:56	75-34-3	
1,2-Dichloroethane	<1.5	ug/kg	7.9	1.5	1	04/12/24 09:46	04/12/24 14:56	107-06-2	
1,2-Dichloroethene (Total)	<3.0	ug/kg	15.8	3.0	1	04/12/24 09:46	04/12/24 14:56	540-59-0	
1,1-Dichloroethene	<3.2	ug/kg	7.9	3.2	1	04/12/24 09:46	04/12/24 14:56	75-35-4	
cis-1,2-Dichloroethene	<1.5	ug/kg	7.9	1.5	1	04/12/24 09:46	04/12/24 14:56	156-59-2	
trans-1,2-Dichloroethene	<1.8	ug/kg	7.9	1.8	1	04/12/24 09:46	04/12/24 14:56	156-60-5	
1,2-Dichloropropane	<1.6	ug/kg	7.9	1.6	1	04/12/24 09:46	04/12/24 14:56	78-87-5	
1,3-Dichloropropane	<0.31	ug/kg	7.9	0.31	1	04/12/24 09:46	04/12/24 14:56	142-28-9	
2,2-Dichloropropane	<2.4	ug/kg	7.9	2.4	1	04/12/24 09:46	04/12/24 14:56	594-20-7	
1,1-Dichloropropene	<1.7	ug/kg	7.9	1.7	1	04/12/24 09:46	04/12/24 14:56	563-58-6	
cis-1,3-Dichloropropene	<1.2	ug/kg	7.9	1.2	1	04/12/24 09:46	04/12/24 14:56	10061-01-5	
trans-1,3-Dichloropropene	<0.95	ug/kg	7.9	0.95	1	04/12/24 09:46	04/12/24 14:56	10061-02-6	
Ethylbenzene	<1.4	ug/kg	7.9	1.4	1	04/12/24 09:46	04/12/24 14:56	100-41-4	
Hexachloro-1,3-butadiene	<1.4	ug/kg	7.9	1.4	1	04/12/24 09:46	04/12/24 14:56	87-68-3	
2-Hexanone	<16.5	ug/kg	99.8	16.5	1	04/12/24 09:46	04/12/24 14:56	591-78-6	
Isopropylbenzene (Cumene)	<0.50	ug/kg	7.9	0.50	1	04/12/24 09:46	04/12/24 14:56	98-82-8	
p-Isopropyltoluene	<0.69	ug/kg	7.9	0.69	1	04/12/24 09:46	04/12/24 14:56	99-87-6	
Methylene Chloride	<30.7	ug/kg	39.6	30.7	1	04/12/24 09:46	04/12/24 14:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	<11.1	ug/kg	99.8	11.1	1	04/12/24 09:46	04/12/24 14:56	108-10-1	
Methyl-tert-butyl ether	<1.5	ug/kg	7.9	1.5	1	04/12/24 09:46	04/12/24 14:56	1634-04-4	
Naphthalene	<1.2	ug/kg	15.8	1.2	1	04/12/24 09:46	04/12/24 14:56	91-20-3	
n-Propylbenzene	<0.96	ug/kg	7.9	0.96	1	04/12/24 09:46	04/12/24 14:56	103-65-1	
Styrene	<0.64	ug/kg	7.9	0.64	1	04/12/24 09:46	04/12/24 14:56	100-42-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD03/SD-1 Lab ID: 60450758005 Collected: 04/10/24 14:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<1.1	ug/kg	7.9	1.1	1	04/12/24 09:46	04/12/24 14:56	630-20-6	
1,1,2,2-Tetrachloroethane	<1.1	ug/kg	7.9	1.1	1	04/12/24 09:46	04/12/24 14:56	79-34-5	
Tetrachloroethene	<0.84	ug/kg	7.9	0.84	1	04/12/24 09:46	04/12/24 14:56	127-18-4	
Toluene	<7.0	ug/kg	31.7	7.0	1	04/12/24 09:46	04/12/24 14:56	108-88-3	
1,2,3-Trichlorobenzene	<0.92	ug/kg	7.9	0.92	1	04/12/24 09:46	04/12/24 14:56	87-61-6	
1,2,4-Trichlorobenzene	<0.78	ug/kg	7.9	0.78	1	04/12/24 09:46	04/12/24 14:56	120-82-1	
1,1,1-Trichloroethane	<1.6	ug/kg	7.9	1.6	1	04/12/24 09:46	04/12/24 14:56	71-55-6	
1,1,2-Trichloroethane	<1.1	ug/kg	7.9	1.1	1	04/12/24 09:46	04/12/24 14:56	79-00-5	
Trichloroethene	<3.0	ug/kg	7.9	3.0	1	04/12/24 09:46	04/12/24 14:56	79-01-6	
Trichlorofluoromethane	<15.2	ug/kg	20.6	15.2	1	04/12/24 09:46	04/12/24 14:56	75-69-4	
1,2,3-Trichloropropane	<2.4	ug/kg	7.9	2.4	1	04/12/24 09:46	04/12/24 14:56	96-18-4	
1,2,4-Trimethylbenzene	<1.1	ug/kg	7.9	1.1	1	04/12/24 09:46	04/12/24 14:56	95-63-6	
1,3,5-Trimethylbenzene	<0.69	ug/kg	7.9	0.69	1	04/12/24 09:46	04/12/24 14:56	108-67-8	
Vinyl chloride	<1.5	ug/kg	20.6	1.5	1	04/12/24 09:46	04/12/24 14:56	75-01-4	
Xylene (Total)	<5.8	ug/kg	23.8	5.8	1	04/12/24 09:46	04/12/24 14:56	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	110	%	80-120		1	04/12/24 09:46	04/12/24 14:56	2037-26-5	
4-Bromofluorobenzene (S)	102	%	83-119		1	04/12/24 09:46	04/12/24 14:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/12/24 09:46	04/12/24 14:56	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.071	mg/kg	0.52	0.071	1	04/16/24 17:07	04/16/24 22:09		
<b>Surrogates</b>									
Toluene-d8 (S)	102	%	78-122		1	04/16/24 17:07	04/16/24 22:09	2037-26-5	
4-Bromofluorobenzene (S)	107	%	69-133		1	04/16/24 17:07	04/16/24 22:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/16/24 17:07	04/16/24 22:09	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	24.7	%	0.50	0.50	1		04/12/24 13:41		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	83.4	%			1	04/13/24 16:02	04/13/24 16:13		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	3.2	mg/kg	1.4	1.1	1	04/15/24 09:34	04/16/24 16:09	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.15	mg/kg	0.19	0.15	1	04/18/24 08:30	04/18/24 12:19	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: SD03/SD-1 Lab ID: 60450758005 Collected: 04/10/24 14:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<7.4	mg/kg	13.1	7.4	10	04/17/24 16:50	04/19/24 15:34	14797-55-8	
Nitrite as N	<6.9	mg/kg	13.1	6.9	10	04/17/24 16:50	04/19/24 15:34	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: DUP-03 Lab ID: 60450758006 Collected: 04/10/24 00:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00433	mg/kg	0.0230	0.00433	1	04/17/24 06:14	04/17/24 14:08	309-00-2	
alpha-BHC	<0.00424	mg/kg	0.0230	0.00424	1	04/17/24 06:14	04/17/24 14:08	319-84-6	
beta-BHC	<0.00436	mg/kg	0.0230	0.00436	1	04/17/24 06:14	04/17/24 14:08	319-85-7	
delta-BHC	<0.00398	mg/kg	0.0230	0.00398	1	04/17/24 06:14	04/17/24 14:08	319-86-8	
gamma-BHC (Lindane)	<0.00396	mg/kg	0.0230	0.00396	1	04/17/24 06:14	04/17/24 14:08	58-89-9	
Chlordane (Technical)	<0.119	mg/kg	0.345	0.119	1	04/17/24 06:14	04/17/24 14:08	57-74-9	
4,4'-DDD	<0.00426	mg/kg	0.0230	0.00426	1	04/17/24 06:14	04/17/24 14:08	72-54-8	
4,4'-DDE	<0.00421	mg/kg	0.0230	0.00421	1	04/17/24 06:14	04/17/24 14:08	72-55-9	
4,4'-DDT	<0.00722	mg/kg	0.0230	0.00722	1	04/17/24 06:14	04/17/24 14:08	50-29-3	
Dieldrin	<0.00396	mg/kg	0.0230	0.00396	1	04/17/24 06:14	04/17/24 14:08	60-57-1	
Endosulfan I	<0.00418	mg/kg	0.0230	0.00418	1	04/17/24 06:14	04/17/24 14:08	959-98-8	
Endosulfan II	<0.00386	mg/kg	0.0230	0.00386	1	04/17/24 06:14	04/17/24 14:08	33213-65-9	
Endosulfan sulfate	<0.00419	mg/kg	0.0230	0.00419	1	04/17/24 06:14	04/17/24 14:08	1031-07-8	
Endrin	<0.00403	mg/kg	0.0230	0.00403	1	04/17/24 06:14	04/17/24 14:08	72-20-8	
Endrin aldehyde	<0.00390	mg/kg	0.0230	0.00390	1	04/17/24 06:14	04/17/24 14:08	7421-93-4	
Endrin ketone	<0.00819	mg/kg	0.0230	0.00819	1	04/17/24 06:14	04/17/24 14:08	53494-70-5	
Hexachlorobenzene	<0.00398	mg/kg	0.0230	0.00398	1	04/17/24 06:14	04/17/24 14:08	118-74-1	
Heptachlor	<0.00493	mg/kg	0.0230	0.00493	1	04/17/24 06:14	04/17/24 14:08	76-44-8	
Heptachlor epoxide	<0.00390	mg/kg	0.0230	0.00390	1	04/17/24 06:14	04/17/24 14:08	1024-57-3	
Methoxychlor	<0.00557	mg/kg	0.0230	0.00557	1	04/17/24 06:14	04/17/24 14:08	72-43-5	
Toxaphene	<0.143	mg/kg	0.461	0.143	1	04/17/24 06:14	04/17/24 14:08	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	96.4	%	10.0-135		1	04/17/24 06:14	04/17/24 14:08	2051-24-3	
Tetrachloro-m-xylene (S)	108	%	10.0-139		1	04/17/24 06:14	04/17/24 14:08	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00808	mg/kg	0.0806	0.00808	1	04/17/24 14:29	04/19/24 17:43	94-75-7	
Dalapon	<0.0130	mg/kg	0.0806	0.0130	1	04/17/24 14:29	04/19/24 17:43	127-20-8	
2,4-DB	<0.0342	mg/kg	0.0806	0.0342	1	04/17/24 14:29	04/19/24 17:43	94-82-6	
Dicamba	<0.0181	mg/kg	0.0806	0.0181	1	04/17/24 14:29	04/19/24 17:43	1918-00-9	
Dichlorprop	<0.0282	mg/kg	0.0806	0.0282	1	04/17/24 14:29	04/19/24 17:43	120-36-5	
Dinoseb	<0.00803	mg/kg	0.0806	0.00803	1	04/17/24 14:29	04/19/24 17:43	88-85-7	
MCPA	<0.510	mg/kg	7.48	0.510	1	04/17/24 14:29	04/19/24 17:43	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.423	mg/kg	7.48	0.423	1	04/17/24 14:29	04/19/24 17:43	93-65-2	
2,4,5-T	<0.00981	mg/kg	0.0806	0.00981	1	04/17/24 14:29	04/19/24 17:43	93-76-5	
2,4,5-TP (Silvex)	<0.0123	mg/kg	0.0806	0.0123	1	04/17/24 14:29	04/19/24 17:43	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	59.4	%	22.0-132		1	04/17/24 14:29	04/19/24 17:43	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<11.7	ug/kg	43.3	11.7	1	04/17/24 20:36	04/19/24 00:56	12674-11-2	
PCB-1221 (Aroclor 1221)	<14.6	ug/kg	43.3	14.6	1	04/17/24 20:36	04/19/24 00:56	11104-28-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: DUP-03 Lab ID: 60450758006 Collected: 04/10/24 00:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<14.6	ug/kg	43.3	14.6	1	04/17/24 20:36	04/19/24 00:56	11141-16-5	
PCB-1242 (Aroclor 1242)	<14.6	ug/kg	43.3	14.6	1	04/17/24 20:36	04/19/24 00:56	53469-21-9	
PCB-1248 (Aroclor 1248)	<14.6	ug/kg	43.3	14.6	1	04/17/24 20:36	04/19/24 00:56	12672-29-6	
PCB-1254 (Aroclor 1254)	<14.6	ug/kg	43.3	14.6	1	04/17/24 20:36	04/19/24 00:56	11097-69-1	
PCB-1260 (Aroclor 1260)	<14.6	ug/kg	43.3	14.6	1	04/17/24 20:36	04/19/24 00:56	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	85	%	20-120		1	04/17/24 20:36	04/19/24 00:56	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3051									
Pace National - Mt. Juliet									
Aluminum	1940	mg/kg	57.6	7.95	5	04/16/24 09:55	04/18/24 14:47	7429-90-5	
Antimony	<0.191	mg/kg	3.45	0.191	5	04/16/24 09:55	04/18/24 14:47	7440-36-0	
Arsenic	3.45	mg/kg	1.15	0.115	5	04/16/24 09:55	04/18/24 14:47	7440-38-2	
Barium	21.0	mg/kg	2.88	0.175	5	04/16/24 09:55	04/18/24 14:47	7440-39-3	
Beryllium	0.241J	mg/kg	2.88	0.159	5	04/16/24 09:55	04/18/24 14:47	7440-41-7	J
Cadmium	<0.0985	mg/kg	1.15	0.0985	5	04/16/24 09:55	04/18/24 14:47	7440-43-9	
Calcium	274000	mg/kg	576	86.9	5	04/16/24 09:55	04/18/24 14:47	7440-70-2	
Chromium	4.34J	mg/kg	5.76	0.341	5	04/16/24 09:55	04/18/24 14:47	7440-47-3	J
Cobalt	2.46	mg/kg	1.15	0.0532	5	04/16/24 09:55	04/18/24 14:47	7440-48-4	
Copper	4.56J	mg/kg	5.76	0.152	5	04/16/24 09:55	04/18/24 14:47	7440-50-8	J
Iron	9370	mg/kg	57.6	10.3	5	04/16/24 09:55	04/18/24 14:47	7439-89-6	
Lead	4.44	mg/kg	2.30	0.114	5	04/16/24 09:55	04/18/24 14:47	7439-92-1	
Magnesium	6460	mg/kg	576	52.9	5	04/16/24 09:55	04/18/24 14:47	7439-95-4	
Manganese	720	mg/kg	2.88	0.309	5	04/16/24 09:55	04/18/24 14:47	7439-96-5	
Molybdenum	0.890J	mg/kg	2.88	0.116	5	04/16/24 09:55	04/18/24 14:47	7439-98-7	J
Nickel	8.64	mg/kg	2.88	0.227	5	04/16/24 09:55	04/18/24 14:47	7440-02-0	
Potassium	626	mg/kg	576	78.3	5	04/16/24 09:55	04/18/24 14:47	7440-09-7	
Selenium	0.225J	mg/kg	2.88	0.207	5	04/16/24 09:55	04/18/24 14:47	7782-49-2	J
Silver	<0.0996	mg/kg	0.576	0.0996	5	04/16/24 09:55	04/18/24 14:47	7440-22-4	
Sodium	149J	mg/kg	576	88.1	5	04/16/24 09:55	04/18/24 14:47	7440-23-5	J
Thallium	<0.0748	mg/kg	2.30	0.0748	5	04/16/24 09:55	04/18/24 14:47	7440-28-0	
Vanadium	4.82	mg/kg	2.88	0.215	5	04/16/24 09:55	04/18/24 14:47	7440-62-2	
Zinc	17.3J	mg/kg	28.8	0.852	5	04/16/24 09:55	04/18/24 14:47	7440-66-6	J
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0207	mg/kg	0.0461	0.0207	1	04/14/24 16:42	04/15/24 13:22	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<92.2	ug/kg	429	92.2	1	04/17/24 09:39	04/22/24 05:19	83-32-9	
Acenaphthylene	<70.2	ug/kg	429	70.2	1	04/17/24 09:39	04/22/24 05:19	208-96-8	
Anthracene	<89.8	ug/kg	429	89.8	1	04/17/24 09:39	04/22/24 05:19	120-12-7	
Benzo(a)anthracene	<90.8	ug/kg	429	90.8	1	04/17/24 09:39	04/22/24 05:19	56-55-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: DUP-03 Lab ID: 60450758006 Collected: 04/10/24 00:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<92.4	ug/kg	429	92.4	1	04/17/24 09:39	04/22/24 05:19	50-32-8	
Benzo(b)fluoranthene	<105	ug/kg	429	105	1	04/17/24 09:39	04/22/24 05:19	205-99-2	
Benzo(g,h,i)perylene	<74.5	ug/kg	429	74.5	1	04/17/24 09:39	04/22/24 05:19	191-24-2	
Benzo(k)fluoranthene	<92.4	ug/kg	429	92.4	1	04/17/24 09:39	04/22/24 05:19	207-08-9	
Benzoic Acid	<234	ug/kg	2170	234	1	04/17/24 09:39	04/22/24 05:19	65-85-0	
Benzyl alcohol	<78.8	ug/kg	859	78.8	1	04/17/24 09:39	04/22/24 05:19	100-51-6	
4-Bromophenylphenyl ether	<92.6	ug/kg	429	92.6	1	04/17/24 09:39	04/22/24 05:19	101-55-3	
Butylbenzylphthalate	<87.4	ug/kg	429	87.4	1	04/17/24 09:39	04/22/24 05:19	85-68-7	
Carbazole	<88.3	ug/kg	429	88.3	1	04/17/24 09:39	04/22/24 05:19	86-74-8	
4-Chloro-3-methylphenol	<90.0	ug/kg	859	90.0	1	04/17/24 09:39	04/22/24 05:19	59-50-7	
4-Chloroaniline	<67.3	ug/kg	859	67.3	1	04/17/24 09:39	04/22/24 05:19	106-47-8	
bis(2-Chloroethoxy)methane	<85.3	ug/kg	429	85.3	1	04/17/24 09:39	04/22/24 05:19	111-91-1	
bis(2-Chloroethyl) ether	<86.6	ug/kg	429	86.6	1	04/17/24 09:39	04/22/24 05:19	111-44-4	
bis(2-Chloroisopropyl) ether	<93.0	ug/kg	429	93.0	1	04/17/24 09:39	04/22/24 05:19	108-60-1	
2-Chloronaphthalene	<90.4	ug/kg	429	90.4	1	04/17/24 09:39	04/22/24 05:19	91-58-7	
2-Chlorophenol	<87.7	ug/kg	429	87.7	1	04/17/24 09:39	04/22/24 05:19	95-57-8	
4-Chlorophenylphenyl ether	<92.1	ug/kg	429	92.1	1	04/17/24 09:39	04/22/24 05:19	7005-72-3	
Chrysene	<95.6	ug/kg	429	95.6	1	04/17/24 09:39	04/22/24 05:19	218-01-9	
Dibenz(a,h)anthracene	<77.1	ug/kg	429	77.1	1	04/17/24 09:39	04/22/24 05:19	53-70-3	
Dibenzofuran	<91.7	ug/kg	429	91.7	1	04/17/24 09:39	04/22/24 05:19	132-64-9	
1,2-Dichlorobenzene	<85.5	ug/kg	429	85.5	1	04/17/24 09:39	04/22/24 05:19	95-50-1	
1,3-Dichlorobenzene	<83.9	ug/kg	429	83.9	1	04/17/24 09:39	04/22/24 05:19	541-73-1	
1,4-Dichlorobenzene	<82.7	ug/kg	429	82.7	1	04/17/24 09:39	04/22/24 05:19	106-46-7	
3,3'-Dichlorobenzidine	<42.1	ug/kg	859	42.1	1	04/17/24 09:39	04/22/24 05:19	91-94-1	
2,4-Dichlorophenol	<86.0	ug/kg	429	86.0	1	04/17/24 09:39	04/22/24 05:19	120-83-2	
Diethylphthalate	<98.1	ug/kg	429	98.1	1	04/17/24 09:39	04/22/24 05:19	84-66-2	
2,4-Dimethylphenol	<62.4	ug/kg	429	62.4	1	04/17/24 09:39	04/22/24 05:19	105-67-9	
Dimethylphthalate	<89.1	ug/kg	429	89.1	1	04/17/24 09:39	04/22/24 05:19	131-11-3	
Di-n-butylphthalate	<102	ug/kg	429	102	1	04/17/24 09:39	04/22/24 05:19	84-74-2	
4,6-Dinitro-2-methylphenol	<74.3	ug/kg	2170	74.3	1	04/17/24 09:39	04/22/24 05:19	534-52-1	
2,4-Dinitrophenol	<130	ug/kg	2170	130	1	04/17/24 09:39	04/22/24 05:19	51-28-5	
2,4-Dinitrotoluene	<96.7	ug/kg	429	96.7	1	04/17/24 09:39	04/22/24 05:19	121-14-2	
2,6-Dinitrotoluene	<83.6	ug/kg	429	83.6	1	04/17/24 09:39	04/22/24 05:19	606-20-2	
Di-n-octylphthalate	<104	ug/kg	429	104	1	04/17/24 09:39	04/22/24 05:19	117-84-0	
bis(2-Ethylhexyl)phthalate	<96.4	ug/kg	429	96.4	1	04/17/24 09:39	04/22/24 05:19	117-81-7	
Fluoranthene	<94.6	ug/kg	429	94.6	1	04/17/24 09:39	04/22/24 05:19	206-44-0	
Fluorene	<91.3	ug/kg	429	91.3	1	04/17/24 09:39	04/22/24 05:19	86-73-7	
Hexachloro-1,3-butadiene	<92.0	ug/kg	429	92.0	1	04/17/24 09:39	04/22/24 05:19	87-68-3	
Hexachlorobenzene	<89.8	ug/kg	429	89.8	1	04/17/24 09:39	04/22/24 05:19	118-74-1	
Hexachlorocyclopentadiene	<264	ug/kg	429	264	1	04/17/24 09:39	04/22/24 05:19	77-47-4	
Hexachloroethane	<78.7	ug/kg	429	78.7	1	04/17/24 09:39	04/22/24 05:19	67-72-1	
Indeno(1,2,3-cd)pyrene	<87.8	ug/kg	429	87.8	1	04/17/24 09:39	04/22/24 05:19	193-39-5	
Isophorone	<83.0	ug/kg	429	83.0	1	04/17/24 09:39	04/22/24 05:19	78-59-1	
2-Methylnaphthalene	<87.0	ug/kg	429	87.0	1	04/17/24 09:39	04/22/24 05:19	91-57-6	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: DUP-03 Lab ID: 60450758006 Collected: 04/10/24 00:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<78.2	ug/kg	429	78.2	1	04/17/24 09:39	04/22/24 05:19	95-48-7	
3&4-Methylphenol(m&p Cresol)	<79.7	ug/kg	429	79.7	1	04/17/24 09:39	04/22/24 05:19	15831-10-4	
Naphthalene	<92.4	ug/kg	429	92.4	1	04/17/24 09:39	04/22/24 05:19	91-20-3	
2-Nitroaniline	<71.2	ug/kg	859	71.2	1	04/17/24 09:39	04/22/24 05:19	88-74-4	
3-Nitroaniline	<66.9	ug/kg	859	66.9	1	04/17/24 09:39	04/22/24 05:19	99-09-2	
4-Nitroaniline	<73.5	ug/kg	859	73.5	1	04/17/24 09:39	04/22/24 05:19	100-01-6	
Nitrobenzene	<90.9	ug/kg	429	90.9	1	04/17/24 09:39	04/22/24 05:19	98-95-3	
2-Nitrophenol	<67.1	ug/kg	429	67.1	1	04/17/24 09:39	04/22/24 05:19	88-75-5	
4-Nitrophenol	<63.2	ug/kg	2170	63.2	1	04/17/24 09:39	04/22/24 05:19	100-02-7	
N-Nitroso-di-n-propylamine	<81.8	ug/kg	429	81.8	1	04/17/24 09:39	04/22/24 05:19	621-64-7	
N-Nitrosodiphenylamine	<85.3	ug/kg	429	85.3	1	04/17/24 09:39	04/22/24 05:19	86-30-6	
Pentachlorophenol	<142	ug/kg	2170	142	1	04/17/24 09:39	04/22/24 05:19	87-86-5	
Phenanthrene	<91.7	ug/kg	429	91.7	1	04/17/24 09:39	04/22/24 05:19	85-01-8	
Phenol	<80.8	ug/kg	429	80.8	1	04/17/24 09:39	04/22/24 05:19	108-95-2	
Pyrene	<91.6	ug/kg	429	91.6	1	04/17/24 09:39	04/22/24 05:19	129-00-0	
Pyridine	<63.6	ug/kg	429	63.6	1	04/17/24 09:39	04/22/24 05:19	110-86-1	
1,2,4-Trichlorobenzene	<89.9	ug/kg	429	89.9	1	04/17/24 09:39	04/22/24 05:19	120-82-1	
2,4,5-Trichlorophenol	<87.9	ug/kg	429	87.9	1	04/17/24 09:39	04/22/24 05:19	95-95-4	
2,4,6-Trichlorophenol	<79.4	ug/kg	429	79.4	1	04/17/24 09:39	04/22/24 05:19	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	81	%	30-120		1	04/17/24 09:39	04/22/24 05:19	4165-60-0	
2-Fluorobiphenyl (S)	75	%	40-120		1	04/17/24 09:39	04/22/24 05:19	321-60-8	
Terphenyl-d14 (S)	77	%	45-120		1	04/17/24 09:39	04/22/24 05:19	1718-51-0	
Phenol-d6 (S)	81	%	40-120		1	04/17/24 09:39	04/22/24 05:19	13127-88-3	
2-Fluorophenol (S)	80	%	40-120		1	04/17/24 09:39	04/22/24 05:19	367-12-4	
2,4,6-Tribromophenol (S)	82	%	35-120		1	04/17/24 09:39	04/22/24 05:19	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	11.5J	mg/kg	19.5	6.6	1	04/11/24 16:15	04/16/24 18:23		
TPH-DRO	<6.6	mg/kg	19.5	6.6	1	04/11/24 16:15	04/16/24 18:23		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	84	%	35-120		1	04/11/24 16:15	04/16/24 18:23	4165-60-0	
2-Fluorobiphenyl (S)	90	%	50-120		1	04/11/24 16:15	04/16/24 18:23	321-60-8	
Terphenyl-d14 (S)	86	%	45-120		1	04/11/24 16:15	04/16/24 18:23	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<81.2	ug/kg	85.2	81.2	1	04/12/24 09:46	04/12/24 15:16	67-64-1	
Benzene	<0.62	ug/kg	6.8	0.62	1	04/12/24 09:46	04/12/24 15:16	71-43-2	
Bromobenzene	<0.84	ug/kg	6.8	0.84	1	04/12/24 09:46	04/12/24 15:16	108-86-1	
Bromochloromethane	<1.0	ug/kg	6.8	1.0	1	04/12/24 09:46	04/12/24 15:16	74-97-5	
Bromodichloromethane	<1.1	ug/kg	17.6	1.1	1	04/12/24 09:46	04/12/24 15:16	75-27-4	
Bromoform	<0.52	ug/kg	17.6	0.52	1	04/12/24 09:46	04/12/24 15:16	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: DUP-03 Lab ID: 60450758006 Collected: 04/10/24 00:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Bromomethane	<8.3	ug/kg	17.6	8.3	1	04/12/24 09:46	04/12/24 15:16	74-83-9	
2-Butanone (MEK)	<43.1	ug/kg	85.2	43.1	1	04/12/24 09:46	04/12/24 15:16	78-93-3	
n-Butylbenzene	<0.65	ug/kg	6.8	0.65	1	04/12/24 09:46	04/12/24 15:16	104-51-8	
sec-Butylbenzene	<0.67	ug/kg	6.8	0.67	1	04/12/24 09:46	04/12/24 15:16	135-98-8	
tert-Butylbenzene	<0.44	ug/kg	6.8	0.44	1	04/12/24 09:46	04/12/24 15:16	98-06-6	
Carbon disulfide	<3.1	ug/kg	6.8	3.1	1	04/12/24 09:46	04/12/24 15:16	75-15-0	
Carbon tetrachloride	<2.3	ug/kg	6.8	2.3	1	04/12/24 09:46	04/12/24 15:16	56-23-5	
Chlorobenzene	<0.39	ug/kg	6.8	0.39	1	04/12/24 09:46	04/12/24 15:16	108-90-7	
Chloroethane	<11.2	ug/kg	33.8	11.2	1	04/12/24 09:46	04/12/24 15:16	75-00-3	
Chloroform	<2.5	ug/kg	6.8	2.5	1	04/12/24 09:46	04/12/24 15:16	67-66-3	
Chloromethane	<1.7	ug/kg	17.6	1.7	1	04/12/24 09:46	04/12/24 15:16	74-87-3	
2-Chlorotoluene	<0.94	ug/kg	6.8	0.94	1	04/12/24 09:46	04/12/24 15:16	95-49-8	
4-Chlorotoluene	<0.53	ug/kg	6.8	0.53	1	04/12/24 09:46	04/12/24 15:16	106-43-4	
1,2-Dibromo-3-chloropropane	<4.5	ug/kg	17.6	4.5	1	04/12/24 09:46	04/12/24 15:16	96-12-8	
Dibromochloromethane	<0.41	ug/kg	6.8	0.41	1	04/12/24 09:46	04/12/24 15:16	124-48-1	
1,2-Dibromoethane (EDB)	<0.71	ug/kg	6.8	0.71	1	04/12/24 09:46	04/12/24 15:16	106-93-4	
Dibromomethane	<2.0	ug/kg	6.8	2.0	1	04/12/24 09:46	04/12/24 15:16	74-95-3	
1,2-Dichlorobenzene	<1.1	ug/kg	6.8	1.1	1	04/12/24 09:46	04/12/24 15:16	95-50-1	
1,3-Dichlorobenzene	<0.86	ug/kg	6.8	0.86	1	04/12/24 09:46	04/12/24 15:16	541-73-1	
1,4-Dichlorobenzene	<1.2	ug/kg	6.8	1.2	1	04/12/24 09:46	04/12/24 15:16	106-46-7	
Dichlorodifluoromethane	<1.3	ug/kg	17.6	1.3	1	04/12/24 09:46	04/12/24 15:16	75-71-8	
1,1-Dichloroethane	<1.6	ug/kg	6.8	1.6	1	04/12/24 09:46	04/12/24 15:16	75-34-3	
1,2-Dichloroethane	<1.3	ug/kg	6.8	1.3	1	04/12/24 09:46	04/12/24 15:16	107-06-2	
1,2-Dichloroethene (Total)	<2.6	ug/kg	13.5	2.6	1	04/12/24 09:46	04/12/24 15:16	540-59-0	
1,1-Dichloroethene	<2.7	ug/kg	6.8	2.7	1	04/12/24 09:46	04/12/24 15:16	75-35-4	
cis-1,2-Dichloroethene	<1.3	ug/kg	6.8	1.3	1	04/12/24 09:46	04/12/24 15:16	156-59-2	
trans-1,2-Dichloroethene	<1.5	ug/kg	6.8	1.5	1	04/12/24 09:46	04/12/24 15:16	156-60-5	
1,2-Dichloropropane	<1.4	ug/kg	6.8	1.4	1	04/12/24 09:46	04/12/24 15:16	78-87-5	
1,3-Dichloropropane	<0.26	ug/kg	6.8	0.26	1	04/12/24 09:46	04/12/24 15:16	142-28-9	
2,2-Dichloropropane	<2.0	ug/kg	6.8	2.0	1	04/12/24 09:46	04/12/24 15:16	594-20-7	
1,1-Dichloropropene	<1.5	ug/kg	6.8	1.5	1	04/12/24 09:46	04/12/24 15:16	563-58-6	
cis-1,3-Dichloropropene	<1.0	ug/kg	6.8	1.0	1	04/12/24 09:46	04/12/24 15:16	10061-01-5	
trans-1,3-Dichloropropene	<0.81	ug/kg	6.8	0.81	1	04/12/24 09:46	04/12/24 15:16	10061-02-6	
Ethylbenzene	<1.2	ug/kg	6.8	1.2	1	04/12/24 09:46	04/12/24 15:16	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/kg	6.8	1.2	1	04/12/24 09:46	04/12/24 15:16	87-68-3	
2-Hexanone	26.7J	ug/kg	85.2	14.1	1	04/12/24 09:46	04/12/24 15:16	591-78-6	
Isopropylbenzene (Cumene)	<0.43	ug/kg	6.8	0.43	1	04/12/24 09:46	04/12/24 15:16	98-82-8	
p-Isopropyltoluene	<0.59	ug/kg	6.8	0.59	1	04/12/24 09:46	04/12/24 15:16	99-87-6	
Methylene Chloride	<26.2	ug/kg	33.8	26.2	1	04/12/24 09:46	04/12/24 15:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	<9.5	ug/kg	85.2	9.5	1	04/12/24 09:46	04/12/24 15:16	108-10-1	
Methyl-tert-butyl ether	<1.3	ug/kg	6.8	1.3	1	04/12/24 09:46	04/12/24 15:16	1634-04-4	
Naphthalene	<0.99	ug/kg	13.5	0.99	1	04/12/24 09:46	04/12/24 15:16	91-20-3	
n-Propylbenzene	<0.82	ug/kg	6.8	0.82	1	04/12/24 09:46	04/12/24 15:16	103-65-1	
Styrene	<0.55	ug/kg	6.8	0.55	1	04/12/24 09:46	04/12/24 15:16	100-42-5	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: DUP-03 Lab ID: 60450758006 Collected: 04/10/24 00:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<0.96	ug/kg	6.8	0.96	1	04/12/24 09:46	04/12/24 15:16	630-20-6	
1,1,2,2-Tetrachloroethane	<0.95	ug/kg	6.8	0.95	1	04/12/24 09:46	04/12/24 15:16	79-34-5	
Tetrachloroethene	<0.72	ug/kg	6.8	0.72	1	04/12/24 09:46	04/12/24 15:16	127-18-4	
Toluene	<6.0	ug/kg	27.0	6.0	1	04/12/24 09:46	04/12/24 15:16	108-88-3	
1,2,3-Trichlorobenzene	<0.79	ug/kg	6.8	0.79	1	04/12/24 09:46	04/12/24 15:16	87-61-6	
1,2,4-Trichlorobenzene	<0.66	ug/kg	6.8	0.66	1	04/12/24 09:46	04/12/24 15:16	120-82-1	
1,1,1-Trichloroethane	<1.4	ug/kg	6.8	1.4	1	04/12/24 09:46	04/12/24 15:16	71-55-6	
1,1,2-Trichloroethane	<0.97	ug/kg	6.8	0.97	1	04/12/24 09:46	04/12/24 15:16	79-00-5	
Trichloroethene	<2.6	ug/kg	6.8	2.6	1	04/12/24 09:46	04/12/24 15:16	79-01-6	
Trichlorofluoromethane	<13.0	ug/kg	17.6	13.0	1	04/12/24 09:46	04/12/24 15:16	75-69-4	
1,2,3-Trichloropropane	<2.1	ug/kg	6.8	2.1	1	04/12/24 09:46	04/12/24 15:16	96-18-4	
1,2,4-Trimethylbenzene	<0.93	ug/kg	6.8	0.93	1	04/12/24 09:46	04/12/24 15:16	95-63-6	
1,3,5-Trimethylbenzene	<0.59	ug/kg	6.8	0.59	1	04/12/24 09:46	04/12/24 15:16	108-67-8	
Vinyl chloride	<1.3	ug/kg	17.6	1.3	1	04/12/24 09:46	04/12/24 15:16	75-01-4	
Xylene (Total)	<5.0	ug/kg	20.3	5.0	1	04/12/24 09:46	04/12/24 15:16	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	109	%	80-120		1	04/12/24 09:46	04/12/24 15:16	2037-26-5	
4-Bromofluorobenzene (S)	101	%	83-119		1	04/12/24 09:46	04/12/24 15:16	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	04/12/24 09:46	04/12/24 15:16	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.089	mg/kg	0.65	0.089	1	04/16/24 17:07	04/16/24 22:25		
<b>Surrogates</b>									
Toluene-d8 (S)	102	%	78-122		1	04/16/24 17:07	04/16/24 22:25	2037-26-5	
4-Bromofluorobenzene (S)	107	%	69-133		1	04/16/24 17:07	04/16/24 22:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/16/24 17:07	04/16/24 22:25	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	23.9	%	0.50	0.50	1		04/12/24 13:41		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	86.8	%			1	04/13/24 16:02	04/13/24 16:13		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	1.6	mg/kg	1.2	0.99	1	04/15/24 09:34	04/16/24 16:10	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	<0.17	mg/kg	0.21	0.17	1	04/18/24 08:30	04/18/24 12:21	57-12-5	

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Sample: DUP-03 Lab ID: 60450758006 Collected: 04/10/24 00:00 Received: 04/10/24 16:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	<7.4	mg/kg	13.0	7.4	10	04/17/24 16:50	04/19/24 15:49	14797-55-8	
Nitrite as N	<6.8	mg/kg	13.0	6.8	10	04/17/24 16:50	04/19/24 15:49	14797-65-0	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch: 2268528 Analysis Method: EPA 8081B  
 QC Batch Method: 3546/3665A Analysis Description: Pesticides (GC) 8081B  
 Laboratory: Pace National - Mt. Juliet  
 Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

METHOD BLANK: R4058996-1 Matrix: Solid  
 Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aldrin	mg/kg	<0.00376	0.0200	0.00376	04/17/24 13:00	
alpha-BHC	mg/kg	<0.00368	0.0200	0.00368	04/17/24 13:00	
beta-BHC	mg/kg	<0.00379	0.0200	0.00379	04/17/24 13:00	
delta-BHC	mg/kg	<0.00346	0.0200	0.00346	04/17/24 13:00	
gamma-BHC (Lindane)	mg/kg	<0.00344	0.0200	0.00344	04/17/24 13:00	
Chlordane (Technical)	mg/kg	<0.103	0.300	0.103	04/17/24 13:00	
4,4'-DDD	mg/kg	<0.00370	0.0200	0.00370	04/17/24 13:00	
4,4'-DDE	mg/kg	<0.00366	0.0200	0.00366	04/17/24 13:00	
4,4'-DDT	mg/kg	<0.00627	0.0200	0.00627	04/17/24 13:00	
Dieldrin	mg/kg	<0.00344	0.0200	0.00344	04/17/24 13:00	
Endosulfan I	mg/kg	<0.00363	0.0200	0.00363	04/17/24 13:00	
Endosulfan II	mg/kg	<0.00335	0.0200	0.00335	04/17/24 13:00	
Endosulfan sulfate	mg/kg	<0.00364	0.0200	0.00364	04/17/24 13:00	
Endrin	mg/kg	<0.00350	0.0200	0.00350	04/17/24 13:00	
Endrin aldehyde	mg/kg	<0.00339	0.0200	0.00339	04/17/24 13:00	
Endrin ketone	mg/kg	<0.00711	0.0200	0.00711	04/17/24 13:00	
Hexachlorobenzene	mg/kg	<0.00346	0.0200	0.00346	04/17/24 13:00	
Heptachlor	mg/kg	<0.00428	0.0200	0.00428	04/17/24 13:00	
Heptachlor epoxide	mg/kg	<0.00339	0.0200	0.00339	04/17/24 13:00	
Methoxychlor	mg/kg	<0.00484	0.0200	0.00484	04/17/24 13:00	
Toxaphene	mg/kg	<0.124	0.400	0.124	04/17/24 13:00	
Decachlorobiphenyl (S)	%	74.5	10.0-135		04/17/24 13:00	
Tetrachloro-m-xylene (S)	%	87.2	10.0-139		04/17/24 13:00	

LABORATORY CONTROL SAMPLE: R4058996-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aldrin	mg/kg	0.0666	0.0452	67.9	34.0-136	
alpha-BHC	mg/kg	0.0666	0.0471	70.7	34.0-139	
beta-BHC	mg/kg	0.0666	0.0450	67.6	34.0-133	
delta-BHC	mg/kg	0.0666	0.0419	62.9	34.0-135	
gamma-BHC (Lindane)	mg/kg	0.0666	0.0476	71.5	34.0-136	
4,4'-DDD	mg/kg	0.0666	0.0434	65.2	33.0-141	
4,4'-DDE	mg/kg	0.0666	0.0469	70.4	34.0-134	
4,4'-DDT	mg/kg	0.0666	0.0428	64.3	30.0-143	
Dieldrin	mg/kg	0.0666	0.0459	68.9	35.0-137	
Endosulfan I	mg/kg	0.0666	0.0447	67.1	34.0-134	
Endosulfan II	mg/kg	0.0666	0.0436	65.5	35.0-132	
Endosulfan sulfate	mg/kg	0.0666	0.0430	64.6	35.0-132	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

LABORATORY CONTROL SAMPLE: R4058996-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	mg/kg	0.0666	0.0437	65.6	34.0-137	
Endrin aldehyde	mg/kg	0.0666	0.0392	58.9	23.0-121	
Endrin ketone	mg/kg	0.0666	0.0416	62.5	35.0-144	
Hexachlorobenzene	mg/kg	0.0666	0.0456	68.5	33.0-129	
Heptachlor	mg/kg	0.0666	0.0462	69.4	36.0-141	
Heptachlor epoxide	mg/kg	0.0666	0.0450	67.6	36.0-134	
Methoxychlor	mg/kg	0.0666	0.0421	63.2	28.0-150	
Decachlorobiphenyl (S)	%			73.6	10.0-135	
Tetrachloro-m-xylene (S)	%			85.7	10.0-139	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058996-3 R4058996-4

Parameter	Units	R4058996-3		R4058996-4		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450758001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Aldrin	mg/kg	ND	0.0819	0.0828	0.0538	0.0684	65.7	82.7	20.0-135	23.9	37
alpha-BHC	mg/kg	ND	0.0819	0.0828	0.0549	0.0689	67.1	83.3	27.0-140	22.6	35
beta-BHC	mg/kg	ND	0.0819	0.0828	0.0506	0.0638	61.7	77.1	23.0-141	23.1	37
delta-BHC	mg/kg	ND	0.0819	0.0828	0.0497	0.0628	60.7	75.9	21.0-138	23.3	35
gamma-BHC (Lindane)	mg/kg	ND	0.0819	0.0828	0.0549	0.0694	67.1	83.9	27.0-137	23.3	36
4,4'-DDD	mg/kg	ND	0.0819	0.0828	0.0517	0.0688	63.1	83.1	15.0-152	28.4	39
4,4'-DDE	mg/kg	ND	0.0819	0.0828	0.0509	0.0664	62.2	80.2	10.0-152	26.4	40
4,4'-DDT	mg/kg	ND	0.0819	0.0828	0.0484	0.0654	59.1	79.0	10.0-151	29.8	40
Dieldrin	mg/kg	ND	0.0819	0.0828	0.0555	0.0689	67.8	83.3	17.0-145	21.5	37
Endosulfan I	mg/kg	ND	0.0819	0.0828	0.0533	0.0678	65.1	81.9	20.0-137	23.9	36
Endosulfan II	mg/kg	ND	0.0819	0.0828	0.0524	0.0679	64.0	82.1	15.0-141	25.7	37
Endosulfan sulfate	mg/kg	ND	0.0819	0.0828	0.0471	0.0629	57.5	76.0	15.0-143	28.8	38
Endrin	mg/kg	ND	0.0819	0.0828	0.0528	0.0647	64.5	78.1	19.0-143	20.2	37
Endrin aldehyde	mg/kg	ND	0.0819	0.0828	0.0438	0.0583	53.5	70.4	10.0-139	28.4	40
Endrin ketone	mg/kg	ND	0.0819	0.0828	0.0494	0.0627	60.4	75.7	17.0-149	23.6	38
Hexachlorobenzene	mg/kg	ND	0.0819	0.0828	0.0507	0.0644	61.9	77.8	25.0-126	23.9	35
Heptachlor	mg/kg	ND	0.0819	0.0828	0.0511	0.0670	62.3	81.0	22.0-138	27.1	37
Heptachlor epoxide	mg/kg	ND	0.0819	0.0828	0.0414	0.0534	50.6	64.6	22.0-138	25.3	36 P9
Methoxychlor	mg/kg	ND	0.0819	0.0828	0.0497	0.0629	60.7	76.0	10.0-159	23.5	40
Decachlorobiphenyl (S)	%						69.8	70.1	10.0-135		
Tetrachloro-m-xylene (S)	%						80.0	84.9	10.0-139		

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch: 2266156

Analysis Method: EPA 8151A

QC Batch Method: 8151A

Analysis Description: Chlorinated Herb. (GC) 8151A

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450758001

METHOD BLANK: R4058998-1

Matrix: Solid

Associated Lab Samples: 60450758001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4-D	mg/kg	<0.00702	0.0700	0.00702	04/17/24 16:19	
Dalapon	mg/kg	<0.0113	0.0700	0.0113	04/17/24 16:19	
2,4-DB	mg/kg	<0.0297	0.0700	0.0297	04/17/24 16:19	
Dicamba	mg/kg	<0.0157	0.0700	0.0157	04/17/24 16:19	
Dichlorprop	mg/kg	<0.0245	0.0700	0.0245	04/17/24 16:19	
Dinoseb	mg/kg	<0.00697	0.0700	0.00697	04/17/24 16:19	
MCPA	mg/kg	<0.443	6.50	0.443	04/17/24 16:19	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	<0.367	6.50	0.367	04/17/24 16:19	
2,4,5-T	mg/kg	<0.00852	0.0700	0.00852	04/17/24 16:19	
2,4,5-TP (Silvex)	mg/kg	<0.0107	0.0700	0.0107	04/17/24 16:19	
2,4-DCAA (S)	%	85.6	22.0-132		04/17/24 16:19	

LABORATORY CONTROL SAMPLE: R4058998-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-D	mg/kg	0.0835	0.0824	98.7	40.0-120	
Dalapon	mg/kg	0.0835	0.0536	64.2	15.0-120	
2,4-DB	mg/kg	0.0835	0.0772	92.5	25.0-143	
Dicamba	mg/kg	0.0835	0.0727	87.1	43.0-120	
Dichlorprop	mg/kg	0.0835	0.0780	93.4	32.0-129	
Dinoseb	mg/kg	0.0835	0.0450	53.9	10.0-120	
MCPA	mg/kg	8.35	9.06	109	31.0-121	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	8.35	7.22	86.5	28.0-133	
2,4,5-T	mg/kg	0.0835	0.0726	86.9	41.0-120	
2,4,5-TP (Silvex)	mg/kg	0.0835	0.0825	98.8	42.0-120	
2,4-DCAA (S)	%			83.2	22.0-132	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058998-3 R4058998-4

Parameter	Units	R4058998-3		R4058998-4		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450758001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
2,4-D	mg/kg	ND	0.102	0.103	0.0688	0.0579	67.2	56.2	10.0-160	17.1	24
Dalapon	mg/kg	ND	0.102	0.103	<0.0141	<0.0141	0.00	0.00	10.0-121	0.00	27 ML
2,4-DB	mg/kg	ND	0.102	0.103	0.0718	0.0726	70.1	70.5	10.0-160	1.21	22
Dicamba	mg/kg	ND	0.102	0.103	0.0499	0.0436	48.8	42.3	10.0-154	13.6	21
Dichlorprop	mg/kg	ND	0.102	0.103	0.0793	0.0814	77.4	79.0	10.0-158	2.64	20
Dinoseb	mg/kg	ND	0.102	0.103	0.0716	0.0715	70.0	69.5	10.0-120	0.174	40

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058998-3												R4058998-4	
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450758001 Result	Spike Conc.	Spike Conc.	MS Conc.								
MCPA	mg/kg	ND	10.2	10.3	8.45	8.09	82.6	78.5	10.0-160	4.38	40		
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	ND	10.2	10.3	7.38	6.98	72.1	67.8	10.0-160	5.57	40		
2,4,5-T	mg/kg	ND	0.102	0.103	0.0579	0.0530	56.6	51.5	10.0-157	8.77	20		
2,4,5-TP (Silvex)	mg/kg	ND	0.102	0.103	0.0775	0.0755	75.7	73.3	10.0-156	2.61	20		
2,4-DCAA (S)	%						72.0	69.7	22.0-132				

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch: 2266157 Analysis Method: EPA 8151A  
 QC Batch Method: 8151A Analysis Description: Chlorinated Herb. (GC) 8151A  
 Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

METHOD BLANK: R4060023-1 Matrix: Solid

Associated Lab Samples: 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4-D	mg/kg	<0.00702	0.0700	0.00702	04/19/24 13:07	
Dalapon	mg/kg	<0.0113	0.0700	0.0113	04/19/24 13:07	
2,4-DB	mg/kg	<0.0297	0.0700	0.0297	04/19/24 13:07	
Dicamba	mg/kg	<0.0157	0.0700	0.0157	04/19/24 13:07	
Dichlorprop	mg/kg	<0.0245	0.0700	0.0245	04/19/24 13:07	
Dinoseb	mg/kg	<0.00697	0.0700	0.00697	04/19/24 13:07	
MCPA	mg/kg	<0.443	6.50	0.443	04/19/24 13:07	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	<0.367	6.50	0.367	04/19/24 13:07	
2,4,5-T	mg/kg	<0.00852	0.0700	0.00852	04/19/24 13:07	
2,4,5-TP (Silvex)	mg/kg	<0.0107	0.0700	0.0107	04/19/24 13:07	
2,4-DCAA (S)	%	65.9	22.0-132		04/19/24 13:07	

LABORATORY CONTROL SAMPLE: R4060023-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-D	mg/kg	0.0835	0.0563	67.4	40.0-120	
Dalapon	mg/kg	0.0835	0.0409	49.0	15.0-120	
2,4-DB	mg/kg	0.0835	0.0552	66.1	25.0-143	
Dicamba	mg/kg	0.0835	0.0491	58.8	43.0-120	
Dichlorprop	mg/kg	0.0835	0.0528	63.2	32.0-129	
Dinoseb	mg/kg	0.0835	0.0218	26.1	10.0-120	
MCPA	mg/kg	8.35	4.92	58.9	31.0-121	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	8.35	4.78	57.2	28.0-133	
2,4,5-T	mg/kg	0.0835	0.0565	67.7	41.0-120	
2,4,5-TP (Silvex)	mg/kg	0.0835	0.0552	66.1	42.0-120	
2,4-DCAA (S)	%			56.9	22.0-132	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4060023-3 R4060023-4

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		L1725334-01 Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
2,4-D	mg/kg	ND	0.0951	0.0951	0.0676	0.0542	71.0	57.0	10.0-160	22.0	24	
Dalapon	mg/kg	ND	0.0951	0.0951	0.0382	0.0341	40.1	35.9	10.0-121	11.2	27	
2,4-DB	mg/kg	ND	0.0951	0.0951	0.0659	0.0486	69.3	51.2	10.0-160	30.2	22	R1
Dicamba	mg/kg	ND	0.0951	0.0951	0.0560	0.0476	58.9	50.1	10.0-154	16.2	21	
Dichlorprop	mg/kg	ND	0.0951	0.0951	0.0672	0.0526	70.7	55.3	10.0-158	24.4	20	R1
Dinoseb	mg/kg	ND	0.0951	0.0951	0.0521	0.0297	54.8	31.3	10.0-120	54.6	40	R1

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4060023-3			R4060023-4			% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		L1725334-01 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
MCPA	mg/kg	ND	9.51	9.51	6.39	5.20	67.2	54.7	10.0-160	20.5	40			
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	ND	9.51	9.51	6.31	4.62	66.3	48.6	10.0-160	30.8	40			
2,4,5-T	mg/kg	ND	0.0951	0.0951	0.0655	0.0505	68.8	53.1	10.0-157	25.8	20	R1		
2,4,5-TP (Silvex)	mg/kg	ND	0.0951	0.0951	0.0666	0.0508	70.1	53.5	10.0-156	26.9	20	R1		
2,4-DCAA (S)	%						64.8	52.4	22.0-132					

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch: 2266490

Analysis Method: EPA 6020B

QC Batch Method: 3051

Analysis Description: Metals (ICPMS) 6020B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

METHOD BLANK: R4059304-1

Matrix: Solid

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	mg/kg	<6.90	50.0	6.90	04/18/24 13:46	
Antimony	mg/kg	0.300J	3.00	0.166	04/18/24 13:46	J
Arsenic	mg/kg	<0.100	1.00	0.100	04/18/24 13:46	
Barium	mg/kg	<0.152	2.50	0.152	04/18/24 13:46	
Beryllium	mg/kg	<0.138	2.50	0.138	04/18/24 13:46	
Cadmium	mg/kg	<0.0855	1.00	0.0855	04/18/24 13:46	
Calcium	mg/kg	<75.5	500	75.5	04/18/24 13:46	
Chromium	mg/kg	<0.297	5.00	0.297	04/18/24 13:46	
Cobalt	mg/kg	<0.0463	1.00	0.0463	04/18/24 13:46	
Copper	mg/kg	<0.133	5.00	0.133	04/18/24 13:46	
Iron	mg/kg	<8.95	50.0	8.95	04/18/24 13:46	
Lead	mg/kg	<0.0990	2.00	0.0990	04/18/24 13:46	
Magnesium	mg/kg	<45.9	500	45.9	04/18/24 13:46	
Manganese	mg/kg	<0.269	2.50	0.269	04/18/24 13:46	
Molybdenum	mg/kg	<0.101	2.50	0.101	04/18/24 13:46	
Nickel	mg/kg	<0.197	2.50	0.197	04/18/24 13:46	
Potassium	mg/kg	<68.0	500	68.0	04/18/24 13:46	
Selenium	mg/kg	<0.180	2.50	0.180	04/18/24 13:46	
Silver	mg/kg	<0.0865	0.500	0.0865	04/18/24 13:46	
Sodium	mg/kg	<76.5	500	76.5	04/18/24 13:46	
Thallium	mg/kg	<0.0650	2.00	0.0650	04/18/24 13:46	
Vanadium	mg/kg	<0.187	2.50	0.187	04/18/24 13:46	
Zinc	mg/kg	1.38J	25.0	0.740	04/18/24 13:46	J

LABORATORY CONTROL SAMPLE: R4059304-9

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/kg	1000	998	99.8	80.0-120	
Antimony	mg/kg	100	99.5	99.5	80.0-120	
Arsenic	mg/kg	100	99.6	99.6	80.0-120	
Barium	mg/kg	100	91.9	91.9	80.0-120	
Beryllium	mg/kg	100	102	102	80.0-120	
Cadmium	mg/kg	100	99.9	99.9	80.0-120	
Calcium	mg/kg	1000	1050	105	80.0-120	
Chromium	mg/kg	100	100	100	80.0-120	
Cobalt	mg/kg	100	101	101	80.0-120	
Copper	mg/kg	100	98.4	98.4	80.0-120	
Iron	mg/kg	1000	1090	109	80.0-120	
Lead	mg/kg	100	97.1	97.1	80.0-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

LABORATORY CONTROL SAMPLE: R4059304-9

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	mg/kg	1000	1040	104	80.0-120	
Manganese	mg/kg	100	102	102	80.0-120	
Molybdenum	mg/kg	100	93.8	93.8	80.0-120	
Nickel	mg/kg	100	103	103	80.0-120	
Potassium	mg/kg	1000	1000	100	80.0-120	
Selenium	mg/kg	100	97.6	97.6	80.0-120	
Silver	mg/kg	20.0	19.5	97.4	80.0-120	
Sodium	mg/kg	1000	1040	104	80.0-120	
Thallium	mg/kg	100	92.7	92.7	80.0-120	
Vanadium	mg/kg	100	96.6	96.6	80.0-120	
Zinc	mg/kg	100	107	107	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059304-6 R4059304-7

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450758001 Result	Spike Conc.	Spike Conc.	MS Conc.								
Aluminum	mg/kg	4290	1250	1250	6490	5890	176	128	75.0-125	9.72	20	MH	
Antimony	mg/kg	0.499	125	125	93.4	95.3	74.4	75.9	75.0-125	1.97	20	ML	
Arsenic	mg/kg	6.94	125	125	123	123	92.8	93.1	75.0-125	0.257	20		
Barium	mg/kg	90.4	125	125	207	227	93.3	109	75.0-125	9.28	20		
Beryllium	mg/kg	0.405	125	125	99.7	106	79.5	84.3	75.0-125	5.82	20		
Cadmium	mg/kg	0.529	125	125	122	121	97.4	96.3	75.0-125	1.20	20		
Calcium	mg/kg	151000	1250	1250	151000	140000	20.0	0.00	75.0-125	8.09	20	P6	
Chromium	mg/kg	9.96	125	125	131	128	97.2	95.0	75.0-125	2.19	20		
Cobalt	mg/kg	6.82	125	125	123	123	92.8	92.7	75.0-125	0.136	20		
Copper	mg/kg	12.4	125	125	136	121	99.3	86.8	75.0-125	12.1	20		
Iron	mg/kg	12400	1250	1250	13900	16100	113	293	75.0-125	15.0	20	P6	
Lead	mg/kg	14.6	125	125	144	132	103	94.2	75.0-125	8.31	20		
Magnesium	mg/kg	5490	1250	1250	6570	7560	86.6	166	75.0-125	14.0	20	P6	
Manganese	mg/kg	831	125	125	746	1150	0.00	259	75.0-125	43.0	20	P6, R1	
Molybdenum	mg/kg	0.962	125	125	114	113	90.8	89.7	75.0-125	1.20	20		
Nickel	mg/kg	21.5	125	125	138	135	93.5	90.7	75.0-125	2.57	20		
Potassium	mg/kg	940	1250	1250	2160	1980	97.4	83.7	75.0-125	8.26	20		
Selenium	mg/kg	1.21	125	125	122	117	96.9	93.1	75.0-125	3.93	20		
Silver	mg/kg	ND	25.0	25.0	23.5	23.2	93.9	92.8	75.0-125	1.27	20		
Sodium	mg/kg	204	1250	1250	1440	1430	99.4	98.1	75.0-125	1.11	20		
Thallium	mg/kg	0.149	125	125	121	120	97.1	95.7	75.0-125	1.45	20		
Vanadium	mg/kg	12.9	125	125	131	129	94.8	92.9	75.0-125	1.84	20		
Zinc	mg/kg	62.8	125	125	168	176	84.2	90.9	75.0-125	4.89	20		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch:	2266261	Analysis Method:	EPA 7471B
QC Batch Method:	7471A	Analysis Description:	Mercury 7471B
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

METHOD BLANK: R4057757-1 Matrix: Solid  
 Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	<0.0180	0.0400	0.0180	04/15/24 12:36	

LABORATORY CONTROL SAMPLE: R4057757-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.500	0.484	96.7	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4057757-4 R4057757-5

Parameter	Units	R4057757-4		R4057757-5		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		60450758001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Mercury	mg/kg	0.0339	0.624	0.624	0.536	0.568	80.4	85.6	75.0-125	5.89	20	

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## QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch: 890390

Analysis Method: EPA 8260C

QC Batch Method: EPA 5035A/5030B

Analysis Description: 8260C MSV 5035A Low Level

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

METHOD BLANK: 3524107

Matrix: Solid

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<0.71	5.0	0.71	04/12/24 11:26	
1,1,1-Trichloroethane	ug/kg	<1.0	5.0	1.0	04/12/24 11:26	
1,1,2,2-Tetrachloroethane	ug/kg	<0.70	5.0	0.70	04/12/24 11:26	
1,1,2-Trichloroethane	ug/kg	<0.72	5.0	0.72	04/12/24 11:26	
1,1-Dichloroethane	ug/kg	<1.2	5.0	1.2	04/12/24 11:26	
1,1-Dichloroethene	ug/kg	<2.0	5.0	2.0	04/12/24 11:26	
1,1-Dichloropropene	ug/kg	<1.1	5.0	1.1	04/12/24 11:26	
1,2,3-Trichlorobenzene	ug/kg	<0.58	5.0	0.58	04/12/24 11:26	
1,2,3-Trichloropropane	ug/kg	<1.5	5.0	1.5	04/12/24 11:26	
1,2,4-Trichlorobenzene	ug/kg	<0.49	5.0	0.49	04/12/24 11:26	
1,2,4-Trimethylbenzene	ug/kg	<0.69	5.0	0.69	04/12/24 11:26	
1,2-Dibromo-3-chloropropane	ug/kg	<3.3	13.0	3.3	04/12/24 11:26	
1,2-Dibromoethane (EDB)	ug/kg	<0.53	5.0	0.53	04/12/24 11:26	
1,2-Dichlorobenzene	ug/kg	<0.84	5.0	0.84	04/12/24 11:26	
1,2-Dichloroethane	ug/kg	<0.96	5.0	0.96	04/12/24 11:26	
1,2-Dichloroethene (Total)	ug/kg	<1.9	10.0	1.9	04/12/24 11:26	
1,2-Dichloropropane	ug/kg	<1.0	5.0	1.0	04/12/24 11:26	
1,3,5-Trimethylbenzene	ug/kg	<0.43	5.0	0.43	04/12/24 11:26	
1,3-Dichlorobenzene	ug/kg	<0.63	5.0	0.63	04/12/24 11:26	
1,3-Dichloropropane	ug/kg	<0.19	5.0	0.19	04/12/24 11:26	
1,4-Dichlorobenzene	ug/kg	<0.88	5.0	0.88	04/12/24 11:26	
2,2-Dichloropropane	ug/kg	<1.5	5.0	1.5	04/12/24 11:26	
2-Butanone (MEK)	ug/kg	<31.9	63.0	31.9	04/12/24 11:26	
2-Chlorotoluene	ug/kg	<0.70	5.0	0.70	04/12/24 11:26	
2-Hexanone	ug/kg	<10.4	63.0	10.4	04/12/24 11:26	
4-Chlorotoluene	ug/kg	<0.39	5.0	0.39	04/12/24 11:26	
4-Methyl-2-pentanone (MIBK)	ug/kg	<7.0	63.0	7.0	04/12/24 11:26	
Acetone	ug/kg	<60.1	63.0	60.1	04/12/24 11:26	
Benzene	ug/kg	<0.46	5.0	0.46	04/12/24 11:26	
Bromobenzene	ug/kg	<0.62	5.0	0.62	04/12/24 11:26	
Bromochloromethane	ug/kg	<0.74	5.0	0.74	04/12/24 11:26	
Bromodichloromethane	ug/kg	<0.85	13.0	0.85	04/12/24 11:26	
Bromoform	ug/kg	<0.39	13.0	0.39	04/12/24 11:26	
Bromomethane	ug/kg	<6.2	13.0	6.2	04/12/24 11:26	
Carbon disulfide	ug/kg	<2.3	5.0	2.3	04/12/24 11:26	
Carbon tetrachloride	ug/kg	<1.7	5.0	1.7	04/12/24 11:26	
Chlorobenzene	ug/kg	<0.29	5.0	0.29	04/12/24 11:26	
Chloroethane	ug/kg	<8.3	25.0	8.3	04/12/24 11:26	
Chloroform	ug/kg	<1.8	5.0	1.8	04/12/24 11:26	
Chloromethane	ug/kg	<1.2	13.0	1.2	04/12/24 11:26	

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## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

METHOD BLANK: 3524107

Matrix: Solid

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/kg	<0.93	5.0	0.93	04/12/24 11:26	
cis-1,3-Dichloropropene	ug/kg	<0.75	5.0	0.75	04/12/24 11:26	
Dibromochloromethane	ug/kg	<0.30	5.0	0.30	04/12/24 11:26	
Dibromomethane	ug/kg	<1.5	5.0	1.5	04/12/24 11:26	
Dichlorodifluoromethane	ug/kg	<0.95	13.0	0.95	04/12/24 11:26	
Ethylbenzene	ug/kg	<0.87	5.0	0.87	04/12/24 11:26	
Hexachloro-1,3-butadiene	ug/kg	<0.89	5.0	0.89	04/12/24 11:26	
Isopropylbenzene (Cumene)	ug/kg	<0.32	5.0	0.32	04/12/24 11:26	
Methyl-tert-butyl ether	ug/kg	<0.96	5.0	0.96	04/12/24 11:26	
Methylene Chloride	ug/kg	<19.4	25.0	19.4	04/12/24 11:26	
n-Butylbenzene	ug/kg	<0.48	5.0	0.48	04/12/24 11:26	
n-Propylbenzene	ug/kg	<0.61	5.0	0.61	04/12/24 11:26	
Naphthalene	ug/kg	<0.73	10.0	0.73	04/12/24 11:26	
p-Isopropyltoluene	ug/kg	<0.44	5.0	0.44	04/12/24 11:26	
sec-Butylbenzene	ug/kg	<0.49	5.0	0.49	04/12/24 11:26	
Styrene	ug/kg	<0.40	5.0	0.40	04/12/24 11:26	
tert-Butylbenzene	ug/kg	<0.32	5.0	0.32	04/12/24 11:26	
Tetrachloroethene	ug/kg	<0.53	5.0	0.53	04/12/24 11:26	
Toluene	ug/kg	<4.4	20.0	4.4	04/12/24 11:26	
trans-1,2-Dichloroethene	ug/kg	<1.1	5.0	1.1	04/12/24 11:26	
trans-1,3-Dichloropropene	ug/kg	<0.60	5.0	0.60	04/12/24 11:26	
Trichloroethene	ug/kg	<1.9	5.0	1.9	04/12/24 11:26	
Trichlorofluoromethane	ug/kg	<9.6	13.0	9.6	04/12/24 11:26	
Vinyl chloride	ug/kg	<0.93	13.0	0.93	04/12/24 11:26	
Xylene (Total)	ug/kg	<3.7	15.0	3.7	04/12/24 11:26	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		04/12/24 11:26	
4-Bromofluorobenzene (S)	%	101	83-119		04/12/24 11:26	
Toluene-d8 (S)	%	109	80-120		04/12/24 11:26	

LABORATORY CONTROL SAMPLE: 3524108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	1250	1440	115	84-125	
1,1,1-Trichloroethane	ug/kg	1250	1330	106	81-121	
1,1,2,2-Tetrachloroethane	ug/kg	1250	1290	103	76-121	
1,1,2-Trichloroethane	ug/kg	1250	1310	105	83-118	
1,1-Dichloroethane	ug/kg	1250	1250	100	74-120	
1,1-Dichloroethene	ug/kg	1250	1240	100	71-124	
1,1-Dichloropropene	ug/kg	1250	1200	96	73-123	
1,2,3-Trichlorobenzene	ug/kg	1250	1340	107	81-123	
1,2,3-Trichloropropane	ug/kg	1250	1330	107	81-116	
1,2,4-Trichlorobenzene	ug/kg	1250	1360	109	79-126	
1,2,4-Trimethylbenzene	ug/kg	1250	1380	111	79-121	
1,2-Dibromo-3-chloropropane	ug/kg	1250	1330	106	74-125	

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**REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

LABORATORY CONTROL SAMPLE: 3524108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/kg	1250	1320	106	64-137	
1,2-Dichlorobenzene	ug/kg	1250	1230	99	83-119	
1,2-Dichloroethane	ug/kg	1250	1270	102	58-128	
1,2-Dichloroethene (Total)	ug/kg	2500	2390	95	82-117	
1,2-Dichloropropane	ug/kg	1250	1310	105	77-122	
1,3,5-Trimethylbenzene	ug/kg	1250	1380	110	81-122	
1,3-Dichlorobenzene	ug/kg	1250	1310	105	83-119	
1,3-Dichloropropane	ug/kg	1250	1290	103	83-118	
1,4-Dichlorobenzene	ug/kg	1250	1200	96	83-116	
2,2-Dichloropropane	ug/kg	1250	1420	114	76-124	
2-Butanone (MEK)	ug/kg	6250	5860	94	63-122	
2-Chlorotoluene	ug/kg	1250	1350	108	79-119	
2-Hexanone	ug/kg	6250	6730	108	68-122	
4-Chlorotoluene	ug/kg	1250	1360	109	84-119	
4-Methyl-2-pentanone (MIBK)	ug/kg	6250	6800	109	63-128	
Acetone	ug/kg	6250	6330	101	55-124	
Benzene	ug/kg	1250	1200	96	67-126	
Bromobenzene	ug/kg	1250	1320	106	85-117	
Bromochloromethane	ug/kg	1250	1310	105	78-122	
Bromodichloromethane	ug/kg	1250	1280	103	82-120	
Bromoform	ug/kg	1250	1490	119	77-133	
Bromomethane	ug/kg	1250	1150	92	20-168	
Carbon disulfide	ug/kg	1250	1210	96	60-133	
Carbon tetrachloride	ug/kg	1250	1340	107	79-128	
Chlorobenzene	ug/kg	1250	1240	99	84-118	
Chloroethane	ug/kg	1250	1140	91	53-139	
Chloroform	ug/kg	1250	1250	100	82-120	
Chloromethane	ug/kg	1250	1020	81	33-143	
cis-1,2-Dichloroethene	ug/kg	1250	1140	91	83-117	
cis-1,3-Dichloropropene	ug/kg	1250	1390	111	80-122	
Dibromochloromethane	ug/kg	1250	1460	117	82-128	
Dibromomethane	ug/kg	1250	1300	104	82-119	
Dichlorodifluoromethane	ug/kg	1250	1020	81	12-159	
Ethylbenzene	ug/kg	1250	1270	102	69-127	
Hexachloro-1,3-butadiene	ug/kg	1250	1430	114	77-133	
Isopropylbenzene (Cumene)	ug/kg	1250	1360	109	83-122	
Methyl-tert-butyl ether	ug/kg	1250	1360	109	58-137	
Methylene Chloride	ug/kg	1250	1170	94	68-125	
n-Butylbenzene	ug/kg	1250	1430	115	73-131	
n-Propylbenzene	ug/kg	1250	1340	107	82-122	
Naphthalene	ug/kg	1250	1360	109	60-136	
p-Isopropyltoluene	ug/kg	1250	1420	114	74-129	
sec-Butylbenzene	ug/kg	1250	1380	110	71-133	
Styrene	ug/kg	1250	1380	110	84-121	
tert-Butylbenzene	ug/kg	1250	1380	110	81-122	
Tetrachloroethene	ug/kg	1250	1360	109	78-130	
Toluene	ug/kg	1250	1200	96	80-118	

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## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

LABORATORY CONTROL SAMPLE: 3524108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/kg	1250	1250	100	78-118	
trans-1,3-Dichloropropene	ug/kg	1250	1440	115	81-123	
Trichloroethene	ug/kg	1250	1300	104	78-127	
Trichlorofluoromethane	ug/kg	1250	1360	109	64-133	
Vinyl chloride	ug/kg	1250	1150	92	45-139	
Xylene (Total)	ug/kg	3750	3880	104	69-130	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			98	83-119	
Toluene-d8 (S)	%			102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3524109 3524110

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450758001 Result	Spike Conc.	Spike Conc.	MS Result								
1,1,1,2-Tetrachloroethane	ug/kg	<1.0	1820	1820	1750	1880	96	104	12-128	7	59		
1,1,1-Trichloroethane	ug/kg	<1.5	1820	1820	1610	1730	88	95	15-131	8	75		
1,1,2,2-Tetrachloroethane	ug/kg	<1.0	1820	1820	1710	1810	94	100	10-132	6	65		
1,1,2-Trichloroethane	ug/kg	<1.0	1820	1820	1660	1750	92	96	14-132	5	54		
1,1-Dichloroethane	ug/kg	<1.7	1820	1820	1560	1640	86	90	23-126	5	64		
1,1-Dichloroethene	ug/kg	<3.0	1820	1820	1420	1560	78	86	20-129	10	80		
1,1-Dichloropropene	ug/kg	<1.6	1820	1820	1400	1490	77	82	15-127	6	78		
1,2,3-Trichlorobenzene	ug/kg	<0.85	1820	1820	1660	1750	92	96	10-124	5	67		
1,2,3-Trichloropropane	ug/kg	<2.2	1820	1820	1690	1820	93	100	19-125	7	51		
1,2,4-Trichlorobenzene	ug/kg	<0.71	1820	1820	1670	1800	92	99	10-129	7	73		
1,2,4-Trimethylbenzene	ug/kg	1.4J	1820	1820	1770	1810	97	99	10-124	2	68		
1,2-Dibromo-3-chloropropane	ug/kg	<4.8	1820	1820	1680	1760	93	97	10-135	4	56		
1,2-Dibromoethane (EDB)	ug/kg	<0.76	1820	1820	1670	1780	92	98	23-123	6	50		
1,2-Dichlorobenzene	ug/kg	<1.2	1820	1820	1570	1660	86	91	10-126	6	60		
1,2-Dichloroethane	ug/kg	<1.4	1820	1820	1680	1720	93	95	27-116	2	45		
1,2-Dichloroethene (Total)	ug/kg	<2.7	3640	3640	2850	3080	78	85	20-127	8	64		
1,2-Dichloropropane	ug/kg	<1.5	1820	1820	1670	1740	92	96	21-125	4	57		
1,3,5-Trimethylbenzene	ug/kg	<0.63	1820	1820	1670	1750	92	97	10-125	5	65		
1,3-Dichlorobenzene	ug/kg	1.2J	1820	1820	1630	1700	90	94	10-126	4	63		
1,3-Dichloropropane	ug/kg	<0.28	1820	1820	1620	1720	89	94	24-114	6	51		
1,4-Dichlorobenzene	ug/kg	<1.3	1820	1820	1500	1640	83	90	10-126	9	62		
2,2-Dichloropropane	ug/kg	<2.2	1820	1820	1560	1710	86	94	17-124	9	70		
2-Butanone (MEK)	ug/kg	<46.4	9090	9090	7390	7690	81	85	29-120	4	50		
2-Chlorotoluene	ug/kg	<1.0	1820	1820	1610	1700	89	93	10-138	5	70		
2-Hexanone	ug/kg	<15.1	9090	9090	8970	9660	99	106	25-121	7	51		
4-Chlorotoluene	ug/kg	<0.57	1820	1820	1630	1730	90	95	10-112	6	62		
4-Methyl-2-pentanone (MIBK)	ug/kg	<10.2	9090	9090	8990	9470	99	104	23-131	5	50		
Acetone	ug/kg	<87.4	9090	9090	8400	8660	92	94	15-129	3	49		
Benzene	ug/kg	<0.66	1820	1820	1480	1540	81	85	17-134	4	53		
Bromobenzene	ug/kg	<0.90	1820	1820	1580	1690	87	93	10-129	6	63		

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3524109 3524110												
Parameter	Units	60450758001		MS	MSD	3524110		% Rec	% Rec	% Rec	Max	
		Result	Conc.	Spike	Spike	MS	MSD					Result
Bromochloromethane	ug/kg	<1.1	1820	1820	1820	1670	1750	92	97	28-118	5	53
Bromodichloromethane	ug/kg	<1.2	1820	1820	1820	1710	1800	94	99	21-126	5	59
Bromoform	ug/kg	<0.56	1820	1820	1820	1840	2060	101	114	14-127	11	60
Bromomethane	ug/kg	<9.0	1820	1820	1820	1190	1360	65	75	10-121	14	67
Carbon disulfide	ug/kg	19.2	1820	1820	1820	1390	1500	75	82	10-122	8	78
Carbon tetrachloride	ug/kg	<2.4	1820	1820	1820	1630	1770	89	97	10-134	8	82
Chlorobenzene	ug/kg	<0.42	1820	1820	1820	1540	1650	85	91	10-126	7	60
Chloroethane	ug/kg	<12.0	1820	1820	1820	1390	1450	76	80	10-133	5	79
Chloroform	ug/kg	<2.7	1820	1820	1820	1600	1690	88	93	24-126	6	60
Chloromethane	ug/kg	<1.8	1820	1820	1820	928	979	51	54	10-125	5	78
cis-1,2-Dichloroethene	ug/kg	<1.4	1820	1820	1820	1380	1480	76	82	18-131	7	62
cis-1,3-Dichloropropene	ug/kg	<1.1	1820	1820	1820	1780	1840	98	101	24-117	4	60
Dibromochloromethane	ug/kg	<0.44	1820	1820	1820	1810	1980	100	109	22-117	9	59
Dibromomethane	ug/kg	<2.1	1820	1820	1820	1690	1760	93	97	29-118	4	52
Dichlorodifluoromethane	ug/kg	<1.4	1820	1820	1820	627	685	35	38	10-161	9	84
Ethylbenzene	ug/kg	<1.3	1820	1820	1820	1600	1670	88	92	10-137	4	60
Hexachloro-1,3-butadiene	ug/kg	<1.3	1820	1820	1820	1610	1690	89	93	10-124	5	76
Isopropylbenzene (Cumene)	ug/kg	<0.46	1820	1820	1820	1700	1800	94	99	10-123	6	72
Methyl-tert-butyl ether	ug/kg	<1.4	1820	1820	1820	1690	1780	93	98	31-126	5	42
Methylene Chloride	ug/kg	<28.2	1820	1820	1820	1440	1520	79	83	23-117	5	59
n-Butylbenzene	ug/kg	<0.70	1820	1820	1820	1730	1830	95	100	10-130	5	78
n-Propylbenzene	ug/kg	<0.88	1820	1820	1820	1600	1690	88	93	10-121	6	70
Naphthalene	ug/kg	<1.1	1820	1820	1820	1810	1920	100	105	10-131	6	63
p-Isopropyltoluene	ug/kg	2.7J	1820	1820	1820	1690	1800	93	99	10-127	6	76
sec-Butylbenzene	ug/kg	<0.72	1820	1820	1820	1630	1730	90	95	10-137	6	81
Styrene	ug/kg	<0.59	1820	1820	1820	1750	1870	97	103	10-119	6	56
tert-Butylbenzene	ug/kg	<0.47	1820	1820	1820	1620	1740	89	96	10-121	7	80
Tetrachloroethene	ug/kg	<0.77	1820	1820	1820	1540	1690	85	93	10-131	9	78
Toluene	ug/kg	<6.5	1820	1820	1820	1670	1550	92	85	13-131	8	60
trans-1,2-Dichloroethene	ug/kg	<1.6	1820	1820	1820	1470	1600	81	88	22-125	9	70
trans-1,3-Dichloropropene	ug/kg	<0.87	1820	1820	1820	1810	1910	100	105	20-122	5	54
Trichloroethene	ug/kg	<2.7	1820	1820	1820	1600	1710	88	94	14-144	7	69
Trichlorofluoromethane	ug/kg	<14.0	1820	1820	1820	1720	1650	94	91	10-134	4	86
Vinyl chloride	ug/kg	<1.3	1820	1820	1820	1100	1200	60	66	10-141	9	81
Xylene (Total)	ug/kg	<5.3	5450	5450	5450	5080	5160	93	95	10-137	2	58
1,2-Dichlorobenzene-d4 (S)	%							99	99	80-120		
4-Bromofluorobenzene (S)	%							102	101	83-119		
Toluene-d8 (S)	%							103	102	80-120		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch:	890681	Analysis Method:	EPA 8260
QC Batch Method:	EPA 5035	Analysis Description:	8260 MSV GRO and Oxygenates
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450758001, 60450758002, 60450758004, 60450758005, 60450758006

METHOD BLANK: 3525099 Matrix: Solid  
 Associated Lab Samples: 60450758001, 60450758002, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.068	0.50	0.068	04/16/24 20:50	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		04/16/24 20:50	
4-Bromofluorobenzene (S)	%	97	69-133		04/16/24 20:50	
Toluene-d8 (S)	%	99	78-122		04/16/24 20:50	

LABORATORY CONTROL SAMPLE: 3525100

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	3.8	94	61-140	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			99	69-133	
Toluene-d8 (S)	%			101	78-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525101 3525102

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual	
		60450758001 Result	Spike Conc.	Spike Conc.	Result						
TPH-GRO	mg/kg	<0.066	4.1	3.8	2.7	2.2	66	58	40-160	18	35
1,2-Dichlorobenzene-d4 (S)	%						99	99	80-120		
4-Bromofluorobenzene (S)	%						110	107	69-133		
Toluene-d8 (S)	%						103	101	78-122		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch: 890926

Analysis Method: EPA 8260

QC Batch Method: EPA 5035

Analysis Description: 8260 MSV GRO and Oxygenates

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450758003

METHOD BLANK: 3526135

Matrix: Solid

Associated Lab Samples: 60450758003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.068	0.50	0.068	04/17/24 11:35	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		04/17/24 11:35	
4-Bromofluorobenzene (S)	%	99	69-133		04/17/24 11:35	
Toluene-d8 (S)	%	99	78-122		04/17/24 11:35	

LABORATORY CONTROL SAMPLE: 3526136

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	3.9	98	61-140	
1,2-Dichlorobenzene-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			97	69-133	
Toluene-d8 (S)	%			102	78-122	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch: 890827 Analysis Method: EPA 8082  
 QC Batch Method: EPA 3546 Analysis Description: 8082 GCS PCB  
 Laboratory: Pace Analytical Services - Kansas City  
 Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

METHOD BLANK: 3525693 Matrix: Solid  
 Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<8.8	32.8	8.8	04/18/24 11:51	
PCB-1221 (Aroclor 1221)	ug/kg	<11.0	32.8	11.0	04/18/24 11:51	
PCB-1232 (Aroclor 1232)	ug/kg	<11.0	32.8	11.0	04/18/24 11:51	
PCB-1242 (Aroclor 1242)	ug/kg	<11.0	32.8	11.0	04/18/24 11:51	
PCB-1248 (Aroclor 1248)	ug/kg	<11.0	32.8	11.0	04/18/24 11:51	
PCB-1254 (Aroclor 1254)	ug/kg	<11.0	32.8	11.0	04/18/24 11:51	
PCB-1260 (Aroclor 1260)	ug/kg	<11.0	32.8	11.0	04/18/24 11:51	
Decachlorobiphenyl (S)	%	87	20-120		04/18/24 11:51	

LABORATORY CONTROL SAMPLE: 3525694

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	163	165	101	48-120	
PCB-1260 (Aroclor 1260)	ug/kg	163	159	97	55-120	
Decachlorobiphenyl (S)	%			96	20-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525695 3525696

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450758001 Result	Spike Conc.	Spike Conc.	Result						
PCB-1016 (Aroclor 1016)	ug/kg	<10.9	205	205	174	180	85	88	48-120	4	40
PCB-1260 (Aroclor 1260)	ug/kg	<13.5	205	205	174	179	84	87	55-120	3	40
Decachlorobiphenyl (S)	%						71	91	20-120		40

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QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch: 890829

Analysis Method: EPA 8270

QC Batch Method: EPA 3546

Analysis Description: 8270 Solid MSSV Microwave

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

METHOD BLANK: 3525697

Matrix: Solid

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Table with 7 columns: Parameter, Units, Blank Result, Reporting Limit, MDL, Analyzed, Qualifiers. Lists various chemical compounds and their detection results.

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

METHOD BLANK: 3525697

Matrix: Solid

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Ethylhexyl)phthalate	ug/kg	<73.6	328	73.6	04/21/24 19:11	
Butylbenzylphthalate	ug/kg	<66.7	328	66.7	04/21/24 19:11	
Carbazole	ug/kg	<67.4	328	67.4	04/21/24 19:11	
Chrysene	ug/kg	<73.0	328	73.0	04/21/24 19:11	
Di-n-butylphthalate	ug/kg	<77.5	328	77.5	04/21/24 19:11	
Di-n-octylphthalate	ug/kg	<79.7	328	79.7	04/21/24 19:11	
Dibenz(a,h)anthracene	ug/kg	<58.9	328	58.9	04/21/24 19:11	
Dibenzofuran	ug/kg	<70.0	328	70.0	04/21/24 19:11	
Diethylphthalate	ug/kg	<74.9	328	74.9	04/21/24 19:11	
Dimethylphthalate	ug/kg	<68.0	328	68.0	04/21/24 19:11	
Fluoranthene	ug/kg	<72.2	328	72.2	04/21/24 19:11	
Fluorene	ug/kg	<69.7	328	69.7	04/21/24 19:11	
Hexachloro-1,3-butadiene	ug/kg	<70.2	328	70.2	04/21/24 19:11	
Hexachlorobenzene	ug/kg	<68.5	328	68.5	04/21/24 19:11	
Hexachlorocyclopentadiene	ug/kg	<202	328	202	04/21/24 19:11	
Hexachloroethane	ug/kg	<60.1	328	60.1	04/21/24 19:11	
Indeno(1,2,3-cd)pyrene	ug/kg	<67.0	328	67.0	04/21/24 19:11	
Isophorone	ug/kg	<63.3	328	63.3	04/21/24 19:11	
N-Nitroso-di-n-propylamine	ug/kg	<62.4	328	62.4	04/21/24 19:11	
N-Nitrosodiphenylamine	ug/kg	<65.1	328	65.1	04/21/24 19:11	
Naphthalene	ug/kg	<70.5	328	70.5	04/21/24 19:11	
Nitrobenzene	ug/kg	<69.4	328	69.4	04/21/24 19:11	
Pentachlorophenol	ug/kg	<108	1660	108	04/21/24 19:11	
Phenanthrene	ug/kg	<70.0	328	70.0	04/21/24 19:11	
Phenol	ug/kg	<61.6	328	61.6	04/21/24 19:11	
Pyrene	ug/kg	<69.9	328	69.9	04/21/24 19:11	
Pyridine	ug/kg	<48.5	328	48.5	04/21/24 19:11	
2,4,6-Tribromophenol (S)	%	89	35-120		04/21/24 19:11	
2-Fluorobiphenyl (S)	%	77	40-120		04/21/24 19:11	
2-Fluorophenol (S)	%	84	40-120		04/21/24 19:11	
Nitrobenzene-d5 (S)	%	86	30-120		04/21/24 19:11	
Phenol-d6 (S)	%	85	40-120		04/21/24 19:11	
Terphenyl-d14 (S)	%	89	45-120		04/21/24 19:11	

LABORATORY CONTROL SAMPLE: 3525698

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1640	1240	76	50-120	
1,2-Dichlorobenzene	ug/kg	1640	1210	74	45-120	
1,3-Dichlorobenzene	ug/kg	1640	1200	73	45-120	
1,4-Dichlorobenzene	ug/kg	1640	1220	74	45-120	
2,4,5-Trichlorophenol	ug/kg	1640	1290	79	50-120	
2,4,6-Trichlorophenol	ug/kg	1640	1330	81	45-120	
2,4-Dichlorophenol	ug/kg	1640	1260	77	50-120	

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## QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

LABORATORY CONTROL SAMPLE: 3525698

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dimethylphenol	ug/kg	1640	1310	80	40-120	
2,4-Dinitrophenol	ug/kg	1640	1230J	75	10-145	
2,4-Dinitrotoluene	ug/kg	1640	1320	81	50-120	
2,6-Dinitrotoluene	ug/kg	1640	1310	80	50-120	
2-Chloronaphthalene	ug/kg	1640	1270	78	45-120	
2-Chlorophenol	ug/kg	1640	1300	79	45-120	
2-Methylnaphthalene	ug/kg	1640	1250	76	50-120	
2-Methylphenol(o-Cresol)	ug/kg	1640	1300	79	45-120	
2-Nitroaniline	ug/kg	1640	1420	87	45-120	
2-Nitrophenol	ug/kg	1640	1310	80	45-120	
3&4-Methylphenol(m&p Cresol)	ug/kg	1640	1330	81	45-120	
3,3'-Dichlorobenzidine	ug/kg	1640	974	59	10-120	
3-Nitroaniline	ug/kg	1640	1010	62	15-120	
4,6-Dinitro-2-methylphenol	ug/kg	1640	1260J	77	20-135	
4-Bromophenylphenyl ether	ug/kg	1640	1320	81	50-120	
4-Chloro-3-methylphenol	ug/kg	1640	1360	83	50-120	
4-Chloroaniline	ug/kg	1640	762	46	10-120	
4-Chlorophenylphenyl ether	ug/kg	1640	1290	78	50-120	
4-Nitroaniline	ug/kg	1640	1250	76	45-120	
4-Nitrophenol	ug/kg	1640	1410J	86	45-125	
Acenaphthene	ug/kg	1640	1260	77	50-120	
Acenaphthylene	ug/kg	1640	1250	76	50-120	
Anthracene	ug/kg	1640	1270	77	50-120	
Benzo(a)anthracene	ug/kg	1640	1280	78	50-120	
Benzo(a)pyrene	ug/kg	1640	1290	79	50-120	
Benzo(b)fluoranthene	ug/kg	1640	1340	82	50-120	
Benzo(g,h,i)perylene	ug/kg	1640	1340	81	45-120	
Benzo(k)fluoranthene	ug/kg	1640	1280	78	50-120	
Benzoic Acid	ug/kg	1640	1180J	72	10-155	
Benzyl alcohol	ug/kg	1640	1300	79	45-120	
bis(2-Chloroethoxy)methane	ug/kg	1640	1300	80	45-120	
bis(2-Chloroethyl) ether	ug/kg	1640	1300	80	45-120	
bis(2-Chloroisopropyl) ether	ug/kg	1640	1330	81	40-120	
bis(2-Ethylhexyl)phthalate	ug/kg	1640	1340	82	50-125	
Butylbenzylphthalate	ug/kg	1640	1380	84	55-120	
Carbazole	ug/kg	1640	1240	76	50-120	
Chrysene	ug/kg	1640	1260	77	50-120	
Di-n-butylphthalate	ug/kg	1640	1370	84	50-120	
Di-n-octylphthalate	ug/kg	1640	1400	85	55-125	
Dibenz(a,h)anthracene	ug/kg	1640	1340	82	45-120	
Dibenzofuran	ug/kg	1640	1270	77	50-120	
Diethylphthalate	ug/kg	1640	1320	80	50-120	
Dimethylphthalate	ug/kg	1640	1270	77	50-120	
Fluoranthene	ug/kg	1640	1290	79	50-120	
Fluorene	ug/kg	1640	1280	78	50-120	
Hexachloro-1,3-butadiene	ug/kg	1640	1240	76	50-120	
Hexachlorobenzene	ug/kg	1640	1290	79	50-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

LABORATORY CONTROL SAMPLE: 3525698

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachlorocyclopentadiene	ug/kg	1640	1150	70	20-120	
Hexachloroethane	ug/kg	1640	1260	77	45-120	
Indeno(1,2,3-cd)pyrene	ug/kg	1640	1350	82	45-120	
Isophorone	ug/kg	1640	1310	80	45-120	
N-Nitroso-di-n-propylamine	ug/kg	1640	1360	83	45-120	
N-Nitrosodiphenylamine	ug/kg	1640	1280	78	50-120	
Naphthalene	ug/kg	1640	1240	76	50-120	
Nitrobenzene	ug/kg	1640	1330	81	45-120	
Pentachlorophenol	ug/kg	1640	1300J	79	25-135	
Phenanthrene	ug/kg	1640	1250	76	50-120	
Phenol	ug/kg	1640	1310	80	45-120	
Pyrene	ug/kg	1640	1220	75	55-120	
Pyridine	ug/kg	1640	950	58	25-120	
2,4,6-Tribromophenol (S)	%			84	35-120	
2-Fluorobiphenyl (S)	%			73	40-120	
2-Fluorophenol (S)	%			80	40-120	
Nitrobenzene-d5 (S)	%			82	30-120	
Phenol-d6 (S)	%			80	40-120	
Terphenyl-d14 (S)	%			77	45-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525699 3525700

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450758001	Result	Spike Conc.	Spike Conc.								
1,2,4-Trichlorobenzene	ug/kg	<170	2050	2050	1610	1660	78	81	38-120	3	26		
1,2-Dichlorobenzene	ug/kg	<161	2050	2050	1550	1610	75	79	35-120	4	31		
1,3-Dichlorobenzene	ug/kg	<158	2050	2050	1550	1590	75	78	35-120	3	31		
1,4-Dichlorobenzene	ug/kg	<156	2050	2050	1530	1600	74	78	40-120	4	30		
2,4,5-Trichlorophenol	ug/kg	<166	2050	2050	1650	1660	80	81	40-125	1	31		
2,4,6-Trichlorophenol	ug/kg	<150	2050	2050	1670	1730	81	85	40-120	4	31		
2,4-Dichlorophenol	ug/kg	<162	2050	2050	1640	1640	80	80	35-120	0	29		
2,4-Dimethylphenol	ug/kg	<118	2050	2050	1680	1720	82	84	20-120	2	32		
2,4-Dinitrophenol	ug/kg	<245	2050	2050	<246	<245	11	5	10-125		35	M1	
2,4-Dinitrotoluene	ug/kg	<182	2050	2050	1510	1510	74	74	25-135	0	32		
2,6-Dinitrotoluene	ug/kg	<158	2050	2050	1510	1530	74	75	20-140	1	25		
2-Chloronaphthalene	ug/kg	<171	2050	2050	1650	1690	80	82	35-120	2	28		
2-Chlorophenol	ug/kg	<165	2050	2050	1690	1760	82	86	30-120	4	31		
2-Methylnaphthalene	ug/kg	<164	2050	2050	1610	1650	78	80	35-120	2	28		
2-Methylphenol(o-Cresol)	ug/kg	<147	2050	2050	1730	1770	84	86	40-120	2	32		
2-Nitroaniline	ug/kg	<134	2050	2050	2130	2240	104	109	30-140	5	28		
2-Nitrophenol	ug/kg	<127	2050	2050	1310	1260	64	62	10-165	3	30		
3&4-Methylphenol(m&p Cresol)	ug/kg	<150	2050	2050	1770	1800	85	87	40-120	2	30		
3,3'-Dichlorobenzidine	ug/kg	<79.5	2050	2050	1310J	1280J	64	63	10-120		39		
3-Nitroaniline	ug/kg	<126	2050	2050	1600J	1550J	78	75	10-130		27		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525699 3525700												
Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	Max RPD	Qual
		60450758001	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
4,6-Dinitro-2-methylphenol	ug/kg	<140	2050	2050	521J	325J	25	16	10-130		30	
4-Bromophenylphenyl ether	ug/kg	<175	2050	2050	1700	1680	83	82	40-120	2	33	
4-Chloro-3-methylphenol	ug/kg	<170	2050	2050	1860	1820	90	89	35-125	2	30	
4-Chloroaniline	ug/kg	<127	2050	2050	1290J	1250J	63	61	10-120		33	
4-Chlorophenylphenyl ether	ug/kg	<174	2050	2050	1670	1680	81	82	40-120	1	33	
4-Nitroaniline	ug/kg	<139	2050	2050	1930	1950	94	95	15-125	1	47	
4-Nitrophenol	ug/kg	<119	2050	2050	1830J	1820J	89	89	20-140		35	
Acenaphthene	ug/kg	<174	2050	2050	1650	1670	80	81	40-120	1	23	
Acenaphthylene	ug/kg	<133	2050	2050	1600	1630	78	80	40-120	2	29	
Anthracene	ug/kg	<169	2050	2050	1630	1660	79	81	40-120	1	30	
Benzo(a)anthracene	ug/kg	<171	2050	2050	1760	1720	85	83	35-130	2	32	
Benzo(a)pyrene	ug/kg	<174	2050	2050	1700	1690	83	82	25-135	0	33	
Benzo(b)fluoranthene	ug/kg	<198	2050	2050	1710	1640	83	80	15-145	4	37	
Benzo(g,h,i)perylene	ug/kg	<141	2050	2050	1670	1700	81	83	25-120	2	41	
Benzo(k)fluoranthene	ug/kg	<174	2050	2050	1630	1650	79	80	35-125	1	32	
Benzoic Acid	ug/kg	<442	2050	2050	665J	549J	32	27	10-160		35	
Benzyl alcohol	ug/kg	<149	2050	2050	1710	1780	83	87	40-120	4	31	
bis(2-Chloroethoxy)methane	ug/kg	<161	2050	2050	1720	1750	84	85	35-120	2	29	
bis(2-Chloroethyl) ether	ug/kg	<163	2050	2050	1740	1840	85	90	35-120	5	32	
bis(2-Chloroisopropyl) ether	ug/kg	<175	2050	2050	1760	1830	85	89	30-150	4	29	
bis(2-Ethylhexyl)phthalate	ug/kg	<182	2050	2050	1870	1910	91	93	30-150	2	33	
Butylbenzylphthalate	ug/kg	<165	2050	2050	1980	1950	96	95	25-155	1	33	
Carbazole	ug/kg	<167	2050	2050	1630	1640	79	80	40-120	1	30	
Chrysene	ug/kg	<180	2050	2050	1700	1710	83	83	30-125	0	31	
Di-n-butylphthalate	ug/kg	<192	2050	2050	1850	1840	90	90	40-125	1	31	
Di-n-octylphthalate	ug/kg	<197	2050	2050	1950	1900	95	93	35-155	2	29	
Dibenz(a,h)anthracene	ug/kg	<146	2050	2050	1690	1690	82	83	30-125	0	35	
Dibenzofuran	ug/kg	<173	2050	2050	1630	1660	79	81	35-125	2	28	
Diethylphthalate	ug/kg	<185	2050	2050	1770	1790	86	87	40-120	1	31	
Dimethylphthalate	ug/kg	<168	2050	2050	1690	1710	82	83	40-120	1	30	
Fluoranthene	ug/kg	<178	2050	2050	1700	1720	82	84	30-130	1	32	
Fluorene	ug/kg	<172	2050	2050	1680	1690	82	82	40-120	1	32	
Hexachloro-1,3-butadiene	ug/kg	<174	2050	2050	1640	1630	80	79	40-120	1	27	
Hexachlorobenzene	ug/kg	<169	2050	2050	1690	1700	82	83	45-120	1	31	
Hexachlorocyclopentadiene	ug/kg	<498	2050	2050	<501	<500	0	0	10-125		61 M1	
Hexachloroethane	ug/kg	<148	2050	2050	1210	1220	59	59	30-120	1	34	
Indeno(1,2,3-cd)pyrene	ug/kg	<166	2050	2050	1680	1690	82	83	30-125	1	38	
Isophorone	ug/kg	<157	2050	2050	1750	1790	85	88	40-120	3	28	
N-Nitroso-di-n-propylamine	ug/kg	<154	2050	2050	1850	1940	90	94	35-120	5	30	
N-Nitrosodiphenylamine	ug/kg	<161	2050	2050	1690	1700	82	83	35-125	1	36	
Naphthalene	ug/kg	<174	2050	2050	1620	1660	79	81	25-125	3	31	
Nitrobenzene	ug/kg	<172	2050	2050	1670	1680	81	82	40-120	1	29	
Pentachlorophenol	ug/kg	<268	2050	2050	1430J	1310J	70	64	15-150		35	
Phenanthrene	ug/kg	<173	2050	2050	1640	1630	80	80	35-125	0	29	
Phenol	ug/kg	<152	2050	2050	1730	1790	84	87	30-120	3	29	

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525699 3525700													
Parameter	Units	60450758001 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Pyrene	ug/kg	<173	2050	2050	1680	1610	82	79	35-135		4	38	
Pyridine	ug/kg	<120	2050	2050	1120	1150	54	56	10-120		3	35	
2,4,6-Tribromophenol (S)	%						90	87	35-120				
2-Fluorobiphenyl (S)	%						77	77	40-120				
2-Fluorophenol (S)	%						85	86	40-120				
Nitrobenzene-d5 (S)	%						80	80	30-120				P3
Phenol-d6 (S)	%						86	88	40-120				
Terphenyl-d14 (S)	%						84	83	45-120				

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch:	890257	Analysis Method:	EPA 8270
QC Batch Method:	EPA 3546	Analysis Description:	8270 MSSV TPH ORO
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

METHOD BLANK: 3523489 Matrix: Solid  
 Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-DRO	mg/kg	<5.0	14.8	5.0	04/15/24 10:21	
TPH-ORO	mg/kg	<5.0	14.8	5.0	04/15/24 10:21	
2-Fluorobiphenyl (S)	%	97	50-120		04/15/24 10:21	
Nitrobenzene-d5 (S)	%	88	35-120		04/15/24 10:21	
Terphenyl-d14 (S)	%	96	45-120		04/15/24 10:21	

LABORATORY CONTROL SAMPLE: 3523490

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/kg	331	247	75	40-125	
2-Fluorobiphenyl (S)	%			82	50-120	
Nitrobenzene-d5 (S)	%			78	35-120	
Terphenyl-d14 (S)	%			80	45-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3523491 3523492

Parameter	Units	60450758001		3523491		3523492		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
TPH-DRO	mg/kg	27.5	411	409	353	339	79	76	40-125	4	38		
2-Fluorobiphenyl (S)	%						98	84	50-120				
Nitrobenzene-d5 (S)	%						94	85	35-120				
Terphenyl-d14 (S)	%						95	84	45-120				

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### QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch: 890391

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

METHOD BLANK: 3524113

Matrix: Solid

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Percent Moisture	%	<0.50	0.50	0.50	04/12/24 13:40	

SAMPLE DUPLICATE: 3524114

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.1	19.6	2	20	

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### QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch:	2266353	Analysis Method:	SM 2540G
QC Batch Method:	SM 2540 G	Analysis Description:	Total Solids 2540 G-2011
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004

METHOD BLANK: R4057559-1 Matrix: Solid  
 Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	0.00600J			04/13/24 13:14	J

LABORATORY CONTROL SAMPLE: R4057559-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	99.9	90.0-110	

SAMPLE DUPLICATE: R4057559-3

Parameter	Units	L1725086-13 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	86.2	87.8	1.80	10	

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### QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch: 2266358

Analysis Method: SM 2540G

QC Batch Method: SM 2540 G

Analysis Description: Total Solids 2540 G-2011

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450758005, 60450758006

METHOD BLANK: R4057571-1

Matrix: Solid

Associated Lab Samples: 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	0.00300			04/13/24 16:13	

LABORATORY CONTROL SAMPLE: R4057571-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	90.0-110	

SAMPLE DUPLICATE: R4057571-3

Parameter	Units	L1725199-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	87.9	88.2	0.363	10	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch:	890504	Analysis Method:	EPA 350.1
QC Batch Method:	EPA 350.1	Analysis Description:	350.1 Ammonia
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

METHOD BLANK: 3524512 Matrix: Solid  
 Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/kg	<0.76	0.95	0.76	04/16/24 15:33	

LABORATORY CONTROL SAMPLE: 3524513

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/kg	46.1	48.8	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3524514 3524516

Parameter	Units	60450758001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/kg	<0.95	67.1	58.4	60.5	51.6	90	88	80-120	16	20	

SAMPLE DUPLICATE: 3524515

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/kg	<0.95	2.4		20	

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QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch: 890751 Analysis Method: SM 4500-CN-E  
 QC Batch Method: SM 4500-CN-E Analysis Description: 4500CNE Cyanide, Total  
 Laboratory: Pace Analytical Services - Kansas City  
 Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

METHOD BLANK: 3525479 Matrix: Solid  
 Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cyanide	mg/kg	<0.12	0.15	0.12	04/18/24 12:05	

LABORATORY CONTROL SAMPLE: 3525480

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	3	3.0	101	72-115	

MATRIX SPIKE SAMPLE: 3525481

Parameter	Units	60450758001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	<0.16	3.7	2.8	71	10-128	

SAMPLE DUPLICATE: 3525482

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/kg	<0.16	<0.16		35	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

QC Batch:	890759	Analysis Method:	EPA 9056
QC Batch Method:	EPA 9056	Analysis Description:	9056 IC Anions
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

METHOD BLANK: 3525507 Matrix: Solid  
 Associated Lab Samples: 60450758001, 60450758002, 60450758003, 60450758004, 60450758005, 60450758006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrate as N	mg/kg	<5.6	9.9	5.6	04/19/24 11:36	
Nitrite as N	mg/kg	<5.2	9.9	5.2	04/19/24 11:36	

LABORATORY CONTROL SAMPLE: 3525508

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/kg	199	184	93	80-120	
Nitrite as N	mg/kg	199	210	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525509 3525510

Parameter	Units	60450713001		MS		MSD		% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result						
Nitrate as N	mg/kg	ND	499	499	18.0J	90.1	2	16	80-120		15	M1	
Nitrite as N	mg/kg	ND	499	499	295	410	57	80	80-120	33	15	M1, R1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3526959 3526960

Parameter	Units	60450758001		MS		MSD		% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result						
Nitrate as N	mg/kg	<6.9	245	245	246	252	99	101	80-120	2	15		
Nitrite as N	mg/kg	<6.4	245	245	287	293	115	118	80-120	2	15		

SAMPLE DUPLICATE: 3525511

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrate as N	mg/kg	<6.9	<6.9		15	
Nitrite as N	mg/kg	<6.4	<6.4		15	

SAMPLE DUPLICATE: 3526961

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrate as N	mg/kg	<6.9	<6.9		15	

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### QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

SAMPLE DUPLICATE: 3526961

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/kg	<6.4	<6.4		15	

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### QUALIFIERS

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

#### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

#### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

J Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

P3 Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

P9 RPD between the primary and confirmatory analysis exceeded 40%.

PH The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

R1 RPD value was outside control limits.

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: KC Water Treatment Sediment  
Pace Project No.: 60450758

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450758001	SD07/SD-1	3546/3665A	2268528	EPA 8081B	2268528
60450758002	SD06/SD-1	3546/3665A	2268528	EPA 8081B	2268528
60450758003	SD05/SD-1	3546/3665A	2268528	EPA 8081B	2268528
60450758004	SD04/SD-1	3546/3665A	2268528	EPA 8081B	2268528
60450758005	SD03/SD-1	3546/3665A	2268528	EPA 8081B	2268528
60450758006	DUP-03	3546/3665A	2268528	EPA 8081B	2268528
60450758001	SD07/SD-1	8151A	2266156	EPA 8151A	2266156
60450758002	SD06/SD-1	8151A	2266157	EPA 8151A	2266157
60450758003	SD05/SD-1	8151A	2266157	EPA 8151A	2266157
60450758004	SD04/SD-1	8151A	2266157	EPA 8151A	2266157
60450758005	SD03/SD-1	8151A	2266157	EPA 8151A	2266157
60450758006	DUP-03	8151A	2266157	EPA 8151A	2266157
60450758001	SD07/SD-1	EPA 3546	890827	EPA 8082	891018
60450758002	SD06/SD-1	EPA 3546	890827	EPA 8082	891018
60450758003	SD05/SD-1	EPA 3546	890827	EPA 8082	891018
60450758004	SD04/SD-1	EPA 3546	890827	EPA 8082	891018
60450758005	SD03/SD-1	EPA 3546	890827	EPA 8082	891018
60450758006	DUP-03	EPA 3546	890827	EPA 8082	891018
60450758001	SD07/SD-1	3051	2266490	EPA 6020B	2266490
60450758002	SD06/SD-1	3051	2266490	EPA 6020B	2266490
60450758003	SD05/SD-1	3051	2266490	EPA 6020B	2266490
60450758004	SD04/SD-1	3051	2266490	EPA 6020B	2266490
60450758005	SD03/SD-1	3051	2266490	EPA 6020B	2266490
60450758006	DUP-03	3051	2266490	EPA 6020B	2266490
60450758001	SD07/SD-1	7471A	2266261	EPA 7471B	2266261
60450758002	SD06/SD-1	7471A	2266261	EPA 7471B	2266261
60450758003	SD05/SD-1	7471A	2266261	EPA 7471B	2266261
60450758004	SD04/SD-1	7471A	2266261	EPA 7471B	2266261
60450758005	SD03/SD-1	7471A	2266261	EPA 7471B	2266261
60450758006	DUP-03	7471A	2266261	EPA 7471B	2266261
60450758001	SD07/SD-1	EPA 3546	890829	EPA 8270	891428
60450758002	SD06/SD-1	EPA 3546	890829	EPA 8270	891428
60450758003	SD05/SD-1	EPA 3546	890829	EPA 8270	891428
60450758004	SD04/SD-1	EPA 3546	890829	EPA 8270	891428
60450758005	SD03/SD-1	EPA 3546	890829	EPA 8270	891428
60450758006	DUP-03	EPA 3546	890829	EPA 8270	891428
60450758001	SD07/SD-1	EPA 3546	890257	EPA 8270	890364
60450758002	SD06/SD-1	EPA 3546	890257	EPA 8270	890364
60450758003	SD05/SD-1	EPA 3546	890257	EPA 8270	890364
60450758004	SD04/SD-1	EPA 3546	890257	EPA 8270	890364
60450758005	SD03/SD-1	EPA 3546	890257	EPA 8270	890364
60450758006	DUP-03	EPA 3546	890257	EPA 8270	890364
60450758001	SD07/SD-1	EPA 5035A/5030B	890390	EPA 8260C	890403
60450758002	SD06/SD-1	EPA 5035A/5030B	890390	EPA 8260C	890403
60450758003	SD05/SD-1	EPA 5035A/5030B	890390	EPA 8260C	890403

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KC Water Treatment Sediment

Pace Project No.: 60450758

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450758004	SD04/SD-1	EPA 5035A/5030B	890390	EPA 8260C	890403
60450758005	SD03/SD-1	EPA 5035A/5030B	890390	EPA 8260C	890403
60450758006	DUP-03	EPA 5035A/5030B	890390	EPA 8260C	890403
60450758001	SD07/SD-1	EPA 5035	890681	EPA 8260	890801
60450758002	SD06/SD-1	EPA 5035	890681	EPA 8260	890801
60450758003	SD05/SD-1	EPA 5035	890926	EPA 8260	890930
60450758004	SD04/SD-1	EPA 5035	890681	EPA 8260	890801
60450758005	SD03/SD-1	EPA 5035	890681	EPA 8260	890801
60450758006	DUP-03	EPA 5035	890681	EPA 8260	890801
60450758001	SD07/SD-1	ASTM D2974	890391		
60450758002	SD06/SD-1	ASTM D2974	890391		
60450758003	SD05/SD-1	ASTM D2974	890391		
60450758004	SD04/SD-1	ASTM D2974	890391		
60450758005	SD03/SD-1	ASTM D2974	890391		
60450758006	DUP-03	ASTM D2974	890391		
60450758001	SD07/SD-1	SM 2540 G	2266353	SM 2540G	2266353
60450758002	SD06/SD-1	SM 2540 G	2266353	SM 2540G	2266353
60450758003	SD05/SD-1	SM 2540 G	2266353	SM 2540G	2266353
60450758004	SD04/SD-1	SM 2540 G	2266353	SM 2540G	2266353
60450758005	SD03/SD-1	SM 2540 G	2266358	SM 2540G	2266358
60450758006	DUP-03	SM 2540 G	2266358	SM 2540G	2266358
60450758001	SD07/SD-1	EPA 350.1	890504	EPA 350.1	890813
60450758002	SD06/SD-1	EPA 350.1	890504	EPA 350.1	890813
60450758003	SD05/SD-1	EPA 350.1	890504	EPA 350.1	890813
60450758004	SD04/SD-1	EPA 350.1	890504	EPA 350.1	890813
60450758005	SD03/SD-1	EPA 350.1	890504	EPA 350.1	890813
60450758006	DUP-03	EPA 350.1	890504	EPA 350.1	890813
60450758001	SD07/SD-1	SM 4500-CN-E	890751	SM 4500-CN-E	891325
60450758002	SD06/SD-1	SM 4500-CN-E	890751	SM 4500-CN-E	891325
60450758003	SD05/SD-1	SM 4500-CN-E	890751	SM 4500-CN-E	891325
60450758004	SD04/SD-1	SM 4500-CN-E	890751	SM 4500-CN-E	891325
60450758005	SD03/SD-1	SM 4500-CN-E	890751	SM 4500-CN-E	891325
60450758006	DUP-03	SM 4500-CN-E	890751	SM 4500-CN-E	891325
60450758001	SD07/SD-1	EPA 9056	890759	EPA 9056	891554
60450758002	SD06/SD-1	EPA 9056	890759	EPA 9056	891554
60450758003	SD05/SD-1	EPA 9056	890759	EPA 9056	891554
60450758004	SD04/SD-1	EPA 9056	890759	EPA 9056	891554
60450758005	SD03/SD-1	EPA 9056	890759	EPA 9056	891554
60450758006	DUP-03	EPA 9056	890759	EPA 9056	891554

REPORT OF LABORATORY ANALYSIS

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DC#\_Title: ENV-FRM-LENE-0009\_Sample C

Revision: 2

Effective Date: 01/12/2022

WO#: 60450758



60450758

Client Name: Burns & McDonnell

Courier: FedEx  UPS  VIA  Clay  PEX  ECI  Pace  Xroads  Client  Other

Tracking #: \_\_\_\_\_ Pace Shipping Label Used? Yes  No

Custody Seal on Cooler/Box Present: Yes  No  Seals intact: Yes  No

Packing Material: Bubble Wrap  Bubble Bags  Foam  None  Other  2 p/c

Thermometer Used: T298 Type of Ice: Wet Blue  None

Cooler Temperature (°C): As-read 1.5 Corr. Factor -0.3 Corrected 1.2

Date and initials of person examining contents: 01.11.2024 KZ

Temperature should be above freezing to 6°C 3.6, 2.7 3.3, 2.4

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>SL</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks:		
Lead acetate strip turns dark? (Record only)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area: State: <u>MO</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

**Pace**  
 Pace Analytical Kansas  
 9608 Loiret Blvd., Lenexa, KS 66219

Company Name: BURNS & MCDONNELL  
 Street Address: 9400 Ward Parkway, Kansas City, MO 64114

Customer Project #: KC Water Treatment Sediment  
 Project Name:

Site Collection Info/Facility ID (as applicable):

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET  
 Data Deliverables:

[ ] Level II [ ] Level III [ ] Level IV  
 [ ] EQUIS

Date Results Requested:  
 [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other

Rush (Pre-approval required):  
 DW PWSID # or WW Permit # as applicable:

Field Filtered (if applicable): [ ] Yes [ ] No  
 Analysis:

\* Matrix Codes (Invert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab		Composite Start		Collected or Composite End		# Cont.	Res. Chlorine	
		Date	Time	Date	Time	Results	Units			
SD07/SD-1	SED			4/10/24	0850					
SD07/SD-1MS					0850					
SD07/SD-1MSD					0850					
SD06/SD-1					1010					
SD05/SD-1					1130					
SD04/SD-1					1310					
SD03/SD-1					1400					
DUP-03										

Additional Instructions from Pace:  
 6020/7471 Metals; Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Hg, Ni, K, Se, Ag, Na, Ti, V, Zn

Relinquished by/Company: (Signature)  
 Relinquished by/Company: (Signature)

Relinquished by/Company: (Signature)  
 Relinquished by/Company: (Signature)

Relinquished by/Company: (Signature)  
 Relinquished by/Company: (Signature)

Relinquished by/Company: (Signature)  
 Relinquished by/Company: (Signature)

Relinquished by/Company: (Signature)  
 Relinquished by/Company: (Signature)

**CHAIN-OF-CUSTODY Analytical Request Document**

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Contact/Report To: Justin Carter  
 Phone #: 816-333-9400  
 E-Mail: jcarter@burnsmcd.com  
 Cc E-Mail:

Invoice To: Accounts Payable  
 Invoice E-Mail: accountspayable@burnsmcd.com  
 Purchase Order # (if applicable): TBD  
 Quote #:

County / State origin of sample(s): Missouri

Reportable [ ] Yes [ ] No

Specify Container Size \*\*

Identify Container Preservative Type \*\*\*

Analysis Requested

Lab Use Only	4500CNE Cyanide, Total	601/7471 Metals *see list	8081 Pesticides	8082 GCS PCB SW	8260 MSV GRO	8260C MSV 5035A Low Level	8270 DR/ORO: 8270 SVOCs	8321 Herbicides	Ammonia: NO2/NO3; Percent Moisture	Preservation non-conformance identified for sample
Proj. Mgr: Alice Spiller	X	X	X	X	X	X	X	X	X	
AcctNum / Client ID:	X	X	X	X	X	X	X	X	X	
Table #:	X	X	X	X	X	X	X	X	X	
Profile / Template: 10409	X	X	X	X	X	X	X	X	X	
Prelog / Bottle Ord. ID: EZ 3093912	X	X	X	X	X	X	X	X	X	
Sample Comment										MS
										MSD

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers: Thermopaste ID: T298 Correction Factor (C): -0.3 Obs. Temp (C): 1.5 Corrected Temp (C): 1.2 On Ice: 1.2

Date/Time: 4/10/24 Tracking Number: 1635 3.3 / 2.4

Delivered by: [ ] In-Person [ ] Courier

Page: 1 of 2

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ENV-FRM-CORC-0019\_v02\_110123 ©



60450758

Scan QR Code for instructions

# Internal Transfer Chain of Custody

F113



Rush Multiplier \_\_\_\_\_ X  
 Samples Pre-Logged into eCOC

State Of Origin: MO  
 Cert. Needed:  Yes  No

Workorder: 60450758 Workorder Name: KC Water Treatment Sediment

Owner Received Date: 4/10/2024 Results Requested By: 4/25/2024

Report To		Subcontract To					Requested Analysis																																																																																			
Alice Spiller Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665		Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858					<table border="1"> <tr> <td>6020/7470 TAL Metals + Mo *see list</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>8081 Pesticides</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>8321 or 8151 Herbicides</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>												6020/7470 TAL Metals + Mo *see list																								8081 Pesticides																								8321 or 8151 Herbicides																							
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8321 or 8151 Herbicides																																																																																										
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers																																																																																				
						Unpreserved																																																																																				
1	SD07/SD-1	RQS	4/10/2024 08:50	60450758001	Solid	9																																																																																				
2	SD06/SD-1	PS	4/10/2024 10:10	60450758002	Solid	3																																																																																				
3	SD05/SD-1	PS	4/10/2024 11:30	60450758003	Solid	3																																																																																				
4	SD04/SD-1	PS	4/10/2024 13:10	60450758004	Solid	3																																																																																				
5	SD03/SD-1	PS	4/10/2024 14:00	60450758005	Solid	3																																																																																				
6	DUP-03	PS	4/10/2024 00:00	60450758006	Solid	3																																																																																				
Transfers		Released By	Date/Time	Received By	Date/Time	Comments																																																																																				
1		KCipt / [Signature]	04.11.2024 17:00	[Signature]		KS sample location: RECEIVING																																																																																				
2						*metals; Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Hg,Ni,K,Se,Ag,Na,Tl,V,Zn																																																																																				
3				Christopher J. Galligan	4/12/24 09:00																																																																																					
Cooler Temperature on Receipt		°C	Custody Seal	Y or N	Received on Ice	Y or N	Samples Intact					Y or N																																																																														

L1725144  
 LAB USE ONLY  
 -01  
 -02  
 -03  
 -04  
 -05  
 -06

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

3.3=3.4

Sample Receipt Checklist  
 COC Seal Present/Intact:  Y  N  
 COC Signed/Accurate:  Y  N  
 Bottles arrive intact:  Y  N  
 Correct bottles used:  Y  N  
 Sufficient volume sent:  Y  N  
 RA Screen <0.5 mR/hr:  Y  N  
 If Applicable  
 VOA Zero Headspace:  Y  N  
 Pres. Correct/Check:  Y  N  
 24 TOTAL



April 26, 2024

Justin Carter  
Burns & McDonnell  
9400 Ward Parkway  
Kansas City, MO 64114

RE: Project: KC Water Treatment Sediment  
Pace Project No.: 60450784

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on April 11, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller  
alice.spiller@pacelabs.com  
(913)599-5665  
PM Lab Management

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL  
Jacquelin Lee, Burns & McDonnell



## REPORT OF LABORATORY ANALYSIS

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### CERTIFICATIONS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

#### Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219  
 Arkansas Inorganic Drinking Water Certification  
 Arkansas Certification #: 88-00679  
 Colorado Division of Oil and Public Safety  
 Illinois Certification #: 2000302023-6  
 Iowa Certification #: 118  
 Kansas Field Laboratory Certification #: E-92587

Kansas/NELAP Certification #: E-10116  
 Louisiana Certification #: 03055  
 Missouri Inorganic Drinking Water Certification  
 Nevada Certification #: KS000212024-1  
 Oklahoma Certification #: 2023-073  
 Texas Certification #: T104704407-23-17  
 Utah Certification #: KS000212022-13

#### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122  
 Alabama Certification #: 40660  
 Alaska Certification 17-026  
 Arizona Certification #: AZ0612  
 Arkansas Certification #: 88-0469  
 California Certification #: 2932  
 Canada Certification #: 1461.01  
 Colorado Certification #: TN00003  
 Connecticut Certification #: PH-0197  
 DOD Certification: #1461.01  
 EPA# TN00003  
 Florida Certification #: E87487  
 Georgia DW Certification #: 923  
 Georgia Certification: NELAP  
 Idaho Certification #: TN00003  
 Illinois Certification #: 200008  
 Indiana Certification #: C-TN-01  
 Iowa Certification #: 364  
 Kansas Certification #: E-10277  
 Kentucky UST Certification #: 16  
 Kentucky Certification #: 90010  
 Louisiana Certification #: AI30792  
 Louisiana DW Certification #: LA180010  
 Maine Certification #: TN0002  
 Maryland Certification #: 324  
 Massachusetts Certification #: M-TN003  
 Michigan Certification #: 9958  
 Minnesota Certification #: 047-999-395  
 Mississippi Certification #: TN00003  
 Missouri Certification #: 340  
 Montana Certification #: CERT0086  
 Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34  
 New Hampshire Certification #: 2975  
 New Jersey Certification #: TN002  
 New Mexico DW Certification  
 New York Certification #: 11742  
 North Carolina Aquatic Toxicity Certification #: 41  
 North Carolina Drinking Water Certification #: 21704  
 North Carolina Environmental Certificate #: 375  
 North Dakota Certification #: R-140  
 Ohio VAP Certification #: CL0069  
 Oklahoma Certification #: 9915  
 Oregon Certification #: TN200002  
 Pennsylvania Certification #: 68-02979  
 Rhode Island Certification #: LAO00356  
 South Carolina Certification #: 84004  
 South Dakota Certification  
 Tennessee DW/Chem/Micro Certification #: 2006  
 Texas Mold Certification #: LAB0152  
 Texas Certification #: T 104704245-17-14  
 USDA Soil Permit #: P330-15-00234  
 Utah Certification #: TN00003  
 Virginia Certification #: VT2006  
 Vermont Dept. of Health: ID# VT-2006  
 Virginia Certification #: 460132  
 Washington Certification #: C847  
 West Virginia Certification #: 233  
 Wisconsin Certification #: 998093910  
 Wyoming UST Certification #: via A2LA 2926.01  
 A2LA-ISO 17025 Certification #: 1461.01  
 A2LA-ISO 17025 Certification #: 1461.02  
 AIHA-LAP/LLC EMLAP Certification #:100789

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: KC Water Treatment Sediment  
Pace Project No.: 60450784

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60450784001	SD02/SD-1	Solid	04/11/24 08:30	04/11/24 11:30
60450784002	SD01/SD-1	Solid	04/11/24 09:15	04/11/24 11:30

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60450784001	SD02/SD-1	EPA 8081B	MEW	23	PAN
		EPA 8151A	NWH	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	LD	23	PAN
		EPA 7471B	SDG	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 8260C	RAD	68	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMB	1	PAN
		EPA 350.1	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		EPA 9056	PL	2	PASI-K
		60450784002	SD01/SD-1	EPA 8081B	MEW
EPA 8151A	JMB			11	PAN
EPA 8082	JDS			8	PASI-K
EPA 6020B	LD			23	PAN
EPA 7471B	SDG			1	PAN
EPA 8270	WFG			73	PASI-K
EPA 8270	WDC			5	PASI-K
EPA 8260C	RAD			68	PASI-K
EPA 8260	RAD			4	PASI-K
ASTM D2974	DWC			1	PASI-K
SM 2540G	CMB			1	PAN
EPA 350.1	RKA			1	PASI-K
SM 4500-CN-E	ECF			1	PASI-K
EPA 9056	PL			2	PASI-K

PAN = Pace National - Mt. Juliet

PASI-K = Pace Analytical Services - Kansas City

### REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** EPA 8081B

**Description:** Pesticides (GC) 8081B

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

**General Information:**

2 samples were analyzed for EPA 8081B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** EPA 8151A

**Description:** Chlorinated Herb. (GC) 8151A

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

### General Information:

2 samples were analyzed for EPA 8151A by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 2266157

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): L1725334-01

R1: RPD value was outside control limits.

- MSD (Lab ID: R4060023-4)
  - 2,4,5-T
  - 2,4,5-TP (Silvex)
  - 2,4-DB
  - Dichlorprop
  - Dinoseb

QC Batch: 2270175

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): L1727573-12

R1: RPD value was outside control limits.

- MSD (Lab ID: R4060961-4)
  - 2,4,5-T
  - 2,4,5-TP (Silvex)
  - 2,4-D
  - 2,4-DB
  - 2-(2-methyl-4-chlorophenoxy)pa

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** EPA 8151A

**Description:** Chlorinated Herb. (GC) 8151A

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

QC Batch: 2270175

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): L1727573-12

R1: RPD value was outside control limits.

- Dicamba
- Dichlorprop
- Dinoseb

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** EPA 8082

**Description:** 8082 GCS PCB SW

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

**General Information:**

2 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** EPA 6020B

**Description:** Metals (ICPMS) 6020B

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

**General Information:**

2 samples were analyzed for EPA 6020B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 2266780

B: Analyte was detected in the associated method blank.

- R4060691-1 (Lab ID: R4060691-1)
- Antimony

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

Analyte Comments:

QC Batch: 2266780

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: R4060691-5)
  - Beryllium
- MSD (Lab ID: R4060691-6)
  - Beryllium

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** EPA 7471B

**Description:** Mercury 7471B

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

**General Information:**

2 samples were analyzed for EPA 7471B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** EPA 8270

**Description:** 8270 MSSV Semivolatiles

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

**General Information:**

2 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890829

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450758001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3525699)
  - Hexachlorocyclopentadiene
- MSD (Lab ID: 3525700)
  - 2,4-Dinitrophenol
  - Hexachlorocyclopentadiene

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** EPA 8270

**Description:** 8270 MSSV Semivolatiles

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

Analyte Comments:

QC Batch: 890829

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- SD01/SD-1 (Lab ID: 60450784002)
  - Nitrobenzene-d5 (S)

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** EPA 8270

**Description:** 8270 MSSV DRO/ORO

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

**General Information:**

2 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** EPA 8260C

**Description:** 8260C MSV 5035A Low Level

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

**General Information:**

2 samples were analyzed for EPA 8260C by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 5035A/5030B with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** EPA 8260

**Description:** 8260 MSV GRO and Oxygenates

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

**General Information:**

2 samples were analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 5035 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** SM 2540G

**Description:** Total Solids 2540 G-2011

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

**General Information:**

2 samples were analyzed for SM 2540G by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** EPA 350.1

**Description:** 350.1 Ammonia

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

**General Information:**

2 samples were analyzed for EPA 350.1 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

---

**Method:** SM 4500-CN-E

**Description:** 4500CNE Cyanide, Total

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

**General Information:**

2 samples were analyzed for SM 4500-CN-E by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with SM 4500-CN-E with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

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**Method:** EPA 9056

**Description:** 9056 IC Anions

**Client:** BURNS & MCDONNELL

**Date:** April 26, 2024

### General Information:

2 samples were analyzed for EPA 9056 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 9056 with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890759

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450713001,60450758001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3525509)
  - Nitrate as N
  - Nitrite as N
- MSD (Lab ID: 3525510)
  - Nitrate as N

R1: RPD value was outside control limits.

- MSD (Lab ID: 3525510)
  - Nitrite as N

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD02/SD-1 Lab ID: 60450784001 Collected: 04/11/24 08:30 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00601	mg/kg	0.0320	0.00601	1	04/17/24 06:14	04/17/24 14:18	309-00-2	
alpha-BHC	<0.00588	mg/kg	0.0320	0.00588	1	04/17/24 06:14	04/17/24 14:18	319-84-6	
beta-BHC	<0.00606	mg/kg	0.0320	0.00606	1	04/17/24 06:14	04/17/24 14:18	319-85-7	
delta-BHC	<0.00553	mg/kg	0.0320	0.00553	1	04/17/24 06:14	04/17/24 14:18	319-86-8	
gamma-BHC (Lindane)	<0.00550	mg/kg	0.0320	0.00550	1	04/17/24 06:14	04/17/24 14:18	58-89-9	
Chlordane (Technical)	<0.165	mg/kg	0.480	0.165	1	04/17/24 06:14	04/17/24 14:18	57-74-9	
4,4'-DDD	<0.00592	mg/kg	0.0320	0.00592	1	04/17/24 06:14	04/17/24 14:18	72-54-8	
4,4'-DDE	<0.00585	mg/kg	0.0320	0.00585	1	04/17/24 06:14	04/17/24 14:18	72-55-9	
4,4'-DDT	<0.0100	mg/kg	0.0320	0.0100	1	04/17/24 06:14	04/17/24 14:18	50-29-3	
Dieldrin	<0.00550	mg/kg	0.0320	0.00550	1	04/17/24 06:14	04/17/24 14:18	60-57-1	
Endosulfan I	<0.00580	mg/kg	0.0320	0.00580	1	04/17/24 06:14	04/17/24 14:18	959-98-8	
Endosulfan II	<0.00536	mg/kg	0.0320	0.00536	1	04/17/24 06:14	04/17/24 14:18	33213-65-9	
Endosulfan sulfate	<0.00582	mg/kg	0.0320	0.00582	1	04/17/24 06:14	04/17/24 14:18	1031-07-8	
Endrin	<0.00560	mg/kg	0.0320	0.00560	1	04/17/24 06:14	04/17/24 14:18	72-20-8	
Endrin aldehyde	<0.00542	mg/kg	0.0320	0.00542	1	04/17/24 06:14	04/17/24 14:18	7421-93-4	
Endrin ketone	<0.0114	mg/kg	0.0320	0.0114	1	04/17/24 06:14	04/17/24 14:18	53494-70-5	
Hexachlorobenzene	<0.00553	mg/kg	0.0320	0.00553	1	04/17/24 06:14	04/17/24 14:18	118-74-1	
Heptachlor	<0.00684	mg/kg	0.0320	0.00684	1	04/17/24 06:14	04/17/24 14:18	76-44-8	
Heptachlor epoxide	<0.00542	mg/kg	0.0320	0.00542	1	04/17/24 06:14	04/17/24 14:18	1024-57-3	
Methoxychlor	<0.00774	mg/kg	0.0320	0.00774	1	04/17/24 06:14	04/17/24 14:18	72-43-5	
Toxaphene	<0.198	mg/kg	0.640	0.198	1	04/17/24 06:14	04/17/24 14:18	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	99.5	%	10.0-135		1	04/17/24 06:14	04/17/24 14:18	2051-24-3	
Tetrachloro-m-xylene (S)	106	%	10.0-139		1	04/17/24 06:14	04/17/24 14:18	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.0112	mg/kg	0.112	0.0112	1	04/17/24 14:29	04/19/24 17:53	94-75-7	
Dalapon	<0.0181	mg/kg	0.112	0.0181	1	04/17/24 14:29	04/19/24 17:53	127-20-8	
2,4-DB	<0.0475	mg/kg	0.112	0.0475	1	04/17/24 14:29	04/19/24 17:53	94-82-6	
Dicamba	<0.0251	mg/kg	0.112	0.0251	1	04/17/24 14:29	04/19/24 17:53	1918-00-9	
Dichlorprop	<0.0392	mg/kg	0.112	0.0392	1	04/17/24 14:29	04/19/24 17:53	120-36-5	
Dinoseb	<0.0111	mg/kg	0.112	0.0111	1	04/17/24 14:29	04/19/24 17:53	88-85-7	
MCPA	<0.708	mg/kg	10.4	0.708	1	04/17/24 14:29	04/19/24 17:53	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.587	mg/kg	10.4	0.587	1	04/17/24 14:29	04/19/24 17:53	93-65-2	
2,4,5-T	<0.0136	mg/kg	0.112	0.0136	1	04/17/24 14:29	04/19/24 17:53	93-76-5	
2,4,5-TP (Silvex)	<0.0171	mg/kg	0.112	0.0171	1	04/17/24 14:29	04/19/24 17:53	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	60.5	%	22.0-132		1	04/17/24 14:29	04/19/24 17:53	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<18.6	ug/kg	69.0	18.6	1	04/17/24 20:36	04/19/24 01:40	12674-11-2	
PCB-1221 (Aroclor 1221)	<23.2	ug/kg	69.0	23.2	1	04/17/24 20:36	04/19/24 01:40	11104-28-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD02/SD-1 Lab ID: 60450784001 Collected: 04/11/24 08:30 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<23.2	ug/kg	69.0	23.2	1	04/17/24 20:36	04/19/24 01:40	11141-16-5	
PCB-1242 (Aroclor 1242)	<23.2	ug/kg	69.0	23.2	1	04/17/24 20:36	04/19/24 01:40	53469-21-9	
PCB-1248 (Aroclor 1248)	<23.2	ug/kg	69.0	23.2	1	04/17/24 20:36	04/19/24 01:40	12672-29-6	
PCB-1254 (Aroclor 1254)	<23.2	ug/kg	69.0	23.2	1	04/17/24 20:36	04/19/24 01:40	11097-69-1	
PCB-1260 (Aroclor 1260)	<23.2	ug/kg	69.0	23.2	1	04/17/24 20:36	04/19/24 01:40	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	93	%	20-120		1	04/17/24 20:36	04/19/24 01:40	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	7240	mg/kg	80.0	11.0	5	04/15/24 09:26	04/22/24 20:14	7429-90-5	
Antimony	0.498J	mg/kg	4.80	0.265	5	04/15/24 09:26	04/22/24 20:14	7440-36-0	B,J
Arsenic	4.43	mg/kg	1.60	0.160	5	04/15/24 09:26	04/22/24 20:14	7440-38-2	
Barium	50.8	mg/kg	4.00	0.243	5	04/15/24 09:26	04/22/24 20:14	7440-39-3	
Beryllium	0.591J	mg/kg	4.00	0.221	5	04/15/24 09:26	04/22/24 20:14	7440-41-7	J
Cadmium	0.150J	mg/kg	1.60	0.137	5	04/15/24 09:26	04/22/24 20:14	7440-43-9	J
Calcium	188000	mg/kg	800	121	5	04/15/24 09:26	04/22/24 20:14	7440-70-2	
Chromium	11.4	mg/kg	8.00	0.473	5	04/15/24 09:26	04/22/24 20:14	7440-47-3	
Cobalt	3.97	mg/kg	1.60	0.0739	5	04/15/24 09:26	04/22/24 20:14	7440-48-4	
Copper	8.55	mg/kg	8.00	0.211	5	04/15/24 09:26	04/22/24 20:14	7440-50-8	
Iron	11200	mg/kg	80.0	14.3	5	04/15/24 09:26	04/22/24 20:14	7439-89-6	
Lead	5.85	mg/kg	3.20	0.158	5	04/15/24 09:26	04/22/24 20:14	7439-92-1	
Magnesium	6050	mg/kg	800	73.4	5	04/15/24 09:26	04/22/24 20:14	7439-95-4	
Manganese	414	mg/kg	4.00	0.429	5	04/15/24 09:26	04/22/24 20:14	7439-96-5	
Molybdenum	1.09J	mg/kg	4.00	0.162	5	04/15/24 09:26	04/22/24 20:14	7439-98-7	J
Nickel	13.7	mg/kg	4.00	0.315	5	04/15/24 09:26	04/22/24 20:14	7440-02-0	
Potassium	2080	mg/kg	800	109	5	04/15/24 09:26	04/22/24 20:14	7440-09-7	
Selenium	0.522J	mg/kg	4.00	0.288	5	04/15/24 09:26	04/22/24 20:14	7782-49-2	J
Silver	<0.138	mg/kg	0.800	0.138	5	04/15/24 09:26	04/22/24 20:14	7440-22-4	
Sodium	214J	mg/kg	800	122	5	04/15/24 09:26	04/22/24 20:14	7440-23-5	J
Thallium	0.243J	mg/kg	3.20	0.104	5	04/15/24 09:26	04/22/24 20:14	7440-28-0	J
Vanadium	14.1	mg/kg	4.00	0.299	5	04/15/24 09:26	04/22/24 20:14	7440-62-2	
Zinc	31.4J	mg/kg	40.0	1.18	5	04/15/24 09:26	04/22/24 20:14	7440-66-6	J
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0288	mg/kg	0.0640	0.0288	1	04/12/24 23:20	04/13/24 18:25	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<148	ug/kg	689	148	1	04/17/24 09:39	04/22/24 05:41	83-32-9	
Acenaphthylene	<113	ug/kg	689	113	1	04/17/24 09:39	04/22/24 05:41	208-96-8	
Anthracene	<144	ug/kg	689	144	1	04/17/24 09:39	04/22/24 05:41	120-12-7	
Benzo(a)anthracene	<146	ug/kg	689	146	1	04/17/24 09:39	04/22/24 05:41	56-55-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD02/SD-1 Lab ID: 60450784001 Collected: 04/11/24 08:30 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<148	ug/kg	689	148	1	04/17/24 09:39	04/22/24 05:41	50-32-8	
Benzo(b)fluoranthene	<168	ug/kg	689	168	1	04/17/24 09:39	04/22/24 05:41	205-99-2	
Benzo(g,h,i)perylene	<120	ug/kg	689	120	1	04/17/24 09:39	04/22/24 05:41	191-24-2	
Benzo(k)fluoranthene	<148	ug/kg	689	148	1	04/17/24 09:39	04/22/24 05:41	207-08-9	
Benzoic Acid	<376	ug/kg	3490	376	1	04/17/24 09:39	04/22/24 05:41	65-85-0	
Benzyl alcohol	<127	ug/kg	1380	127	1	04/17/24 09:39	04/22/24 05:41	100-51-6	
4-Bromophenylphenyl ether	<149	ug/kg	689	149	1	04/17/24 09:39	04/22/24 05:41	101-55-3	
Butylbenzylphthalate	<140	ug/kg	689	140	1	04/17/24 09:39	04/22/24 05:41	85-68-7	
Carbazole	<142	ug/kg	689	142	1	04/17/24 09:39	04/22/24 05:41	86-74-8	
4-Chloro-3-methylphenol	<144	ug/kg	1380	144	1	04/17/24 09:39	04/22/24 05:41	59-50-7	
4-Chloroaniline	<108	ug/kg	1380	108	1	04/17/24 09:39	04/22/24 05:41	106-47-8	
bis(2-Chloroethoxy)methane	<137	ug/kg	689	137	1	04/17/24 09:39	04/22/24 05:41	111-91-1	
bis(2-Chloroethyl) ether	<139	ug/kg	689	139	1	04/17/24 09:39	04/22/24 05:41	111-44-4	
bis(2-Chloroisopropyl) ether	<149	ug/kg	689	149	1	04/17/24 09:39	04/22/24 05:41	108-60-1	
2-Chloronaphthalene	<145	ug/kg	689	145	1	04/17/24 09:39	04/22/24 05:41	91-58-7	
2-Chlorophenol	<141	ug/kg	689	141	1	04/17/24 09:39	04/22/24 05:41	95-57-8	
4-Chlorophenylphenyl ether	<148	ug/kg	689	148	1	04/17/24 09:39	04/22/24 05:41	7005-72-3	
Chrysene	<153	ug/kg	689	153	1	04/17/24 09:39	04/22/24 05:41	218-01-9	
Dibenz(a,h)anthracene	<124	ug/kg	689	124	1	04/17/24 09:39	04/22/24 05:41	53-70-3	
Dibenzofuran	<147	ug/kg	689	147	1	04/17/24 09:39	04/22/24 05:41	132-64-9	
1,2-Dichlorobenzene	<137	ug/kg	689	137	1	04/17/24 09:39	04/22/24 05:41	95-50-1	
1,3-Dichlorobenzene	<135	ug/kg	689	135	1	04/17/24 09:39	04/22/24 05:41	541-73-1	
1,4-Dichlorobenzene	<133	ug/kg	689	133	1	04/17/24 09:39	04/22/24 05:41	106-46-7	
3,3'-Dichlorobenzidine	<67.6	ug/kg	1380	67.6	1	04/17/24 09:39	04/22/24 05:41	91-94-1	
2,4-Dichlorophenol	<138	ug/kg	689	138	1	04/17/24 09:39	04/22/24 05:41	120-83-2	
Diethylphthalate	<157	ug/kg	689	157	1	04/17/24 09:39	04/22/24 05:41	84-66-2	
2,4-Dimethylphenol	<100	ug/kg	689	100	1	04/17/24 09:39	04/22/24 05:41	105-67-9	
Dimethylphthalate	<143	ug/kg	689	143	1	04/17/24 09:39	04/22/24 05:41	131-11-3	
Di-n-butylphthalate	<163	ug/kg	689	163	1	04/17/24 09:39	04/22/24 05:41	84-74-2	
4,6-Dinitro-2-methylphenol	<119	ug/kg	3490	119	1	04/17/24 09:39	04/22/24 05:41	534-52-1	
2,4-Dinitrophenol	<208	ug/kg	3490	208	1	04/17/24 09:39	04/22/24 05:41	51-28-5	
2,4-Dinitrotoluene	<155	ug/kg	689	155	1	04/17/24 09:39	04/22/24 05:41	121-14-2	
2,6-Dinitrotoluene	<134	ug/kg	689	134	1	04/17/24 09:39	04/22/24 05:41	606-20-2	
Di-n-octylphthalate	<168	ug/kg	689	168	1	04/17/24 09:39	04/22/24 05:41	117-84-0	
bis(2-Ethylhexyl)phthalate	<155	ug/kg	689	155	1	04/17/24 09:39	04/22/24 05:41	117-81-7	
Fluoranthene	<152	ug/kg	689	152	1	04/17/24 09:39	04/22/24 05:41	206-44-0	
Fluorene	<147	ug/kg	689	147	1	04/17/24 09:39	04/22/24 05:41	86-73-7	
Hexachloro-1,3-butadiene	<148	ug/kg	689	148	1	04/17/24 09:39	04/22/24 05:41	87-68-3	
Hexachlorobenzene	<144	ug/kg	689	144	1	04/17/24 09:39	04/22/24 05:41	118-74-1	
Hexachlorocyclopentadiene	<424	ug/kg	689	424	1	04/17/24 09:39	04/22/24 05:41	77-47-4	
Hexachloroethane	<126	ug/kg	689	126	1	04/17/24 09:39	04/22/24 05:41	67-72-1	
Indeno(1,2,3-cd)pyrene	<141	ug/kg	689	141	1	04/17/24 09:39	04/22/24 05:41	193-39-5	
Isophorone	<133	ug/kg	689	133	1	04/17/24 09:39	04/22/24 05:41	78-59-1	
2-Methylnaphthalene	<140	ug/kg	689	140	1	04/17/24 09:39	04/22/24 05:41	91-57-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD02/SD-1 Lab ID: 60450784001 Collected: 04/11/24 08:30 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<125	ug/kg	689	125	1	04/17/24 09:39	04/22/24 05:41	95-48-7	
3&4-Methylphenol(m&p Cresol)	<128	ug/kg	689	128	1	04/17/24 09:39	04/22/24 05:41	15831-10-4	
Naphthalene	<148	ug/kg	689	148	1	04/17/24 09:39	04/22/24 05:41	91-20-3	
2-Nitroaniline	<114	ug/kg	1380	114	1	04/17/24 09:39	04/22/24 05:41	88-74-4	
3-Nitroaniline	<107	ug/kg	1380	107	1	04/17/24 09:39	04/22/24 05:41	99-09-2	
4-Nitroaniline	<118	ug/kg	1380	118	1	04/17/24 09:39	04/22/24 05:41	100-01-6	
Nitrobenzene	<146	ug/kg	689	146	1	04/17/24 09:39	04/22/24 05:41	98-95-3	
2-Nitrophenol	<108	ug/kg	689	108	1	04/17/24 09:39	04/22/24 05:41	88-75-5	
4-Nitrophenol	<101	ug/kg	3490	101	1	04/17/24 09:39	04/22/24 05:41	100-02-7	
N-Nitroso-di-n-propylamine	<131	ug/kg	689	131	1	04/17/24 09:39	04/22/24 05:41	621-64-7	
N-Nitrosodiphenylamine	<137	ug/kg	689	137	1	04/17/24 09:39	04/22/24 05:41	86-30-6	
Pentachlorophenol	<228	ug/kg	3490	228	1	04/17/24 09:39	04/22/24 05:41	87-86-5	
Phenanthrene	<147	ug/kg	689	147	1	04/17/24 09:39	04/22/24 05:41	85-01-8	
Phenol	<130	ug/kg	689	130	1	04/17/24 09:39	04/22/24 05:41	108-95-2	
Pyrene	<147	ug/kg	689	147	1	04/17/24 09:39	04/22/24 05:41	129-00-0	
Pyridine	<102	ug/kg	689	102	1	04/17/24 09:39	04/22/24 05:41	110-86-1	
1,2,4-Trichlorobenzene	<144	ug/kg	689	144	1	04/17/24 09:39	04/22/24 05:41	120-82-1	
2,4,5-Trichlorophenol	<141	ug/kg	689	141	1	04/17/24 09:39	04/22/24 05:41	95-95-4	
2,4,6-Trichlorophenol	<127	ug/kg	689	127	1	04/17/24 09:39	04/22/24 05:41	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	75	%	30-120		1	04/17/24 09:39	04/22/24 05:41	4165-60-0	
2-Fluorobiphenyl (S)	68	%	40-120		1	04/17/24 09:39	04/22/24 05:41	321-60-8	
Terphenyl-d14 (S)	72	%	45-120		1	04/17/24 09:39	04/22/24 05:41	1718-51-0	
Phenol-d6 (S)	75	%	40-120		1	04/17/24 09:39	04/22/24 05:41	13127-88-3	
2-Fluorophenol (S)	74	%	40-120		1	04/17/24 09:39	04/22/24 05:41	367-12-4	
2,4,6-Tribromophenol (S)	77	%	35-120		1	04/17/24 09:39	04/22/24 05:41	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	132	mg/kg	31.5	10.7	1	04/11/24 16:15	04/15/24 14:54		
TPH-DRO	45.4	mg/kg	31.5	10.7	1	04/11/24 16:15	04/15/24 14:54		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	80	%	35-120		1	04/11/24 16:15	04/15/24 14:54	4165-60-0	
2-Fluorobiphenyl (S)	84	%	50-120		1	04/11/24 16:15	04/15/24 14:54	321-60-8	
Terphenyl-d14 (S)	85	%	45-120		1	04/11/24 16:15	04/15/24 14:54	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<240	ug/kg	252	240	1	04/12/24 09:46	04/12/24 15:36	67-64-1	
Benzene	<1.8	ug/kg	20.0	1.8	1	04/12/24 09:46	04/12/24 15:36	71-43-2	
Bromobenzene	<2.5	ug/kg	20.0	2.5	1	04/12/24 09:46	04/12/24 15:36	108-86-1	
Bromochloromethane	<3.0	ug/kg	20.0	3.0	1	04/12/24 09:46	04/12/24 15:36	74-97-5	
Bromodichloromethane	<3.4	ug/kg	51.9	3.4	1	04/12/24 09:46	04/12/24 15:36	75-27-4	
Bromoform	<1.6	ug/kg	51.9	1.6	1	04/12/24 09:46	04/12/24 15:36	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD02/SD-1 Lab ID: 60450784001 Collected: 04/11/24 08:30 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<24.7	ug/kg	51.9	24.7	1	04/12/24 09:46	04/12/24 15:36	74-83-9	
2-Butanone (MEK)	<127	ug/kg	252	127	1	04/12/24 09:46	04/12/24 15:36	78-93-3	
n-Butylbenzene	<1.9	ug/kg	20.0	1.9	1	04/12/24 09:46	04/12/24 15:36	104-51-8	
sec-Butylbenzene	<2.0	ug/kg	20.0	2.0	1	04/12/24 09:46	04/12/24 15:36	135-98-8	
tert-Butylbenzene	<1.3	ug/kg	20.0	1.3	1	04/12/24 09:46	04/12/24 15:36	98-06-6	
Carbon disulfide	31.7	ug/kg	20.0	9.2	1	04/12/24 09:46	04/12/24 15:36	75-15-0	
Carbon tetrachloride	<6.7	ug/kg	20.0	6.7	1	04/12/24 09:46	04/12/24 15:36	56-23-5	
Chlorobenzene	<1.2	ug/kg	20.0	1.2	1	04/12/24 09:46	04/12/24 15:36	108-90-7	
Chloroethane	<33.1	ug/kg	99.9	33.1	1	04/12/24 09:46	04/12/24 15:36	75-00-3	
Chloroform	<7.4	ug/kg	20.0	7.4	1	04/12/24 09:46	04/12/24 15:36	67-66-3	
Chloromethane	<4.9	ug/kg	51.9	4.9	1	04/12/24 09:46	04/12/24 15:36	74-87-3	
2-Chlorotoluene	<2.8	ug/kg	20.0	2.8	1	04/12/24 09:46	04/12/24 15:36	95-49-8	
4-Chlorotoluene	<1.6	ug/kg	20.0	1.6	1	04/12/24 09:46	04/12/24 15:36	106-43-4	
1,2-Dibromo-3-chloropropane	<13.3	ug/kg	51.9	13.3	1	04/12/24 09:46	04/12/24 15:36	96-12-8	
Dibromochloromethane	<1.2	ug/kg	20.0	1.2	1	04/12/24 09:46	04/12/24 15:36	124-48-1	
1,2-Dibromoethane (EDB)	<2.1	ug/kg	20.0	2.1	1	04/12/24 09:46	04/12/24 15:36	106-93-4	
Dibromomethane	<5.9	ug/kg	20.0	5.9	1	04/12/24 09:46	04/12/24 15:36	74-95-3	
1,2-Dichlorobenzene	<3.3	ug/kg	20.0	3.3	1	04/12/24 09:46	04/12/24 15:36	95-50-1	
1,3-Dichlorobenzene	<2.5	ug/kg	20.0	2.5	1	04/12/24 09:46	04/12/24 15:36	541-73-1	
1,4-Dichlorobenzene	<3.5	ug/kg	20.0	3.5	1	04/12/24 09:46	04/12/24 15:36	106-46-7	
Dichlorodifluoromethane	<3.8	ug/kg	51.9	3.8	1	04/12/24 09:46	04/12/24 15:36	75-71-8	
1,1-Dichloroethane	<4.6	ug/kg	20.0	4.6	1	04/12/24 09:46	04/12/24 15:36	75-34-3	
1,2-Dichloroethane	<3.9	ug/kg	20.0	3.9	1	04/12/24 09:46	04/12/24 15:36	107-06-2	
1,2-Dichloroethene (Total)	<7.6	ug/kg	40.0	7.6	1	04/12/24 09:46	04/12/24 15:36	540-59-0	
1,1-Dichloroethene	<8.1	ug/kg	20.0	8.1	1	04/12/24 09:46	04/12/24 15:36	75-35-4	
cis-1,2-Dichloroethene	<3.7	ug/kg	20.0	3.7	1	04/12/24 09:46	04/12/24 15:36	156-59-2	
trans-1,2-Dichloroethene	<4.4	ug/kg	20.0	4.4	1	04/12/24 09:46	04/12/24 15:36	156-60-5	
1,2-Dichloropropane	<4.2	ug/kg	20.0	4.2	1	04/12/24 09:46	04/12/24 15:36	78-87-5	
1,3-Dichloropropane	<0.78	ug/kg	20.0	0.78	1	04/12/24 09:46	04/12/24 15:36	142-28-9	
2,2-Dichloropropane	<6.0	ug/kg	20.0	6.0	1	04/12/24 09:46	04/12/24 15:36	594-20-7	
1,1-Dichloropropene	<4.3	ug/kg	20.0	4.3	1	04/12/24 09:46	04/12/24 15:36	563-58-6	
cis-1,3-Dichloropropene	<3.0	ug/kg	20.0	3.0	1	04/12/24 09:46	04/12/24 15:36	10061-01-5	
trans-1,3-Dichloropropene	<2.4	ug/kg	20.0	2.4	1	04/12/24 09:46	04/12/24 15:36	10061-02-6	
Ethylbenzene	<3.5	ug/kg	20.0	3.5	1	04/12/24 09:46	04/12/24 15:36	100-41-4	
Hexachloro-1,3-butadiene	<3.6	ug/kg	20.0	3.6	1	04/12/24 09:46	04/12/24 15:36	87-68-3	
2-Hexanone	<41.6	ug/kg	252	41.6	1	04/12/24 09:46	04/12/24 15:36	591-78-6	
Isopropylbenzene (Cumene)	<1.3	ug/kg	20.0	1.3	1	04/12/24 09:46	04/12/24 15:36	98-82-8	
p-Isopropyltoluene	<1.7	ug/kg	20.0	1.7	1	04/12/24 09:46	04/12/24 15:36	99-87-6	
Methylene Chloride	<77.5	ug/kg	99.9	77.5	1	04/12/24 09:46	04/12/24 15:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	<28.0	ug/kg	252	28.0	1	04/12/24 09:46	04/12/24 15:36	108-10-1	
Methyl-tert-butyl ether	<3.8	ug/kg	20.0	3.8	1	04/12/24 09:46	04/12/24 15:36	1634-04-4	
Naphthalene	<2.9	ug/kg	40.0	2.9	1	04/12/24 09:46	04/12/24 15:36	91-20-3	
n-Propylbenzene	<2.4	ug/kg	20.0	2.4	1	04/12/24 09:46	04/12/24 15:36	103-65-1	
Styrene	<1.6	ug/kg	20.0	1.6	1	04/12/24 09:46	04/12/24 15:36	100-42-5	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD02/SD-1 Lab ID: 60450784001 Collected: 04/11/24 08:30 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<2.8	ug/kg	20.0	2.8	1	04/12/24 09:46	04/12/24 15:36	630-20-6	
1,1,2,2-Tetrachloroethane	<2.8	ug/kg	20.0	2.8	1	04/12/24 09:46	04/12/24 15:36	79-34-5	
Tetrachloroethene	<2.1	ug/kg	20.0	2.1	1	04/12/24 09:46	04/12/24 15:36	127-18-4	
Toluene	<17.8	ug/kg	79.9	17.8	1	04/12/24 09:46	04/12/24 15:36	108-88-3	
1,2,3-Trichlorobenzene	<2.3	ug/kg	20.0	2.3	1	04/12/24 09:46	04/12/24 15:36	87-61-6	
1,2,4-Trichlorobenzene	<2.0	ug/kg	20.0	2.0	1	04/12/24 09:46	04/12/24 15:36	120-82-1	
1,1,1-Trichloroethane	<4.1	ug/kg	20.0	4.1	1	04/12/24 09:46	04/12/24 15:36	71-55-6	
1,1,2-Trichloroethane	<2.9	ug/kg	20.0	2.9	1	04/12/24 09:46	04/12/24 15:36	79-00-5	
Trichloroethene	<7.6	ug/kg	20.0	7.6	1	04/12/24 09:46	04/12/24 15:36	79-01-6	
Trichlorofluoromethane	<38.4	ug/kg	51.9	38.4	1	04/12/24 09:46	04/12/24 15:36	75-69-4	
1,2,3-Trichloropropane	<6.2	ug/kg	20.0	6.2	1	04/12/24 09:46	04/12/24 15:36	96-18-4	
1,2,4-Trimethylbenzene	<2.8	ug/kg	20.0	2.8	1	04/12/24 09:46	04/12/24 15:36	95-63-6	
1,3,5-Trimethylbenzene	<1.7	ug/kg	20.0	1.7	1	04/12/24 09:46	04/12/24 15:36	108-67-8	
Vinyl chloride	<3.7	ug/kg	51.9	3.7	1	04/12/24 09:46	04/12/24 15:36	75-01-4	
Xylene (Total)	<14.7	ug/kg	59.9	14.7	1	04/12/24 09:46	04/12/24 15:36	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	110	%	80-120		1	04/12/24 09:46	04/12/24 15:36	2037-26-5	
4-Bromofluorobenzene (S)	100	%	83-119		1	04/12/24 09:46	04/12/24 15:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1	04/12/24 09:46	04/12/24 15:36	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.43	mg/kg	3.2	0.43	1	04/16/24 17:07	04/16/24 22:41		
<b>Surrogates</b>									
Toluene-d8 (S)	100	%	78-122		1	04/16/24 17:07	04/16/24 22:41	2037-26-5	
4-Bromofluorobenzene (S)	105	%	69-133		1	04/16/24 17:07	04/16/24 22:41	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1	04/16/24 17:07	04/16/24 22:41	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	53.3	%	0.50	0.50	1		04/12/24 13:41		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	62.5	%			1	04/13/24 16:02	04/13/24 16:13		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	5.5	mg/kg	2.1	1.7	1	04/15/24 09:34	04/16/24 16:12	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	0.32J	mg/kg	0.32	0.26	1	04/18/24 08:30	04/18/24 12:22	57-12-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD02/SD-1 Lab ID: 60450784001 Collected: 04/11/24 08:30 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>		Analytical Method: EPA 9056 Preparation Method: EPA 9056 Pace Analytical Services - Kansas City							
Nitrate as N	<12.0	mg/kg	21.2	12.0	10	04/17/24 16:50	04/19/24 16:04	14797-55-8	
Nitrite as N	<11.1	mg/kg	21.2	11.1	10	04/17/24 16:50	04/19/24 16:04	14797-65-0	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD01/SD-1 Lab ID: 60450784002 Collected: 04/11/24 09:15 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B</b>									
Analytical Method: EPA 8081B Preparation Method: 3546/3665A									
Pace National - Mt. Juliet									
Aldrin	<0.00451	mg/kg	0.0240	0.00451	1	04/17/24 06:14	04/17/24 14:28	309-00-2	
alpha-BHC	<0.00441	mg/kg	0.0240	0.00441	1	04/17/24 06:14	04/17/24 14:28	319-84-6	
beta-BHC	<0.00455	mg/kg	0.0240	0.00455	1	04/17/24 06:14	04/17/24 14:28	319-85-7	
delta-BHC	<0.00415	mg/kg	0.0240	0.00415	1	04/17/24 06:14	04/17/24 14:28	319-86-8	
gamma-BHC (Lindane)	<0.00413	mg/kg	0.0240	0.00413	1	04/17/24 06:14	04/17/24 14:28	58-89-9	
Chlordane (Technical)	<0.124	mg/kg	0.360	0.124	1	04/17/24 06:14	04/17/24 14:28	57-74-9	
4,4'-DDD	<0.00444	mg/kg	0.0240	0.00444	1	04/17/24 06:14	04/17/24 14:28	72-54-8	
4,4'-DDE	<0.00439	mg/kg	0.0240	0.00439	1	04/17/24 06:14	04/17/24 14:28	72-55-9	
4,4'-DDT	<0.00752	mg/kg	0.0240	0.00752	1	04/17/24 06:14	04/17/24 14:28	50-29-3	
Dieldrin	<0.00413	mg/kg	0.0240	0.00413	1	04/17/24 06:14	04/17/24 14:28	60-57-1	
Endosulfan I	<0.00435	mg/kg	0.0240	0.00435	1	04/17/24 06:14	04/17/24 14:28	959-98-8	
Endosulfan II	<0.00402	mg/kg	0.0240	0.00402	1	04/17/24 06:14	04/17/24 14:28	33213-65-9	
Endosulfan sulfate	<0.00437	mg/kg	0.0240	0.00437	1	04/17/24 06:14	04/17/24 14:28	1031-07-8	
Endrin	<0.00420	mg/kg	0.0240	0.00420	1	04/17/24 06:14	04/17/24 14:28	72-20-8	
Endrin aldehyde	<0.00407	mg/kg	0.0240	0.00407	1	04/17/24 06:14	04/17/24 14:28	7421-93-4	
Endrin ketone	<0.00853	mg/kg	0.0240	0.00853	1	04/17/24 06:14	04/17/24 14:28	53494-70-5	
Hexachlorobenzene	<0.00415	mg/kg	0.0240	0.00415	1	04/17/24 06:14	04/17/24 14:28	118-74-1	
Heptachlor	<0.00513	mg/kg	0.0240	0.00513	1	04/17/24 06:14	04/17/24 14:28	76-44-8	
Heptachlor epoxide	<0.00407	mg/kg	0.0240	0.00407	1	04/17/24 06:14	04/17/24 14:28	1024-57-3	
Methoxychlor	<0.00581	mg/kg	0.0240	0.00581	1	04/17/24 06:14	04/17/24 14:28	72-43-5	
Toxaphene	<0.149	mg/kg	0.480	0.149	1	04/17/24 06:14	04/17/24 14:28	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	91.1	%	10.0-135		1	04/17/24 06:14	04/17/24 14:28	2051-24-3	
Tetrachloro-m-xylene (S)	103	%	10.0-139		1	04/17/24 06:14	04/17/24 14:28	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-D	<0.00842	mg/kg	0.0840	0.00842	1	04/22/24 06:54	04/23/24 02:26	94-75-7	
Dalapon	<0.0136	mg/kg	0.0840	0.0136	1	04/22/24 06:54	04/23/24 02:26	127-20-8	
2,4-DB	<0.0356	mg/kg	0.0840	0.0356	1	04/22/24 06:54	04/23/24 02:26	94-82-6	
Dicamba	<0.0188	mg/kg	0.0840	0.0188	1	04/22/24 06:54	04/23/24 02:26	1918-00-9	
Dichlorprop	<0.0294	mg/kg	0.0840	0.0294	1	04/22/24 06:54	04/23/24 02:26	120-36-5	
Dinoseb	<0.00836	mg/kg	0.0840	0.00836	1	04/22/24 06:54	04/23/24 02:26	88-85-7	
MCPA	<0.531	mg/kg	7.80	0.531	1	04/22/24 06:54	04/23/24 02:26	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.440	mg/kg	7.80	0.440	1	04/22/24 06:54	04/23/24 02:26	93-65-2	
2,4,5-T	<0.0102	mg/kg	0.0840	0.0102	1	04/22/24 06:54	04/23/24 02:26	93-76-5	
2,4,5-TP (Silvex)	<0.0128	mg/kg	0.0840	0.0128	1	04/22/24 06:54	04/23/24 02:26	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	54.4	%	22.0-132		1	04/22/24 06:54	04/23/24 02:26	19719-28-9	
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<10.6	ug/kg	39.3	10.6	1	04/17/24 20:36	04/19/24 01:55	12674-11-2	
PCB-1221 (Aroclor 1221)	<13.2	ug/kg	39.3	13.2	1	04/17/24 20:36	04/19/24 01:55	11104-28-2	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD01/SD-1 Lab ID: 60450784002 Collected: 04/11/24 09:15 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB SW</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
PCB-1232 (Aroclor 1232)	<13.2	ug/kg	39.3	13.2	1	04/17/24 20:36	04/19/24 01:55	11141-16-5	
PCB-1242 (Aroclor 1242)	<13.2	ug/kg	39.3	13.2	1	04/17/24 20:36	04/19/24 01:55	53469-21-9	
PCB-1248 (Aroclor 1248)	<13.2	ug/kg	39.3	13.2	1	04/17/24 20:36	04/19/24 01:55	12672-29-6	
PCB-1254 (Aroclor 1254)	<13.2	ug/kg	39.3	13.2	1	04/17/24 20:36	04/19/24 01:55	11097-69-1	
PCB-1260 (Aroclor 1260)	<13.2	ug/kg	39.3	13.2	1	04/17/24 20:36	04/19/24 01:55	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	91	%	20-120		1	04/17/24 20:36	04/19/24 01:55	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3050B									
Pace National - Mt. Juliet									
Aluminum	21300	mg/kg	60.0	8.28	5	04/15/24 09:26	04/22/24 20:17	7429-90-5	
Antimony	0.496J	mg/kg	3.60	0.199	5	04/15/24 09:26	04/22/24 20:17	7440-36-0	B,J
Arsenic	10.7	mg/kg	1.20	0.120	5	04/15/24 09:26	04/22/24 20:17	7440-38-2	
Barium	191	mg/kg	3.00	0.182	5	04/15/24 09:26	04/22/24 20:17	7440-39-3	
Beryllium	1.03J	mg/kg	3.00	0.166	5	04/15/24 09:26	04/22/24 20:17	7440-41-7	J
Cadmium	0.214J	mg/kg	1.20	0.103	5	04/15/24 09:26	04/22/24 20:17	7440-43-9	J
Calcium	63300	mg/kg	600	90.6	5	04/15/24 09:26	04/22/24 20:17	7440-70-2	
Chromium	27.0	mg/kg	6.00	0.355	5	04/15/24 09:26	04/22/24 20:17	7440-47-3	
Cobalt	10.4	mg/kg	1.20	0.0554	5	04/15/24 09:26	04/22/24 20:17	7440-48-4	
Copper	15.6	mg/kg	6.00	0.158	5	04/15/24 09:26	04/22/24 20:17	7440-50-8	
Iron	26300	mg/kg	60.0	10.7	5	04/15/24 09:26	04/22/24 20:17	7439-89-6	
Lead	14.2	mg/kg	2.40	0.119	5	04/15/24 09:26	04/22/24 20:17	7439-92-1	
Magnesium	8820	mg/kg	600	55.1	5	04/15/24 09:26	04/22/24 20:17	7439-95-4	
Manganese	1050	mg/kg	3.00	0.321	5	04/15/24 09:26	04/22/24 20:17	7439-96-5	
Molybdenum	0.869J	mg/kg	3.00	0.121	5	04/15/24 09:26	04/22/24 20:17	7439-98-7	J
Nickel	27.5	mg/kg	3.00	0.236	5	04/15/24 09:26	04/22/24 20:17	7440-02-0	
Potassium	3810	mg/kg	600	81.6	5	04/15/24 09:26	04/22/24 20:17	7440-09-7	
Selenium	0.513J	mg/kg	3.00	0.216	5	04/15/24 09:26	04/22/24 20:17	7782-49-2	J
Silver	<0.104	mg/kg	0.600	0.104	5	04/15/24 09:26	04/22/24 20:17	7440-22-4	
Sodium	128J	mg/kg	600	91.8	5	04/15/24 09:26	04/22/24 20:17	7440-23-5	J
Thallium	0.264J	mg/kg	2.40	0.0780	5	04/15/24 09:26	04/22/24 20:17	7440-28-0	J
Vanadium	37.6	mg/kg	3.00	0.224	5	04/15/24 09:26	04/22/24 20:17	7440-62-2	
Zinc	55.5	mg/kg	30.0	0.888	5	04/15/24 09:26	04/22/24 20:17	7440-66-6	
<b>Mercury 7471B</b>									
Analytical Method: EPA 7471B Preparation Method: 7471A									
Pace National - Mt. Juliet									
Mercury	<0.0216	mg/kg	0.0480	0.0216	1	04/12/24 23:20	04/13/24 18:27	7439-97-6	
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	<170	ug/kg	790	170	2	04/17/24 09:39	04/22/24 06:02	83-32-9	
Acenaphthylene	<129	ug/kg	790	129	2	04/17/24 09:39	04/22/24 06:02	208-96-8	
Anthracene	<165	ug/kg	790	165	2	04/17/24 09:39	04/22/24 06:02	120-12-7	
Benzo(a)anthracene	<167	ug/kg	790	167	2	04/17/24 09:39	04/22/24 06:02	56-55-3	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD01/SD-1 Lab ID: 60450784002 Collected: 04/11/24 09:15 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Benzo(a)pyrene	<170	ug/kg	790	170	2	04/17/24 09:39	04/22/24 06:02	50-32-8	
Benzo(b)fluoranthene	<193	ug/kg	790	193	2	04/17/24 09:39	04/22/24 06:02	205-99-2	
Benzo(g,h,i)perylene	<137	ug/kg	790	137	2	04/17/24 09:39	04/22/24 06:02	191-24-2	
Benzo(k)fluoranthene	<170	ug/kg	790	170	2	04/17/24 09:39	04/22/24 06:02	207-08-9	
Benzoic Acid	<431	ug/kg	4000	431	2	04/17/24 09:39	04/22/24 06:02	65-85-0	
Benzyl alcohol	<145	ug/kg	1580	145	2	04/17/24 09:39	04/22/24 06:02	100-51-6	
4-Bromophenylphenyl ether	<170	ug/kg	790	170	2	04/17/24 09:39	04/22/24 06:02	101-55-3	
Butylbenzylphthalate	<161	ug/kg	790	161	2	04/17/24 09:39	04/22/24 06:02	85-68-7	
Carbazole	<163	ug/kg	790	163	2	04/17/24 09:39	04/22/24 06:02	86-74-8	
4-Chloro-3-methylphenol	<166	ug/kg	1580	166	2	04/17/24 09:39	04/22/24 06:02	59-50-7	
4-Chloroaniline	<124	ug/kg	1580	124	2	04/17/24 09:39	04/22/24 06:02	106-47-8	
bis(2-Chloroethoxy)methane	<157	ug/kg	790	157	2	04/17/24 09:39	04/22/24 06:02	111-91-1	
bis(2-Chloroethyl) ether	<159	ug/kg	790	159	2	04/17/24 09:39	04/22/24 06:02	111-44-4	
bis(2-Chloroisopropyl) ether	<171	ug/kg	790	171	2	04/17/24 09:39	04/22/24 06:02	108-60-1	
2-Chloronaphthalene	<166	ug/kg	790	166	2	04/17/24 09:39	04/22/24 06:02	91-58-7	
2-Chlorophenol	<161	ug/kg	790	161	2	04/17/24 09:39	04/22/24 06:02	95-57-8	
4-Chlorophenylphenyl ether	<170	ug/kg	790	170	2	04/17/24 09:39	04/22/24 06:02	7005-72-3	
Chrysene	<176	ug/kg	790	176	2	04/17/24 09:39	04/22/24 06:02	218-01-9	
Dibenz(a,h)anthracene	<142	ug/kg	790	142	2	04/17/24 09:39	04/22/24 06:02	53-70-3	
Dibenzofuran	<169	ug/kg	790	169	2	04/17/24 09:39	04/22/24 06:02	132-64-9	
1,2-Dichlorobenzene	<157	ug/kg	790	157	2	04/17/24 09:39	04/22/24 06:02	95-50-1	
1,3-Dichlorobenzene	<154	ug/kg	790	154	2	04/17/24 09:39	04/22/24 06:02	541-73-1	
1,4-Dichlorobenzene	<152	ug/kg	790	152	2	04/17/24 09:39	04/22/24 06:02	106-46-7	
3,3'-Dichlorobenzidine	<77.6	ug/kg	1580	77.6	2	04/17/24 09:39	04/22/24 06:02	91-94-1	
2,4-Dichlorophenol	<158	ug/kg	790	158	2	04/17/24 09:39	04/22/24 06:02	120-83-2	
Diethylphthalate	<181	ug/kg	790	181	2	04/17/24 09:39	04/22/24 06:02	84-66-2	
2,4-Dimethylphenol	<115	ug/kg	790	115	2	04/17/24 09:39	04/22/24 06:02	105-67-9	
Dimethylphthalate	<164	ug/kg	790	164	2	04/17/24 09:39	04/22/24 06:02	131-11-3	
Di-n-butylphthalate	<187	ug/kg	790	187	2	04/17/24 09:39	04/22/24 06:02	84-74-2	
4,6-Dinitro-2-methylphenol	<137	ug/kg	4000	137	2	04/17/24 09:39	04/22/24 06:02	534-52-1	
2,4-Dinitrophenol	<239	ug/kg	4000	239	2	04/17/24 09:39	04/22/24 06:02	51-28-5	
2,4-Dinitrotoluene	<178	ug/kg	790	178	2	04/17/24 09:39	04/22/24 06:02	121-14-2	
2,6-Dinitrotoluene	<154	ug/kg	790	154	2	04/17/24 09:39	04/22/24 06:02	606-20-2	
Di-n-octylphthalate	<192	ug/kg	790	192	2	04/17/24 09:39	04/22/24 06:02	117-84-0	
bis(2-Ethylhexyl)phthalate	<177	ug/kg	790	177	2	04/17/24 09:39	04/22/24 06:02	117-81-7	
Fluoranthene	<174	ug/kg	790	174	2	04/17/24 09:39	04/22/24 06:02	206-44-0	
Fluorene	<168	ug/kg	790	168	2	04/17/24 09:39	04/22/24 06:02	86-73-7	
Hexachloro-1,3-butadiene	<169	ug/kg	790	169	2	04/17/24 09:39	04/22/24 06:02	87-68-3	
Hexachlorobenzene	<165	ug/kg	790	165	2	04/17/24 09:39	04/22/24 06:02	118-74-1	
Hexachlorocyclopentadiene	<486	ug/kg	790	486	2	04/17/24 09:39	04/22/24 06:02	77-47-4	
Hexachloroethane	<145	ug/kg	790	145	2	04/17/24 09:39	04/22/24 06:02	67-72-1	
Indeno(1,2,3-cd)pyrene	<162	ug/kg	790	162	2	04/17/24 09:39	04/22/24 06:02	193-39-5	
Isophorone	<153	ug/kg	790	153	2	04/17/24 09:39	04/22/24 06:02	78-59-1	
2-Methylnaphthalene	<160	ug/kg	790	160	2	04/17/24 09:39	04/22/24 06:02	91-57-6	

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD01/SD-1 Lab ID: 60450784002 Collected: 04/11/24 09:15 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatiles</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
2-Methylphenol(o-Cresol)	<144	ug/kg	790	144	2	04/17/24 09:39	04/22/24 06:02	95-48-7	
3&4-Methylphenol(m&p Cresol)	<147	ug/kg	790	147	2	04/17/24 09:39	04/22/24 06:02	15831-10-4	
Naphthalene	<170	ug/kg	790	170	2	04/17/24 09:39	04/22/24 06:02	91-20-3	
2-Nitroaniline	<131	ug/kg	1580	131	2	04/17/24 09:39	04/22/24 06:02	88-74-4	
3-Nitroaniline	<123	ug/kg	1580	123	2	04/17/24 09:39	04/22/24 06:02	99-09-2	
4-Nitroaniline	<135	ug/kg	1580	135	2	04/17/24 09:39	04/22/24 06:02	100-01-6	
Nitrobenzene	<167	ug/kg	790	167	2	04/17/24 09:39	04/22/24 06:02	98-95-3	
2-Nitrophenol	<124	ug/kg	790	124	2	04/17/24 09:39	04/22/24 06:02	88-75-5	
4-Nitrophenol	<116	ug/kg	4000	116	2	04/17/24 09:39	04/22/24 06:02	100-02-7	
N-Nitroso-di-n-propylamine	<151	ug/kg	790	151	2	04/17/24 09:39	04/22/24 06:02	621-64-7	
N-Nitrosodiphenylamine	<157	ug/kg	790	157	2	04/17/24 09:39	04/22/24 06:02	86-30-6	
Pentachlorophenol	<261	ug/kg	4000	261	2	04/17/24 09:39	04/22/24 06:02	87-86-5	
Phenanthrene	<169	ug/kg	790	169	2	04/17/24 09:39	04/22/24 06:02	85-01-8	
Phenol	<149	ug/kg	790	149	2	04/17/24 09:39	04/22/24 06:02	108-95-2	
Pyrene	<169	ug/kg	790	169	2	04/17/24 09:39	04/22/24 06:02	129-00-0	
Pyridine	<117	ug/kg	790	117	2	04/17/24 09:39	04/22/24 06:02	110-86-1	
1,2,4-Trichlorobenzene	<165	ug/kg	790	165	2	04/17/24 09:39	04/22/24 06:02	120-82-1	
2,4,5-Trichlorophenol	<162	ug/kg	790	162	2	04/17/24 09:39	04/22/24 06:02	95-95-4	
2,4,6-Trichlorophenol	<146	ug/kg	790	146	2	04/17/24 09:39	04/22/24 06:02	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	80	%	30-120		2	04/17/24 09:39	04/22/24 06:02	4165-60-0	D3
2-Fluorobiphenyl (S)	71	%	40-120		2	04/17/24 09:39	04/22/24 06:02	321-60-8	
Terphenyl-d14 (S)	79	%	45-120		2	04/17/24 09:39	04/22/24 06:02	1718-51-0	
Phenol-d6 (S)	78	%	40-120		2	04/17/24 09:39	04/22/24 06:02	13127-88-3	
2-Fluorophenol (S)	76	%	40-120		2	04/17/24 09:39	04/22/24 06:02	367-12-4	
2,4,6-Tribromophenol (S)	80	%	35-120		2	04/17/24 09:39	04/22/24 06:02	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-ORO	113	mg/kg	17.8	6.1	1	04/11/24 16:15	04/15/24 15:13		
TPH-DRO	21.5	mg/kg	17.8	6.1	1	04/11/24 16:15	04/15/24 15:13		
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	75	%	35-120		1	04/11/24 16:15	04/15/24 15:13	4165-60-0	
2-Fluorobiphenyl (S)	81	%	50-120		1	04/11/24 16:15	04/15/24 15:13	321-60-8	
Terphenyl-d14 (S)	79	%	45-120		1	04/11/24 16:15	04/15/24 15:13	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Acetone	<81.5	ug/kg	85.5	81.5	1	04/12/24 09:46	04/12/24 15:56	67-64-1	
Benzene	<0.62	ug/kg	6.8	0.62	1	04/12/24 09:46	04/12/24 15:56	71-43-2	
Bromobenzene	<0.84	ug/kg	6.8	0.84	1	04/12/24 09:46	04/12/24 15:56	108-86-1	
Bromochloromethane	<1.0	ug/kg	6.8	1.0	1	04/12/24 09:46	04/12/24 15:56	74-97-5	
Bromodichloromethane	<1.1	ug/kg	17.6	1.1	1	04/12/24 09:46	04/12/24 15:56	75-27-4	
Bromoform	<0.53	ug/kg	17.6	0.53	1	04/12/24 09:46	04/12/24 15:56	75-25-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD01/SD-1 Lab ID: 60450784002 Collected: 04/11/24 09:15 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>		Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B Pace Analytical Services - Kansas City							
Bromomethane	<8.4	ug/kg	17.6	8.4	1	04/12/24 09:46	04/12/24 15:56	74-83-9	
2-Butanone (MEK)	<43.3	ug/kg	85.5	43.3	1	04/12/24 09:46	04/12/24 15:56	78-93-3	
n-Butylbenzene	<0.65	ug/kg	6.8	0.65	1	04/12/24 09:46	04/12/24 15:56	104-51-8	
sec-Butylbenzene	2.2J	ug/kg	6.8	0.67	1	04/12/24 09:46	04/12/24 15:56	135-98-8	
tert-Butylbenzene	<0.44	ug/kg	6.8	0.44	1	04/12/24 09:46	04/12/24 15:56	98-06-6	
Carbon disulfide	<3.1	ug/kg	6.8	3.1	1	04/12/24 09:46	04/12/24 15:56	75-15-0	
Carbon tetrachloride	<2.3	ug/kg	6.8	2.3	1	04/12/24 09:46	04/12/24 15:56	56-23-5	
Chlorobenzene	<0.40	ug/kg	6.8	0.40	1	04/12/24 09:46	04/12/24 15:56	108-90-7	
Chloroethane	<11.2	ug/kg	33.9	11.2	1	04/12/24 09:46	04/12/24 15:56	75-00-3	
Chloroform	<2.5	ug/kg	6.8	2.5	1	04/12/24 09:46	04/12/24 15:56	67-66-3	
Chloromethane	<1.7	ug/kg	17.6	1.7	1	04/12/24 09:46	04/12/24 15:56	74-87-3	
2-Chlorotoluene	<0.95	ug/kg	6.8	0.95	1	04/12/24 09:46	04/12/24 15:56	95-49-8	
4-Chlorotoluene	<0.53	ug/kg	6.8	0.53	1	04/12/24 09:46	04/12/24 15:56	106-43-4	
1,2-Dibromo-3-chloropropane	<4.5	ug/kg	17.6	4.5	1	04/12/24 09:46	04/12/24 15:56	96-12-8	
Dibromochloromethane	<0.41	ug/kg	6.8	0.41	1	04/12/24 09:46	04/12/24 15:56	124-48-1	
1,2-Dibromoethane (EDB)	<0.71	ug/kg	6.8	0.71	1	04/12/24 09:46	04/12/24 15:56	106-93-4	
Dibromomethane	<2.0	ug/kg	6.8	2.0	1	04/12/24 09:46	04/12/24 15:56	74-95-3	
1,2-Dichlorobenzene	<1.1	ug/kg	6.8	1.1	1	04/12/24 09:46	04/12/24 15:56	95-50-1	
1,3-Dichlorobenzene	<0.86	ug/kg	6.8	0.86	1	04/12/24 09:46	04/12/24 15:56	541-73-1	
1,4-Dichlorobenzene	<1.2	ug/kg	6.8	1.2	1	04/12/24 09:46	04/12/24 15:56	106-46-7	
Dichlorodifluoromethane	<1.3	ug/kg	17.6	1.3	1	04/12/24 09:46	04/12/24 15:56	75-71-8	
1,1-Dichloroethane	<1.6	ug/kg	6.8	1.6	1	04/12/24 09:46	04/12/24 15:56	75-34-3	
1,2-Dichloroethane	<1.3	ug/kg	6.8	1.3	1	04/12/24 09:46	04/12/24 15:56	107-06-2	
1,2-Dichloroethene (Total)	<2.6	ug/kg	13.6	2.6	1	04/12/24 09:46	04/12/24 15:56	540-59-0	
1,1-Dichloroethene	<2.8	ug/kg	6.8	2.8	1	04/12/24 09:46	04/12/24 15:56	75-35-4	
cis-1,2-Dichloroethene	<1.3	ug/kg	6.8	1.3	1	04/12/24 09:46	04/12/24 15:56	156-59-2	
trans-1,2-Dichloroethene	<1.5	ug/kg	6.8	1.5	1	04/12/24 09:46	04/12/24 15:56	156-60-5	
1,2-Dichloropropane	<1.4	ug/kg	6.8	1.4	1	04/12/24 09:46	04/12/24 15:56	78-87-5	
1,3-Dichloropropane	<0.26	ug/kg	6.8	0.26	1	04/12/24 09:46	04/12/24 15:56	142-28-9	
2,2-Dichloropropane	<2.0	ug/kg	6.8	2.0	1	04/12/24 09:46	04/12/24 15:56	594-20-7	
1,1-Dichloropropene	<1.5	ug/kg	6.8	1.5	1	04/12/24 09:46	04/12/24 15:56	563-58-6	
cis-1,3-Dichloropropene	<1.0	ug/kg	6.8	1.0	1	04/12/24 09:46	04/12/24 15:56	10061-01-5	
trans-1,3-Dichloropropene	<0.82	ug/kg	6.8	0.82	1	04/12/24 09:46	04/12/24 15:56	10061-02-6	
Ethylbenzene	<1.2	ug/kg	6.8	1.2	1	04/12/24 09:46	04/12/24 15:56	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/kg	6.8	1.2	1	04/12/24 09:46	04/12/24 15:56	87-68-3	
2-Hexanone	<14.1	ug/kg	85.5	14.1	1	04/12/24 09:46	04/12/24 15:56	591-78-6	
Isopropylbenzene (Cumene)	<0.43	ug/kg	6.8	0.43	1	04/12/24 09:46	04/12/24 15:56	98-82-8	
p-Isopropyltoluene	2.3J	ug/kg	6.8	0.59	1	04/12/24 09:46	04/12/24 15:56	99-87-6	
Methylene Chloride	<26.3	ug/kg	33.9	26.3	1	04/12/24 09:46	04/12/24 15:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	<9.5	ug/kg	85.5	9.5	1	04/12/24 09:46	04/12/24 15:56	108-10-1	
Methyl-tert-butyl ether	<1.3	ug/kg	6.8	1.3	1	04/12/24 09:46	04/12/24 15:56	1634-04-4	
Naphthalene	<0.99	ug/kg	13.6	0.99	1	04/12/24 09:46	04/12/24 15:56	91-20-3	
n-Propylbenzene	<0.82	ug/kg	6.8	0.82	1	04/12/24 09:46	04/12/24 15:56	103-65-1	
Styrene	<0.55	ug/kg	6.8	0.55	1	04/12/24 09:46	04/12/24 15:56	100-42-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD01/SD-1 Lab ID: 60450784002 Collected: 04/11/24 09:15 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
1,1,1,2-Tetrachloroethane	<0.96	ug/kg	6.8	0.96	1	04/12/24 09:46	04/12/24 15:56	630-20-6	
1,1,2,2-Tetrachloroethane	<0.95	ug/kg	6.8	0.95	1	04/12/24 09:46	04/12/24 15:56	79-34-5	
Tetrachloroethene	<0.72	ug/kg	6.8	0.72	1	04/12/24 09:46	04/12/24 15:56	127-18-4	
Toluene	<6.0	ug/kg	27.1	6.0	1	04/12/24 09:46	04/12/24 15:56	108-88-3	
1,2,3-Trichlorobenzene	<0.79	ug/kg	6.8	0.79	1	04/12/24 09:46	04/12/24 15:56	87-61-6	
1,2,4-Trichlorobenzene	<0.66	ug/kg	6.8	0.66	1	04/12/24 09:46	04/12/24 15:56	120-82-1	
1,1,1-Trichloroethane	<1.4	ug/kg	6.8	1.4	1	04/12/24 09:46	04/12/24 15:56	71-55-6	
1,1,2-Trichloroethane	<0.97	ug/kg	6.8	0.97	1	04/12/24 09:46	04/12/24 15:56	79-00-5	
Trichloroethene	<2.6	ug/kg	6.8	2.6	1	04/12/24 09:46	04/12/24 15:56	79-01-6	
Trichlorofluoromethane	<13.0	ug/kg	17.6	13.0	1	04/12/24 09:46	04/12/24 15:56	75-69-4	
1,2,3-Trichloropropane	<2.1	ug/kg	6.8	2.1	1	04/12/24 09:46	04/12/24 15:56	96-18-4	
1,2,4-Trimethylbenzene	<0.93	ug/kg	6.8	0.93	1	04/12/24 09:46	04/12/24 15:56	95-63-6	
1,3,5-Trimethylbenzene	<0.59	ug/kg	6.8	0.59	1	04/12/24 09:46	04/12/24 15:56	108-67-8	
Vinyl chloride	<1.3	ug/kg	17.6	1.3	1	04/12/24 09:46	04/12/24 15:56	75-01-4	
Xylene (Total)	<5.0	ug/kg	20.4	5.0	1	04/12/24 09:46	04/12/24 15:56	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	109	%	80-120		1	04/12/24 09:46	04/12/24 15:56	2037-26-5	
4-Bromofluorobenzene (S)	101	%	83-119		1	04/12/24 09:46	04/12/24 15:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1	04/12/24 09:46	04/12/24 15:56	2199-69-1	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035									
Pace Analytical Services - Kansas City									
TPH-GRO	<0.10	mg/kg	0.74	0.10	1	04/16/24 17:07	04/16/24 22:56		
<b>Surrogates</b>									
Toluene-d8 (S)	102	%	78-122		1	04/16/24 17:07	04/16/24 22:56	2037-26-5	
4-Bromofluorobenzene (S)	107	%	69-133		1	04/16/24 17:07	04/16/24 22:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	04/16/24 17:07	04/16/24 22:56	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	16.8	%	0.50	0.50	1		04/12/24 13:41		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	83.4	%			1	04/13/24 16:02	04/13/24 16:13		
<b>350.1 Ammonia</b>									
Analytical Method: EPA 350.1 Preparation Method: EPA 350.1									
Pace Analytical Services - Kansas City									
Nitrogen, Ammonia	2.3	mg/kg	1.3	1.0	1	04/15/24 09:34	04/16/24 16:13	7664-41-7	
<b>4500CNE Cyanide, Total</b>									
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E									
Pace Analytical Services - Kansas City									
Cyanide	0.19	mg/kg	0.17	0.13	1	04/18/24 08:30	04/18/24 12:24	57-12-5	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Sample: SD01/SD-1 Lab ID: 60450784002 Collected: 04/11/24 09:15 Received: 04/11/24 11:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>9056 IC Anions</b>									
Analytical Method: EPA 9056 Preparation Method: EPA 9056									
Pace Analytical Services - Kansas City									
Nitrate as N	8.1J	mg/kg	11.9	6.7	10	04/17/24 16:50	04/19/24 16:19	14797-55-8	
Nitrite as N	<6.2	mg/kg	11.9	6.2	10	04/17/24 16:50	04/19/24 16:19	14797-65-0	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch: 2268528

Analysis Method: EPA 8081B

QC Batch Method: 3546/3665A

Analysis Description: Pesticides (GC) 8081B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450784001, 60450784002

METHOD BLANK: R4058996-1

Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aldrin	mg/kg	<0.00376	0.0200	0.00376	04/17/24 13:00	
alpha-BHC	mg/kg	<0.00368	0.0200	0.00368	04/17/24 13:00	
beta-BHC	mg/kg	<0.00379	0.0200	0.00379	04/17/24 13:00	
delta-BHC	mg/kg	<0.00346	0.0200	0.00346	04/17/24 13:00	
gamma-BHC (Lindane)	mg/kg	<0.00344	0.0200	0.00344	04/17/24 13:00	
Chlordane (Technical)	mg/kg	<0.103	0.300	0.103	04/17/24 13:00	
4,4'-DDD	mg/kg	<0.00370	0.0200	0.00370	04/17/24 13:00	
4,4'-DDE	mg/kg	<0.00366	0.0200	0.00366	04/17/24 13:00	
4,4'-DDT	mg/kg	<0.00627	0.0200	0.00627	04/17/24 13:00	
Dieldrin	mg/kg	<0.00344	0.0200	0.00344	04/17/24 13:00	
Endosulfan I	mg/kg	<0.00363	0.0200	0.00363	04/17/24 13:00	
Endosulfan II	mg/kg	<0.00335	0.0200	0.00335	04/17/24 13:00	
Endosulfan sulfate	mg/kg	<0.00364	0.0200	0.00364	04/17/24 13:00	
Endrin	mg/kg	<0.00350	0.0200	0.00350	04/17/24 13:00	
Endrin aldehyde	mg/kg	<0.00339	0.0200	0.00339	04/17/24 13:00	
Endrin ketone	mg/kg	<0.00711	0.0200	0.00711	04/17/24 13:00	
Hexachlorobenzene	mg/kg	<0.00346	0.0200	0.00346	04/17/24 13:00	
Heptachlor	mg/kg	<0.00428	0.0200	0.00428	04/17/24 13:00	
Heptachlor epoxide	mg/kg	<0.00339	0.0200	0.00339	04/17/24 13:00	
Methoxychlor	mg/kg	<0.00484	0.0200	0.00484	04/17/24 13:00	
Toxaphene	mg/kg	<0.124	0.400	0.124	04/17/24 13:00	
Decachlorobiphenyl (S)	%	74.5	10.0-135		04/17/24 13:00	
Tetrachloro-m-xylene (S)	%	87.2	10.0-139		04/17/24 13:00	

LABORATORY CONTROL SAMPLE: R4058996-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aldrin	mg/kg	0.0666	0.0452	67.9	34.0-136	
alpha-BHC	mg/kg	0.0666	0.0471	70.7	34.0-139	
beta-BHC	mg/kg	0.0666	0.0450	67.6	34.0-133	
delta-BHC	mg/kg	0.0666	0.0419	62.9	34.0-135	
gamma-BHC (Lindane)	mg/kg	0.0666	0.0476	71.5	34.0-136	
4,4'-DDD	mg/kg	0.0666	0.0434	65.2	33.0-141	
4,4'-DDE	mg/kg	0.0666	0.0469	70.4	34.0-134	
4,4'-DDT	mg/kg	0.0666	0.0428	64.3	30.0-143	
Dieldrin	mg/kg	0.0666	0.0459	68.9	35.0-137	
Endosulfan I	mg/kg	0.0666	0.0447	67.1	34.0-134	
Endosulfan II	mg/kg	0.0666	0.0436	65.5	35.0-132	
Endosulfan sulfate	mg/kg	0.0666	0.0430	64.6	35.0-132	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

LABORATORY CONTROL SAMPLE: R4058996-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	mg/kg	0.0666	0.0437	65.6	34.0-137	
Endrin aldehyde	mg/kg	0.0666	0.0392	58.9	23.0-121	
Endrin ketone	mg/kg	0.0666	0.0416	62.5	35.0-144	
Hexachlorobenzene	mg/kg	0.0666	0.0456	68.5	33.0-129	
Heptachlor	mg/kg	0.0666	0.0462	69.4	36.0-141	
Heptachlor epoxide	mg/kg	0.0666	0.0450	67.6	36.0-134	
Methoxychlor	mg/kg	0.0666	0.0421	63.2	28.0-150	
Decachlorobiphenyl (S)	%			73.6	10.0-135	
Tetrachloro-m-xylene (S)	%			85.7	10.0-139	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058996-3 R4058996-4

Parameter	Units	R4058996-3		R4058996-4		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1725144-01 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Aldrin	mg/kg	ND	0.0819	0.0828	0.0538	0.0684	65.7	82.7	20.0-135	23.9	37
alpha-BHC	mg/kg	ND	0.0819	0.0828	0.0549	0.0689	67.1	83.3	27.0-140	22.6	35
beta-BHC	mg/kg	ND	0.0819	0.0828	0.0506	0.0638	61.7	77.1	23.0-141	23.1	37
delta-BHC	mg/kg	ND	0.0819	0.0828	0.0497	0.0628	60.7	75.9	21.0-138	23.3	35
gamma-BHC (Lindane)	mg/kg	ND	0.0819	0.0828	0.0549	0.0694	67.1	83.9	27.0-137	23.3	36
4,4'-DDD	mg/kg	ND	0.0819	0.0828	0.0517	0.0688	63.1	83.1	15.0-152	28.4	39
4,4'-DDE	mg/kg	ND	0.0819	0.0828	0.0509	0.0664	62.2	80.2	10.0-152	26.4	40
4,4'-DDT	mg/kg	ND	0.0819	0.0828	0.0484	0.0654	59.1	79.0	10.0-151	29.8	40
Dieldrin	mg/kg	ND	0.0819	0.0828	0.0555	0.0689	67.8	83.3	17.0-145	21.5	37
Endosulfan I	mg/kg	ND	0.0819	0.0828	0.0533	0.0678	65.1	81.9	20.0-137	23.9	36
Endosulfan II	mg/kg	ND	0.0819	0.0828	0.0524	0.0679	64.0	82.1	15.0-141	25.7	37
Endosulfan sulfate	mg/kg	ND	0.0819	0.0828	0.0471	0.0629	57.5	76.0	15.0-143	28.8	38
Endrin	mg/kg	ND	0.0819	0.0828	0.0528	0.0647	64.5	78.1	19.0-143	20.2	37
Endrin aldehyde	mg/kg	ND	0.0819	0.0828	0.0438	0.0583	53.5	70.4	10.0-139	28.4	40
Endrin ketone	mg/kg	ND	0.0819	0.0828	0.0494	0.0627	60.4	75.7	17.0-149	23.6	38
Hexachlorobenzene	mg/kg	ND	0.0819	0.0828	0.0507	0.0644	61.9	77.8	25.0-126	23.9	35
Heptachlor	mg/kg	ND	0.0819	0.0828	0.0511	0.0670	62.3	81.0	22.0-138	27.1	37
Heptachlor epoxide	mg/kg	ND	0.0819	0.0828	0.0414	0.0534	50.6	64.6	22.0-138	25.3	36 P9
Methoxychlor	mg/kg	ND	0.0819	0.0828	0.0497	0.0629	60.7	76.0	10.0-159	23.5	40
Decachlorobiphenyl (S)	%						69.8	70.1	10.0-135		
Tetrachloro-m-xylene (S)	%						80.0	84.9	10.0-139		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch: 2266157

Analysis Method: EPA 8151A

QC Batch Method: 8151A

Analysis Description: Chlorinated Herb. (GC) 8151A

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450784001

METHOD BLANK: R4060023-1

Matrix: Solid

Associated Lab Samples: 60450784001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4-D	mg/kg	<0.00702	0.0700	0.00702	04/19/24 13:07	
Dalapon	mg/kg	<0.0113	0.0700	0.0113	04/19/24 13:07	
2,4-DB	mg/kg	<0.0297	0.0700	0.0297	04/19/24 13:07	
Dicamba	mg/kg	<0.0157	0.0700	0.0157	04/19/24 13:07	
Dichlorprop	mg/kg	<0.0245	0.0700	0.0245	04/19/24 13:07	
Dinoseb	mg/kg	<0.00697	0.0700	0.00697	04/19/24 13:07	
MCPA	mg/kg	<0.443	6.50	0.443	04/19/24 13:07	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	<0.367	6.50	0.367	04/19/24 13:07	
2,4,5-T	mg/kg	<0.00852	0.0700	0.00852	04/19/24 13:07	
2,4,5-TP (Silvex)	mg/kg	<0.0107	0.0700	0.0107	04/19/24 13:07	
2,4-DCAA (S)	%	65.9	22.0-132		04/19/24 13:07	

LABORATORY CONTROL SAMPLE: R4060023-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-D	mg/kg	0.0835	0.0563	67.4	40.0-120	
Dalapon	mg/kg	0.0835	0.0409	49.0	15.0-120	
2,4-DB	mg/kg	0.0835	0.0552	66.1	25.0-143	
Dicamba	mg/kg	0.0835	0.0491	58.8	43.0-120	
Dichlorprop	mg/kg	0.0835	0.0528	63.2	32.0-129	
Dinoseb	mg/kg	0.0835	0.0218	26.1	10.0-120	
MCPA	mg/kg	8.35	4.92	58.9	31.0-121	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	8.35	4.78	57.2	28.0-133	
2,4,5-T	mg/kg	0.0835	0.0565	67.7	41.0-120	
2,4,5-TP (Silvex)	mg/kg	0.0835	0.0552	66.1	42.0-120	
2,4-DCAA (S)	%			56.9	22.0-132	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4060023-3

R4060023-4

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		L1725334-01 Result	Spike Conc.	Spike Conc.	Result							
2,4-D	mg/kg	ND	0.0951	0.0951	0.0676	0.0542	71.0	57.0	10.0-160	22.0	24	
Dalapon	mg/kg	ND	0.0951	0.0951	0.0382	0.0341	40.1	35.9	10.0-121	11.2	27	
2,4-DB	mg/kg	ND	0.0951	0.0951	0.0659	0.0486	69.3	51.2	10.0-160	30.2	22	R1
Dicamba	mg/kg	ND	0.0951	0.0951	0.0560	0.0476	58.9	50.1	10.0-154	16.2	21	
Dichlorprop	mg/kg	ND	0.0951	0.0951	0.0672	0.0526	70.7	55.3	10.0-158	24.4	20	R1
Dinoseb	mg/kg	ND	0.0951	0.0951	0.0521	0.0297	54.8	31.3	10.0-120	54.6	40	R1

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4060023-3			R4060023-4			% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		L1725334-01 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
MCPA	mg/kg	ND	9.51	9.51	6.39	5.20	67.2	54.7	10.0-160	20.5	40			
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	ND	9.51	9.51	6.31	4.62	66.3	48.6	10.0-160	30.8	40			
2,4,5-T	mg/kg	ND	0.0951	0.0951	0.0655	0.0505	68.8	53.1	10.0-157	25.8	20	R1		
2,4,5-TP (Silvex)	mg/kg	ND	0.0951	0.0951	0.0666	0.0508	70.1	53.5	10.0-156	26.9	20	R1		
2,4-DCAA (S)	%						64.8	52.4	22.0-132					

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch: 2270175

Analysis Method: EPA 8151A

QC Batch Method: 8151A

Analysis Description: Chlorinated Herb. (GC) 8151A

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450784002

METHOD BLANK: R4060961-1

Matrix: Solid

Associated Lab Samples: 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4-D	mg/kg	<0.00702	0.0700	0.00702	04/23/24 01:15	
Dalapon	mg/kg	<0.0113	0.0700	0.0113	04/23/24 01:15	
2,4-DB	mg/kg	<0.0297	0.0700	0.0297	04/23/24 01:15	
Dicamba	mg/kg	<0.0157	0.0700	0.0157	04/23/24 01:15	
Dichlorprop	mg/kg	<0.0245	0.0700	0.0245	04/23/24 01:15	
Dinoseb	mg/kg	<0.00697	0.0700	0.00697	04/23/24 01:15	
MCPA	mg/kg	<0.443	6.50	0.443	04/23/24 01:15	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	<0.367	6.50	0.367	04/23/24 01:15	
2,4,5-T	mg/kg	<0.00852	0.0700	0.00852	04/23/24 01:15	
2,4,5-TP (Silvex)	mg/kg	<0.0107	0.0700	0.0107	04/23/24 01:15	
2,4-DCAA (S)	%	68.9	22.0-132		04/23/24 01:15	

LABORATORY CONTROL SAMPLE: R4060961-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-D	mg/kg	0.0835	0.0684	81.9	40.0-120	
Dalapon	mg/kg	0.0835	0.0458	54.9	15.0-120	
2,4-DB	mg/kg	0.0835	0.0654	78.3	25.0-143	
Dicamba	mg/kg	0.0835	0.0590	70.7	43.0-120	
Dichlorprop	mg/kg	0.0835	0.0653	78.2	32.0-129	
Dinoseb	mg/kg	0.0835	0.0359	43.0	10.0-120	
MCPA	mg/kg	8.35	6.66	79.8	31.0-121	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	8.35	7.30	87.4	28.0-133	P9
2,4,5-T	mg/kg	0.0835	0.0649	77.7	41.0-120	
2,4,5-TP (Silvex)	mg/kg	0.0835	0.0621	74.4	42.0-120	
2,4-DCAA (S)	%			68.9	22.0-132	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4060961-3

R4060961-4

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1727573-12 Result	Spike Conc.	Spike Conc.	Conc.								
2,4-D	mg/kg	ND	0.101	0.101	0.102	0.0704	100	69.4	10.0-160	36.4	24	P9,R1	
Dalapon	mg/kg	ND	0.101	0.101	0.0635	0.0498	62.7	49.2	10.0-121	24.1	27		
2,4-DB	mg/kg	ND	0.101	0.101	0.103	0.0451	102	44.5	10.0-160	78.2	22	P9,R1	
Dicamba	mg/kg	ND	0.101	0.101	0.0803	0.0572	79.3	56.4	10.0-154	33.6	21	R1	
Dichlorprop	mg/kg	ND	0.101	0.101	0.0906	0.0612	89.4	60.4	10.0-158	38.8	20	P9,R1	
Dinoseb	mg/kg	ND	0.101	0.101	0.0694	0.0162	68.5	16.0	10.0-120	124	40	R1	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Parameter	Units	R4060961-3			R4060961-4			% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		L1727573-12 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
MCPA	mg/kg	ND	10.1	10.1	9.95	7.66	98.2	75.6	10.0-160	26.0	40	P9		
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	ND	10.1	10.1	10.6	6.71	104	66.3	10.0-160	44.6	40	P9,R1		
2,4,5-T	mg/kg	ND	0.101	0.101	0.0802	0.0520	79.1	51.3	10.0-157	42.7	20	R1		
2,4,5-TP (Silvex)	mg/kg	ND	0.101	0.101	0.0852	0.0497	84.0	49.1	10.0-156	52.5	20	R1		
2,4-DCAA (S)	%						79.1	63.8	22.0-132					

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch: 2266780

Analysis Method: EPA 6020B

QC Batch Method: 3050B

Analysis Description: Metals (ICPMS) 6020B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450784001, 60450784002

METHOD BLANK: R4060691-1

Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	mg/kg	<6.90	50.0	6.90	04/22/24 19:51	
Antimony	mg/kg	0.469J	3.00	0.166	04/22/24 19:51	J
Arsenic	mg/kg	<0.100	1.00	0.100	04/22/24 19:51	
Barium	mg/kg	<0.152	2.50	0.152	04/22/24 19:51	
Beryllium	mg/kg	<0.138	2.50	0.138	04/22/24 19:51	
Cadmium	mg/kg	<0.0855	1.00	0.0855	04/22/24 19:51	
Calcium	mg/kg	<75.5	500	75.5	04/22/24 19:51	
Chromium	mg/kg	<0.297	5.00	0.297	04/22/24 19:51	
Cobalt	mg/kg	<0.0463	1.00	0.0463	04/22/24 19:51	
Copper	mg/kg	<0.133	5.00	0.133	04/22/24 19:51	
Iron	mg/kg	<8.95	50.0	8.95	04/22/24 19:51	
Lead	mg/kg	<0.0990	2.00	0.0990	04/22/24 19:51	
Magnesium	mg/kg	<45.9	500	45.9	04/22/24 19:51	
Manganese	mg/kg	<0.269	2.50	0.269	04/22/24 19:51	
Molybdenum	mg/kg	<0.101	2.50	0.101	04/22/24 19:51	
Nickel	mg/kg	<0.197	2.50	0.197	04/22/24 19:51	
Potassium	mg/kg	<68.0	500	68.0	04/22/24 19:51	
Selenium	mg/kg	<0.180	2.50	0.180	04/22/24 19:51	
Silver	mg/kg	<0.0865	0.500	0.0865	04/22/24 19:51	
Sodium	mg/kg	<76.5	500	76.5	04/22/24 19:51	
Thallium	mg/kg	<0.0650	2.00	0.0650	04/22/24 19:51	
Vanadium	mg/kg	<0.187	2.50	0.187	04/22/24 19:51	
Zinc	mg/kg	<0.740	25.0	0.740	04/22/24 19:51	

LABORATORY CONTROL SAMPLE: R4060691-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/kg	1000	1090	109	80.0-120	
Antimony	mg/kg	100	107	107	80.0-120	
Arsenic	mg/kg	100	108	108	80.0-120	
Barium	mg/kg	100	105	105	80.0-120	
Beryllium	mg/kg	100	112	112	80.0-120	
Cadmium	mg/kg	100	109	109	80.0-120	
Calcium	mg/kg	1000	1110	111	80.0-120	
Chromium	mg/kg	100	110	110	80.0-120	
Cobalt	mg/kg	100	112	112	80.0-120	
Copper	mg/kg	100	109	109	80.0-120	
Iron	mg/kg	1000	1120	112	80.0-120	
Lead	mg/kg	100	109	109	80.0-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

LABORATORY CONTROL SAMPLE: R4060691-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	mg/kg	1000	1150	115	80.0-120	
Manganese	mg/kg	100	108	108	80.0-120	
Molybdenum	mg/kg	100	104	104	80.0-120	
Nickel	mg/kg	100	116	116	80.0-120	
Potassium	mg/kg	1000	1090	109	80.0-120	
Selenium	mg/kg	100	107	107	80.0-120	
Silver	mg/kg	20.0	21.9	110	80.0-120	
Sodium	mg/kg	1000	1140	114	80.0-120	
Thallium	mg/kg	100	112	112	80.0-120	
Vanadium	mg/kg	100	110	110	80.0-120	
Zinc	mg/kg	100	106	106	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4060691-5 R4060691-6

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1725594-10 Result	Spike Conc.	Spike Conc.	MS Conc.								
Aluminum	mg/kg	17800	1310	1310	27000	29300	701	876	75.0-125	8.14	20	P6	
Antimony	mg/kg	0.324	131	131	128	126	98.0	96.2	75.0-125	1.77	20		
Arsenic	mg/kg	0.686	131	131	142	143	108	109	75.0-125	0.130	20		
Barium	mg/kg	35.5	131	131	201	187	127	115	75.0-125	7.50	20	MH	
Beryllium	mg/kg	0.889	131	131	144	146	110	111	75.0-125	1.07	20	E	
Cadmium	mg/kg	ND	131	131	156	154	119	118	75.0-125	1.08	20		
Calcium	mg/kg	ND	1310	1310	1540	1550	118	118	75.0-125	0.528	20		
Chromium	mg/kg	33.5	131	131	184	173	115	107	75.0-125	6.09	20		
Cobalt	mg/kg	5.04	131	131	157	160	116	118	75.0-125	1.57	20		
Copper	mg/kg	9.34	131	131	163	161	117	116	75.0-125	0.875	20		
Iron	mg/kg	64100	1310	1310	61300	56000	0.00	0.00	75.0-125	9.12	20	P6	
Lead	mg/kg	29.0	131	131	187	196	121	128	75.0-125	4.69	20	MH	
Magnesium	mg/kg	103	1310	1310	1680	1670	121	120	75.0-125	0.596	20		
Manganese	mg/kg	331	131	131	521	602	145	207	75.0-125	14.4	20	MH	
Molybdenum	mg/kg	0.242	131	131	144	139	110	106	75.0-125	3.36	20		
Nickel	mg/kg	5.73	131	131	161	160	119	118	75.0-125	0.705	20		
Potassium	mg/kg	609	1310	1310	1770	1810	88.5	91.6	75.0-125	2.27	20		
Selenium	mg/kg	0.292	131	131	150	147	115	112	75.0-125	2.01	20		
Silver	mg/kg	ND	26.1	26.1	31.4	31.1	120	119	75.0-125	0.894	20		
Sodium	mg/kg	ND	1310	1310	1540	1510	118	115	75.0-125	1.98	20		
Thallium	mg/kg	0.239	131	131	154	149	118	114	75.0-125	3.68	20		
Vanadium	mg/kg	49.9	131	131	194	192	110	109	75.0-125	0.835	20		
Zinc	mg/kg	15.6	131	131	154	157	106	108	75.0-125	1.32	20		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch: 2266256

Analysis Method: EPA 7471B

QC Batch Method: 7471A

Analysis Description: Mercury 7471B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450784001, 60450784002

METHOD BLANK: R4057381-1

Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	<0.0180	0.0400	0.0180	04/13/24 17:45	

LABORATORY CONTROL SAMPLE: R4057381-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.500	0.503	101	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4057381-4 R4057381-5

Parameter	Units	R4057381-4		R4057381-5		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual	
		L1725131-02 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Mercury	mg/kg	ND	0.525	0.525	0.459	0.502	87.6	95.7	75.0-125	8.84	20	

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## QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch: 890390

Analysis Method: EPA 8260C

QC Batch Method: EPA 5035A/5030B

Analysis Description: 8260C MSV 5035A Low Level

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450784001, 60450784002

METHOD BLANK: 3524107

Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<0.71	5.0	0.71	04/12/24 11:26	
1,1,1-Trichloroethane	ug/kg	<1.0	5.0	1.0	04/12/24 11:26	
1,1,2,2-Tetrachloroethane	ug/kg	<0.70	5.0	0.70	04/12/24 11:26	
1,1,2-Trichloroethane	ug/kg	<0.72	5.0	0.72	04/12/24 11:26	
1,1-Dichloroethane	ug/kg	<1.2	5.0	1.2	04/12/24 11:26	
1,1-Dichloroethene	ug/kg	<2.0	5.0	2.0	04/12/24 11:26	
1,1-Dichloropropene	ug/kg	<1.1	5.0	1.1	04/12/24 11:26	
1,2,3-Trichlorobenzene	ug/kg	<0.58	5.0	0.58	04/12/24 11:26	
1,2,3-Trichloropropane	ug/kg	<1.5	5.0	1.5	04/12/24 11:26	
1,2,4-Trichlorobenzene	ug/kg	<0.49	5.0	0.49	04/12/24 11:26	
1,2,4-Trimethylbenzene	ug/kg	<0.69	5.0	0.69	04/12/24 11:26	
1,2-Dibromo-3-chloropropane	ug/kg	<3.3	13.0	3.3	04/12/24 11:26	
1,2-Dibromoethane (EDB)	ug/kg	<0.53	5.0	0.53	04/12/24 11:26	
1,2-Dichlorobenzene	ug/kg	<0.84	5.0	0.84	04/12/24 11:26	
1,2-Dichloroethane	ug/kg	<0.96	5.0	0.96	04/12/24 11:26	
1,2-Dichloroethene (Total)	ug/kg	<1.9	10.0	1.9	04/12/24 11:26	
1,2-Dichloropropane	ug/kg	<1.0	5.0	1.0	04/12/24 11:26	
1,3,5-Trimethylbenzene	ug/kg	<0.43	5.0	0.43	04/12/24 11:26	
1,3-Dichlorobenzene	ug/kg	<0.63	5.0	0.63	04/12/24 11:26	
1,3-Dichloropropane	ug/kg	<0.19	5.0	0.19	04/12/24 11:26	
1,4-Dichlorobenzene	ug/kg	<0.88	5.0	0.88	04/12/24 11:26	
2,2-Dichloropropane	ug/kg	<1.5	5.0	1.5	04/12/24 11:26	
2-Butanone (MEK)	ug/kg	<31.9	63.0	31.9	04/12/24 11:26	
2-Chlorotoluene	ug/kg	<0.70	5.0	0.70	04/12/24 11:26	
2-Hexanone	ug/kg	<10.4	63.0	10.4	04/12/24 11:26	
4-Chlorotoluene	ug/kg	<0.39	5.0	0.39	04/12/24 11:26	
4-Methyl-2-pentanone (MIBK)	ug/kg	<7.0	63.0	7.0	04/12/24 11:26	
Acetone	ug/kg	<60.1	63.0	60.1	04/12/24 11:26	
Benzene	ug/kg	<0.46	5.0	0.46	04/12/24 11:26	
Bromobenzene	ug/kg	<0.62	5.0	0.62	04/12/24 11:26	
Bromochloromethane	ug/kg	<0.74	5.0	0.74	04/12/24 11:26	
Bromodichloromethane	ug/kg	<0.85	13.0	0.85	04/12/24 11:26	
Bromoform	ug/kg	<0.39	13.0	0.39	04/12/24 11:26	
Bromomethane	ug/kg	<6.2	13.0	6.2	04/12/24 11:26	
Carbon disulfide	ug/kg	<2.3	5.0	2.3	04/12/24 11:26	
Carbon tetrachloride	ug/kg	<1.7	5.0	1.7	04/12/24 11:26	
Chlorobenzene	ug/kg	<0.29	5.0	0.29	04/12/24 11:26	
Chloroethane	ug/kg	<8.3	25.0	8.3	04/12/24 11:26	
Chloroform	ug/kg	<1.8	5.0	1.8	04/12/24 11:26	
Chloromethane	ug/kg	<1.2	13.0	1.2	04/12/24 11:26	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

METHOD BLANK: 3524107

Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/kg	<0.93	5.0	0.93	04/12/24 11:26	
cis-1,3-Dichloropropene	ug/kg	<0.75	5.0	0.75	04/12/24 11:26	
Dibromochloromethane	ug/kg	<0.30	5.0	0.30	04/12/24 11:26	
Dibromomethane	ug/kg	<1.5	5.0	1.5	04/12/24 11:26	
Dichlorodifluoromethane	ug/kg	<0.95	13.0	0.95	04/12/24 11:26	
Ethylbenzene	ug/kg	<0.87	5.0	0.87	04/12/24 11:26	
Hexachloro-1,3-butadiene	ug/kg	<0.89	5.0	0.89	04/12/24 11:26	
Isopropylbenzene (Cumene)	ug/kg	<0.32	5.0	0.32	04/12/24 11:26	
Methyl-tert-butyl ether	ug/kg	<0.96	5.0	0.96	04/12/24 11:26	
Methylene Chloride	ug/kg	<19.4	25.0	19.4	04/12/24 11:26	
n-Butylbenzene	ug/kg	<0.48	5.0	0.48	04/12/24 11:26	
n-Propylbenzene	ug/kg	<0.61	5.0	0.61	04/12/24 11:26	
Naphthalene	ug/kg	<0.73	10.0	0.73	04/12/24 11:26	
p-Isopropyltoluene	ug/kg	<0.44	5.0	0.44	04/12/24 11:26	
sec-Butylbenzene	ug/kg	<0.49	5.0	0.49	04/12/24 11:26	
Styrene	ug/kg	<0.40	5.0	0.40	04/12/24 11:26	
tert-Butylbenzene	ug/kg	<0.32	5.0	0.32	04/12/24 11:26	
Tetrachloroethene	ug/kg	<0.53	5.0	0.53	04/12/24 11:26	
Toluene	ug/kg	<4.4	20.0	4.4	04/12/24 11:26	
trans-1,2-Dichloroethene	ug/kg	<1.1	5.0	1.1	04/12/24 11:26	
trans-1,3-Dichloropropene	ug/kg	<0.60	5.0	0.60	04/12/24 11:26	
Trichloroethene	ug/kg	<1.9	5.0	1.9	04/12/24 11:26	
Trichlorofluoromethane	ug/kg	<9.6	13.0	9.6	04/12/24 11:26	
Vinyl chloride	ug/kg	<0.93	13.0	0.93	04/12/24 11:26	
Xylene (Total)	ug/kg	<3.7	15.0	3.7	04/12/24 11:26	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		04/12/24 11:26	
4-Bromofluorobenzene (S)	%	101	83-119		04/12/24 11:26	
Toluene-d8 (S)	%	109	80-120		04/12/24 11:26	

LABORATORY CONTROL SAMPLE: 3524108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	1250	1440	115	84-125	
1,1,1-Trichloroethane	ug/kg	1250	1330	106	81-121	
1,1,2,2-Tetrachloroethane	ug/kg	1250	1290	103	76-121	
1,1,2-Trichloroethane	ug/kg	1250	1310	105	83-118	
1,1-Dichloroethane	ug/kg	1250	1250	100	74-120	
1,1-Dichloroethene	ug/kg	1250	1240	100	71-124	
1,1-Dichloropropene	ug/kg	1250	1200	96	73-123	
1,2,3-Trichlorobenzene	ug/kg	1250	1340	107	81-123	
1,2,3-Trichloropropane	ug/kg	1250	1330	107	81-116	
1,2,4-Trichlorobenzene	ug/kg	1250	1360	109	79-126	
1,2,4-Trimethylbenzene	ug/kg	1250	1380	111	79-121	
1,2-Dibromo-3-chloropropane	ug/kg	1250	1330	106	74-125	

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## QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

LABORATORY CONTROL SAMPLE: 3524108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/kg	1250	1320	106	64-137	
1,2-Dichlorobenzene	ug/kg	1250	1230	99	83-119	
1,2-Dichloroethane	ug/kg	1250	1270	102	58-128	
1,2-Dichloroethene (Total)	ug/kg	2500	2390	95	82-117	
1,2-Dichloropropane	ug/kg	1250	1310	105	77-122	
1,3,5-Trimethylbenzene	ug/kg	1250	1380	110	81-122	
1,3-Dichlorobenzene	ug/kg	1250	1310	105	83-119	
1,3-Dichloropropane	ug/kg	1250	1290	103	83-118	
1,4-Dichlorobenzene	ug/kg	1250	1200	96	83-116	
2,2-Dichloropropane	ug/kg	1250	1420	114	76-124	
2-Butanone (MEK)	ug/kg	6250	5860	94	63-122	
2-Chlorotoluene	ug/kg	1250	1350	108	79-119	
2-Hexanone	ug/kg	6250	6730	108	68-122	
4-Chlorotoluene	ug/kg	1250	1360	109	84-119	
4-Methyl-2-pentanone (MIBK)	ug/kg	6250	6800	109	63-128	
Acetone	ug/kg	6250	6330	101	55-124	
Benzene	ug/kg	1250	1200	96	67-126	
Bromobenzene	ug/kg	1250	1320	106	85-117	
Bromochloromethane	ug/kg	1250	1310	105	78-122	
Bromodichloromethane	ug/kg	1250	1280	103	82-120	
Bromoform	ug/kg	1250	1490	119	77-133	
Bromomethane	ug/kg	1250	1150	92	20-168	
Carbon disulfide	ug/kg	1250	1210	96	60-133	
Carbon tetrachloride	ug/kg	1250	1340	107	79-128	
Chlorobenzene	ug/kg	1250	1240	99	84-118	
Chloroethane	ug/kg	1250	1140	91	53-139	
Chloroform	ug/kg	1250	1250	100	82-120	
Chloromethane	ug/kg	1250	1020	81	33-143	
cis-1,2-Dichloroethene	ug/kg	1250	1140	91	83-117	
cis-1,3-Dichloropropene	ug/kg	1250	1390	111	80-122	
Dibromochloromethane	ug/kg	1250	1460	117	82-128	
Dibromomethane	ug/kg	1250	1300	104	82-119	
Dichlorodifluoromethane	ug/kg	1250	1020	81	12-159	
Ethylbenzene	ug/kg	1250	1270	102	69-127	
Hexachloro-1,3-butadiene	ug/kg	1250	1430	114	77-133	
Isopropylbenzene (Cumene)	ug/kg	1250	1360	109	83-122	
Methyl-tert-butyl ether	ug/kg	1250	1360	109	58-137	
Methylene Chloride	ug/kg	1250	1170	94	68-125	
n-Butylbenzene	ug/kg	1250	1430	115	73-131	
n-Propylbenzene	ug/kg	1250	1340	107	82-122	
Naphthalene	ug/kg	1250	1360	109	60-136	
p-Isopropyltoluene	ug/kg	1250	1420	114	74-129	
sec-Butylbenzene	ug/kg	1250	1380	110	71-133	
Styrene	ug/kg	1250	1380	110	84-121	
tert-Butylbenzene	ug/kg	1250	1380	110	81-122	
Tetrachloroethene	ug/kg	1250	1360	109	78-130	
Toluene	ug/kg	1250	1200	96	80-118	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

LABORATORY CONTROL SAMPLE: 3524108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/kg	1250	1250	100	78-118	
trans-1,3-Dichloropropene	ug/kg	1250	1440	115	81-123	
Trichloroethene	ug/kg	1250	1300	104	78-127	
Trichlorofluoromethane	ug/kg	1250	1360	109	64-133	
Vinyl chloride	ug/kg	1250	1150	92	45-139	
Xylene (Total)	ug/kg	3750	3880	104	69-130	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			98	83-119	
Toluene-d8 (S)	%			102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3524109 3524110

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450758001 Result	Spike Conc.	Spike Conc.	MS Result						
1,1,1,2-Tetrachloroethane	ug/kg	<1.0	1820	1820	1750	1880	96	104	12-128	7	59
1,1,1-Trichloroethane	ug/kg	<1.5	1820	1820	1610	1730	88	95	15-131	8	75
1,1,2,2-Tetrachloroethane	ug/kg	<1.0	1820	1820	1710	1810	94	100	10-132	6	65
1,1,2-Trichloroethane	ug/kg	<1.0	1820	1820	1660	1750	92	96	14-132	5	54
1,1-Dichloroethane	ug/kg	<1.7	1820	1820	1560	1640	86	90	23-126	5	64
1,1-Dichloroethene	ug/kg	<3.0	1820	1820	1420	1560	78	86	20-129	10	80
1,1-Dichloropropene	ug/kg	<1.6	1820	1820	1400	1490	77	82	15-127	6	78
1,2,3-Trichlorobenzene	ug/kg	<0.85	1820	1820	1660	1750	92	96	10-124	5	67
1,2,3-Trichloropropane	ug/kg	<2.2	1820	1820	1690	1820	93	100	19-125	7	51
1,2,4-Trichlorobenzene	ug/kg	<0.71	1820	1820	1670	1800	92	99	10-129	7	73
1,2,4-Trimethylbenzene	ug/kg	1.4J	1820	1820	1770	1810	97	99	10-124	2	68
1,2-Dibromo-3-chloropropane	ug/kg	<4.8	1820	1820	1680	1760	93	97	10-135	4	56
1,2-Dibromoethane (EDB)	ug/kg	<0.76	1820	1820	1670	1780	92	98	23-123	6	50
1,2-Dichlorobenzene	ug/kg	<1.2	1820	1820	1570	1660	86	91	10-126	6	60
1,2-Dichloroethane	ug/kg	<1.4	1820	1820	1680	1720	93	95	27-116	2	45
1,2-Dichloroethene (Total)	ug/kg	<2.7	3640	3640	2850	3080	78	85	20-127	8	64
1,2-Dichloropropane	ug/kg	<1.5	1820	1820	1670	1740	92	96	21-125	4	57
1,3,5-Trimethylbenzene	ug/kg	<0.63	1820	1820	1670	1750	92	97	10-125	5	65
1,3-Dichlorobenzene	ug/kg	1.2J	1820	1820	1630	1700	90	94	10-126	4	63
1,3-Dichloropropane	ug/kg	<0.28	1820	1820	1620	1720	89	94	24-114	6	51
1,4-Dichlorobenzene	ug/kg	<1.3	1820	1820	1500	1640	83	90	10-126	9	62
2,2-Dichloropropane	ug/kg	<2.2	1820	1820	1560	1710	86	94	17-124	9	70
2-Butanone (MEK)	ug/kg	<46.4	9090	9090	7390	7690	81	85	29-120	4	50
2-Chlorotoluene	ug/kg	<1.0	1820	1820	1610	1700	89	93	10-138	5	70
2-Hexanone	ug/kg	<15.1	9090	9090	8970	9660	99	106	25-121	7	51
4-Chlorotoluene	ug/kg	<0.57	1820	1820	1630	1730	90	95	10-112	6	62
4-Methyl-2-pentanone (MIBK)	ug/kg	<10.2	9090	9090	8990	9470	99	104	23-131	5	50
Acetone	ug/kg	<87.4	9090	9090	8400	8660	92	94	15-129	3	49
Benzene	ug/kg	<0.66	1820	1820	1480	1540	81	85	17-134	4	53
Bromobenzene	ug/kg	<0.90	1820	1820	1580	1690	87	93	10-129	6	63

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3524109 3524110												
Parameter	Units	60450758001		MS	MSD	MS		MSD		% Rec Limits	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec			
Bromochloromethane	ug/kg	<1.1	1820	1820	1670	1750	92	97	28-118	5	53	
Bromodichloromethane	ug/kg	<1.2	1820	1820	1710	1800	94	99	21-126	5	59	
Bromoform	ug/kg	<0.56	1820	1820	1840	2060	101	114	14-127	11	60	
Bromomethane	ug/kg	<9.0	1820	1820	1190	1360	65	75	10-121	14	67	
Carbon disulfide	ug/kg	19.2	1820	1820	1390	1500	75	82	10-122	8	78	
Carbon tetrachloride	ug/kg	<2.4	1820	1820	1630	1770	89	97	10-134	8	82	
Chlorobenzene	ug/kg	<0.42	1820	1820	1540	1650	85	91	10-126	7	60	
Chloroethane	ug/kg	<12.0	1820	1820	1390	1450	76	80	10-133	5	79	
Chloroform	ug/kg	<2.7	1820	1820	1600	1690	88	93	24-126	6	60	
Chloromethane	ug/kg	<1.8	1820	1820	928	979	51	54	10-125	5	78	
cis-1,2-Dichloroethene	ug/kg	<1.4	1820	1820	1380	1480	76	82	18-131	7	62	
cis-1,3-Dichloropropene	ug/kg	<1.1	1820	1820	1780	1840	98	101	24-117	4	60	
Dibromochloromethane	ug/kg	<0.44	1820	1820	1810	1980	100	109	22-117	9	59	
Dibromomethane	ug/kg	<2.1	1820	1820	1690	1760	93	97	29-118	4	52	
Dichlorodifluoromethane	ug/kg	<1.4	1820	1820	627	685	35	38	10-161	9	84	
Ethylbenzene	ug/kg	<1.3	1820	1820	1600	1670	88	92	10-137	4	60	
Hexachloro-1,3-butadiene	ug/kg	<1.3	1820	1820	1610	1690	89	93	10-124	5	76	
Isopropylbenzene (Cumene)	ug/kg	<0.46	1820	1820	1700	1800	94	99	10-123	6	72	
Methyl-tert-butyl ether	ug/kg	<1.4	1820	1820	1690	1780	93	98	31-126	5	42	
Methylene Chloride	ug/kg	<28.2	1820	1820	1440	1520	79	83	23-117	5	59	
n-Butylbenzene	ug/kg	<0.70	1820	1820	1730	1830	95	100	10-130	5	78	
n-Propylbenzene	ug/kg	<0.88	1820	1820	1600	1690	88	93	10-121	6	70	
Naphthalene	ug/kg	<1.1	1820	1820	1810	1920	100	105	10-131	6	63	
p-Isopropyltoluene	ug/kg	2.7J	1820	1820	1690	1800	93	99	10-127	6	76	
sec-Butylbenzene	ug/kg	<0.72	1820	1820	1630	1730	90	95	10-137	6	81	
Styrene	ug/kg	<0.59	1820	1820	1750	1870	97	103	10-119	6	56	
tert-Butylbenzene	ug/kg	<0.47	1820	1820	1620	1740	89	96	10-121	7	80	
Tetrachloroethene	ug/kg	<0.77	1820	1820	1540	1690	85	93	10-131	9	78	
Toluene	ug/kg	<6.5	1820	1820	1670	1550	92	85	13-131	8	60	
trans-1,2-Dichloroethene	ug/kg	<1.6	1820	1820	1470	1600	81	88	22-125	9	70	
trans-1,3-Dichloropropene	ug/kg	<0.87	1820	1820	1810	1910	100	105	20-122	5	54	
Trichloroethene	ug/kg	<2.7	1820	1820	1600	1710	88	94	14-144	7	69	
Trichlorofluoromethane	ug/kg	<14.0	1820	1820	1720	1650	94	91	10-134	4	86	
Vinyl chloride	ug/kg	<1.3	1820	1820	1100	1200	60	66	10-141	9	81	
Xylene (Total)	ug/kg	<5.3	5450	5450	5080	5160	93	95	10-137	2	58	
1,2-Dichlorobenzene-d4 (S)	%						99	99	80-120			
4-Bromofluorobenzene (S)	%						102	101	83-119			
Toluene-d8 (S)	%						103	102	80-120			

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch:	890681	Analysis Method:	EPA 8260
QC Batch Method:	EPA 5035	Analysis Description:	8260 MSV GRO and Oxygenates
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450784001, 60450784002

METHOD BLANK: 3525099 Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.068	0.50	0.068	04/16/24 20:50	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		04/16/24 20:50	
4-Bromofluorobenzene (S)	%	97	69-133		04/16/24 20:50	
Toluene-d8 (S)	%	99	78-122		04/16/24 20:50	

LABORATORY CONTROL SAMPLE: 3525100

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	3.8	94	61-140	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			99	69-133	
Toluene-d8 (S)	%			101	78-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525101 3525102

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual	
		60450758001 Result	Spike Conc.	Spike Conc.	Result						Result
TPH-GRO	mg/kg	<0.066	4.1	3.8	2.7	2.2	66	58	40-160	18	35
1,2-Dichlorobenzene-d4 (S)	%						99	99	80-120		
4-Bromofluorobenzene (S)	%						110	107	69-133		
Toluene-d8 (S)	%						103	101	78-122		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch:	890827	Analysis Method:	EPA 8082
QC Batch Method:	EPA 3546	Analysis Description:	8082 GCS PCB
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450784001, 60450784002

METHOD BLANK: 3525693 Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<8.8	32.8	8.8	04/18/24 11:51	
PCB-1221 (Aroclor 1221)	ug/kg	<11.0	32.8	11.0	04/18/24 11:51	
PCB-1232 (Aroclor 1232)	ug/kg	<11.0	32.8	11.0	04/18/24 11:51	
PCB-1242 (Aroclor 1242)	ug/kg	<11.0	32.8	11.0	04/18/24 11:51	
PCB-1248 (Aroclor 1248)	ug/kg	<11.0	32.8	11.0	04/18/24 11:51	
PCB-1254 (Aroclor 1254)	ug/kg	<11.0	32.8	11.0	04/18/24 11:51	
PCB-1260 (Aroclor 1260)	ug/kg	<11.0	32.8	11.0	04/18/24 11:51	
Decachlorobiphenyl (S)	%	87	20-120		04/18/24 11:51	

LABORATORY CONTROL SAMPLE: 3525694

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	163	165	101	48-120	
PCB-1260 (Aroclor 1260)	ug/kg	163	159	97	55-120	
Decachlorobiphenyl (S)	%			96	20-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525695 3525696

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450758001 Result	Spike Conc.	Spike Conc.	Result						
PCB-1016 (Aroclor 1016)	ug/kg	<10.9	205	205	174	180	85	88	48-120	4	40
PCB-1260 (Aroclor 1260)	ug/kg	<13.5	205	205	174	179	84	87	55-120	3	40
Decachlorobiphenyl (S)	%						71	91	20-120		40

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## QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch: 890829

Analysis Method: EPA 8270

QC Batch Method: EPA 3546

Analysis Description: 8270 Solid MSSV Microwave

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450784001, 60450784002

METHOD BLANK: 3525697

Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	<68.6	328	68.6	04/21/24 19:11	
1,2-Dichlorobenzene	ug/kg	<65.2	328	65.2	04/21/24 19:11	
1,3-Dichlorobenzene	ug/kg	<64.0	328	64.0	04/21/24 19:11	
1,4-Dichlorobenzene	ug/kg	<63.1	328	63.1	04/21/24 19:11	
2,4,5-Trichlorophenol	ug/kg	<67.1	328	67.1	04/21/24 19:11	
2,4,6-Trichlorophenol	ug/kg	<60.6	328	60.6	04/21/24 19:11	
2,4-Dichlorophenol	ug/kg	<65.6	328	65.6	04/21/24 19:11	
2,4-Dimethylphenol	ug/kg	<47.7	328	47.7	04/21/24 19:11	
2,4-Dinitrophenol	ug/kg	<99.0	1660	99.0	04/21/24 19:11	
2,4-Dinitrotoluene	ug/kg	<73.8	328	73.8	04/21/24 19:11	
2,6-Dinitrotoluene	ug/kg	<63.8	328	63.8	04/21/24 19:11	
2-Chloronaphthalene	ug/kg	<69.0	328	69.0	04/21/24 19:11	
2-Chlorophenol	ug/kg	<66.9	328	66.9	04/21/24 19:11	
2-Methylnaphthalene	ug/kg	<66.4	328	66.4	04/21/24 19:11	
2-Methylphenol(o-Cresol)	ug/kg	<59.7	328	59.7	04/21/24 19:11	
2-Nitroaniline	ug/kg	<54.3	655	54.3	04/21/24 19:11	
2-Nitrophenol	ug/kg	<51.2	328	51.2	04/21/24 19:11	
3&4-Methylphenol(m&p Cresol)	ug/kg	<60.9	328	60.9	04/21/24 19:11	
3,3'-Dichlorobenzidine	ug/kg	<32.2	655	32.2	04/21/24 19:11	
3-Nitroaniline	ug/kg	<51.0	655	51.0	04/21/24 19:11	
4,6-Dinitro-2-methylphenol	ug/kg	<56.7	1660	56.7	04/21/24 19:11	
4-Bromophenylphenyl ether	ug/kg	<70.7	328	70.7	04/21/24 19:11	
4-Chloro-3-methylphenol	ug/kg	<68.7	655	68.7	04/21/24 19:11	
4-Chloroaniline	ug/kg	<51.3	655	51.3	04/21/24 19:11	
4-Chlorophenylphenyl ether	ug/kg	<70.3	328	70.3	04/21/24 19:11	
4-Nitroaniline	ug/kg	<56.1	655	56.1	04/21/24 19:11	
4-Nitrophenol	ug/kg	<48.2	1660	48.2	04/21/24 19:11	
Acenaphthene	ug/kg	<70.4	328	70.4	04/21/24 19:11	
Acenaphthylene	ug/kg	<53.6	328	53.6	04/21/24 19:11	
Anthracene	ug/kg	<68.5	328	68.5	04/21/24 19:11	
Benzo(a)anthracene	ug/kg	<69.3	328	69.3	04/21/24 19:11	
Benzo(a)pyrene	ug/kg	<70.5	328	70.5	04/21/24 19:11	
Benzo(b)fluoranthene	ug/kg	<79.9	328	79.9	04/21/24 19:11	
Benzo(g,h,i)perylene	ug/kg	<56.9	328	56.9	04/21/24 19:11	
Benzo(k)fluoranthene	ug/kg	<70.5	328	70.5	04/21/24 19:11	
Benzoic Acid	ug/kg	<179	1660	179	04/21/24 19:11	
Benzyl alcohol	ug/kg	<60.2	655	60.2	04/21/24 19:11	
bis(2-Chloroethoxy)methane	ug/kg	<65.1	328	65.1	04/21/24 19:11	
bis(2-Chloroethyl) ether	ug/kg	<66.1	328	66.1	04/21/24 19:11	
bis(2-Chloroisopropyl) ether	ug/kg	<71.0	328	71.0	04/21/24 19:11	

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## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

METHOD BLANK: 3525697

Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Ethylhexyl)phthalate	ug/kg	<73.6	328	73.6	04/21/24 19:11	
Butylbenzylphthalate	ug/kg	<66.7	328	66.7	04/21/24 19:11	
Carbazole	ug/kg	<67.4	328	67.4	04/21/24 19:11	
Chrysene	ug/kg	<73.0	328	73.0	04/21/24 19:11	
Di-n-butylphthalate	ug/kg	<77.5	328	77.5	04/21/24 19:11	
Di-n-octylphthalate	ug/kg	<79.7	328	79.7	04/21/24 19:11	
Dibenz(a,h)anthracene	ug/kg	<58.9	328	58.9	04/21/24 19:11	
Dibenzofuran	ug/kg	<70.0	328	70.0	04/21/24 19:11	
Diethylphthalate	ug/kg	<74.9	328	74.9	04/21/24 19:11	
Dimethylphthalate	ug/kg	<68.0	328	68.0	04/21/24 19:11	
Fluoranthene	ug/kg	<72.2	328	72.2	04/21/24 19:11	
Fluorene	ug/kg	<69.7	328	69.7	04/21/24 19:11	
Hexachloro-1,3-butadiene	ug/kg	<70.2	328	70.2	04/21/24 19:11	
Hexachlorobenzene	ug/kg	<68.5	328	68.5	04/21/24 19:11	
Hexachlorocyclopentadiene	ug/kg	<202	328	202	04/21/24 19:11	
Hexachloroethane	ug/kg	<60.1	328	60.1	04/21/24 19:11	
Indeno(1,2,3-cd)pyrene	ug/kg	<67.0	328	67.0	04/21/24 19:11	
Isophorone	ug/kg	<63.3	328	63.3	04/21/24 19:11	
N-Nitroso-di-n-propylamine	ug/kg	<62.4	328	62.4	04/21/24 19:11	
N-Nitrosodiphenylamine	ug/kg	<65.1	328	65.1	04/21/24 19:11	
Naphthalene	ug/kg	<70.5	328	70.5	04/21/24 19:11	
Nitrobenzene	ug/kg	<69.4	328	69.4	04/21/24 19:11	
Pentachlorophenol	ug/kg	<108	1660	108	04/21/24 19:11	
Phenanthrene	ug/kg	<70.0	328	70.0	04/21/24 19:11	
Phenol	ug/kg	<61.6	328	61.6	04/21/24 19:11	
Pyrene	ug/kg	<69.9	328	69.9	04/21/24 19:11	
Pyridine	ug/kg	<48.5	328	48.5	04/21/24 19:11	
2,4,6-Tribromophenol (S)	%	89	35-120		04/21/24 19:11	
2-Fluorobiphenyl (S)	%	77	40-120		04/21/24 19:11	
2-Fluorophenol (S)	%	84	40-120		04/21/24 19:11	
Nitrobenzene-d5 (S)	%	86	30-120		04/21/24 19:11	
Phenol-d6 (S)	%	85	40-120		04/21/24 19:11	
Terphenyl-d14 (S)	%	89	45-120		04/21/24 19:11	

LABORATORY CONTROL SAMPLE: 3525698

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1640	1240	76	50-120	
1,2-Dichlorobenzene	ug/kg	1640	1210	74	45-120	
1,3-Dichlorobenzene	ug/kg	1640	1200	73	45-120	
1,4-Dichlorobenzene	ug/kg	1640	1220	74	45-120	
2,4,5-Trichlorophenol	ug/kg	1640	1290	79	50-120	
2,4,6-Trichlorophenol	ug/kg	1640	1330	81	45-120	
2,4-Dichlorophenol	ug/kg	1640	1260	77	50-120	

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## QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

LABORATORY CONTROL SAMPLE: 3525698

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dimethylphenol	ug/kg	1640	1310	80	40-120	
2,4-Dinitrophenol	ug/kg	1640	1230J	75	10-145	
2,4-Dinitrotoluene	ug/kg	1640	1320	81	50-120	
2,6-Dinitrotoluene	ug/kg	1640	1310	80	50-120	
2-Chloronaphthalene	ug/kg	1640	1270	78	45-120	
2-Chlorophenol	ug/kg	1640	1300	79	45-120	
2-Methylnaphthalene	ug/kg	1640	1250	76	50-120	
2-Methylphenol(o-Cresol)	ug/kg	1640	1300	79	45-120	
2-Nitroaniline	ug/kg	1640	1420	87	45-120	
2-Nitrophenol	ug/kg	1640	1310	80	45-120	
3&4-Methylphenol(m&p Cresol)	ug/kg	1640	1330	81	45-120	
3,3'-Dichlorobenzidine	ug/kg	1640	974	59	10-120	
3-Nitroaniline	ug/kg	1640	1010	62	15-120	
4,6-Dinitro-2-methylphenol	ug/kg	1640	1260J	77	20-135	
4-Bromophenylphenyl ether	ug/kg	1640	1320	81	50-120	
4-Chloro-3-methylphenol	ug/kg	1640	1360	83	50-120	
4-Chloroaniline	ug/kg	1640	762	46	10-120	
4-Chlorophenylphenyl ether	ug/kg	1640	1290	78	50-120	
4-Nitroaniline	ug/kg	1640	1250	76	45-120	
4-Nitrophenol	ug/kg	1640	1410J	86	45-125	
Acenaphthene	ug/kg	1640	1260	77	50-120	
Acenaphthylene	ug/kg	1640	1250	76	50-120	
Anthracene	ug/kg	1640	1270	77	50-120	
Benzo(a)anthracene	ug/kg	1640	1280	78	50-120	
Benzo(a)pyrene	ug/kg	1640	1290	79	50-120	
Benzo(b)fluoranthene	ug/kg	1640	1340	82	50-120	
Benzo(g,h,i)perylene	ug/kg	1640	1340	81	45-120	
Benzo(k)fluoranthene	ug/kg	1640	1280	78	50-120	
Benzoic Acid	ug/kg	1640	1180J	72	10-155	
Benzyl alcohol	ug/kg	1640	1300	79	45-120	
bis(2-Chloroethoxy)methane	ug/kg	1640	1300	80	45-120	
bis(2-Chloroethyl) ether	ug/kg	1640	1300	80	45-120	
bis(2-Chloroisopropyl) ether	ug/kg	1640	1330	81	49-122	
bis(2-Ethylhexyl)phthalate	ug/kg	1640	1340	82	50-125	
Butylbenzylphthalate	ug/kg	1640	1380	84	55-120	
Carbazole	ug/kg	1640	1240	76	50-120	
Chrysene	ug/kg	1640	1260	77	50-120	
Di-n-butylphthalate	ug/kg	1640	1370	84	50-120	
Di-n-octylphthalate	ug/kg	1640	1400	85	55-125	
Dibenz(a,h)anthracene	ug/kg	1640	1340	82	45-120	
Dibenzofuran	ug/kg	1640	1270	77	50-120	
Diethylphthalate	ug/kg	1640	1320	80	50-120	
Dimethylphthalate	ug/kg	1640	1270	77	50-120	
Fluoranthene	ug/kg	1640	1290	79	50-120	
Fluorene	ug/kg	1640	1280	78	50-120	
Hexachloro-1,3-butadiene	ug/kg	1640	1240	76	50-120	
Hexachlorobenzene	ug/kg	1640	1290	79	50-120	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

LABORATORY CONTROL SAMPLE: 3525698

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachlorocyclopentadiene	ug/kg	1640	1150	70	20-120	
Hexachloroethane	ug/kg	1640	1260	77	45-120	
Indeno(1,2,3-cd)pyrene	ug/kg	1640	1350	82	45-120	
Isophorone	ug/kg	1640	1310	80	45-120	
N-Nitroso-di-n-propylamine	ug/kg	1640	1360	83	45-120	
N-Nitrosodiphenylamine	ug/kg	1640	1280	78	50-120	
Naphthalene	ug/kg	1640	1240	76	50-120	
Nitrobenzene	ug/kg	1640	1330	81	45-120	
Pentachlorophenol	ug/kg	1640	1300J	79	25-135	
Phenanthrene	ug/kg	1640	1250	76	50-120	
Phenol	ug/kg	1640	1310	80	45-120	
Pyrene	ug/kg	1640	1220	75	55-120	
Pyridine	ug/kg	1640	950	58	25-120	
2,4,6-Tribromophenol (S)	%			84	35-120	
2-Fluorobiphenyl (S)	%			73	40-120	
2-Fluorophenol (S)	%			80	40-120	
Nitrobenzene-d5 (S)	%			82	30-120	
Phenol-d6 (S)	%			80	40-120	
Terphenyl-d14 (S)	%			77	45-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525699 3525700

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450758001	Result	Spike Conc.	Spike Conc.								
1,2,4-Trichlorobenzene	ug/kg	<170	2050	2050	1610	1660	78	81	38-120	3	26		
1,2-Dichlorobenzene	ug/kg	<161	2050	2050	1550	1610	75	79	35-120	4	31		
1,3-Dichlorobenzene	ug/kg	<158	2050	2050	1550	1590	75	78	35-120	3	31		
1,4-Dichlorobenzene	ug/kg	<156	2050	2050	1530	1600	74	78	40-120	4	30		
2,4,5-Trichlorophenol	ug/kg	<166	2050	2050	1650	1660	80	81	40-125	1	31		
2,4,6-Trichlorophenol	ug/kg	<150	2050	2050	1670	1730	81	85	40-120	4	31		
2,4-Dichlorophenol	ug/kg	<162	2050	2050	1640	1640	80	80	35-120	0	29		
2,4-Dimethylphenol	ug/kg	<118	2050	2050	1680	1720	82	84	20-120	2	32		
2,4-Dinitrophenol	ug/kg	<245	2050	2050	<246	<245	11	5	10-125		35	M1	
2,4-Dinitrotoluene	ug/kg	<182	2050	2050	1510	1510	74	74	25-135	0	32		
2,6-Dinitrotoluene	ug/kg	<158	2050	2050	1510	1530	74	75	20-140	1	25		
2-Chloronaphthalene	ug/kg	<171	2050	2050	1650	1690	80	82	35-120	2	28		
2-Chlorophenol	ug/kg	<165	2050	2050	1690	1760	82	86	30-120	4	31		
2-Methylnaphthalene	ug/kg	<164	2050	2050	1610	1650	78	80	35-120	2	28		
2-Methylphenol(o-Cresol)	ug/kg	<147	2050	2050	1730	1770	84	86	40-120	2	32		
2-Nitroaniline	ug/kg	<134	2050	2050	2130	2240	104	109	30-140	5	28		
2-Nitrophenol	ug/kg	<127	2050	2050	1310	1260	64	62	10-165	3	30		
3&4-Methylphenol(m&p Cresol)	ug/kg	<150	2050	2050	1770	1800	85	87	40-120	2	30		
3,3'-Dichlorobenzidine	ug/kg	<79.5	2050	2050	1310J	1280J	64	63	10-120		39		
3-Nitroaniline	ug/kg	<126	2050	2050	1600J	1550J	78	75	10-130		27		

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525699 3525700												
Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	Max RPD	Qual
		60450758001	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
4,6-Dinitro-2-methylphenol	ug/kg	<140	2050	2050	521J	325J	25	16	10-130		30	
4-Bromophenylphenyl ether	ug/kg	<175	2050	2050	1700	1680	83	82	40-120	2	33	
4-Chloro-3-methylphenol	ug/kg	<170	2050	2050	1860	1820	90	89	35-125	2	30	
4-Chloroaniline	ug/kg	<127	2050	2050	1290J	1250J	63	61	10-120		33	
4-Chlorophenylphenyl ether	ug/kg	<174	2050	2050	1670	1680	81	82	40-120	1	33	
4-Nitroaniline	ug/kg	<139	2050	2050	1930	1950	94	95	15-125	1	47	
4-Nitrophenol	ug/kg	<119	2050	2050	1830J	1820J	89	89	20-140		35	
Acenaphthene	ug/kg	<174	2050	2050	1650	1670	80	81	40-120	1	23	
Acenaphthylene	ug/kg	<133	2050	2050	1600	1630	78	80	40-120	2	29	
Anthracene	ug/kg	<169	2050	2050	1630	1660	79	81	40-120	1	30	
Benzo(a)anthracene	ug/kg	<171	2050	2050	1760	1720	85	83	35-130	2	32	
Benzo(a)pyrene	ug/kg	<174	2050	2050	1700	1690	83	82	25-135	0	33	
Benzo(b)fluoranthene	ug/kg	<198	2050	2050	1710	1640	83	80	15-145	4	37	
Benzo(g,h,i)perylene	ug/kg	<141	2050	2050	1670	1700	81	83	25-120	2	41	
Benzo(k)fluoranthene	ug/kg	<174	2050	2050	1630	1650	79	80	35-125	1	32	
Benzoic Acid	ug/kg	<442	2050	2050	665J	549J	32	27	10-160		35	
Benzyl alcohol	ug/kg	<149	2050	2050	1710	1780	83	87	40-120	4	31	
bis(2-Chloroethoxy)methane	ug/kg	<161	2050	2050	1720	1750	84	85	35-120	2	29	
bis(2-Chloroethyl) ether	ug/kg	<163	2050	2050	1740	1840	85	90	35-120	5	32	
bis(2-Chloroisopropyl) ether	ug/kg	<175	2050	2050	1760	1830	85	89	30-150	4	29	
bis(2-Ethylhexyl)phthalate	ug/kg	<182	2050	2050	1870	1910	91	93	30-150	2	33	
Butylbenzylphthalate	ug/kg	<165	2050	2050	1980	1950	96	95	25-155	1	33	
Carbazole	ug/kg	<167	2050	2050	1630	1640	79	80	40-120	1	30	
Chrysene	ug/kg	<180	2050	2050	1700	1710	83	83	30-125	0	31	
Di-n-butylphthalate	ug/kg	<192	2050	2050	1850	1840	90	90	40-125	1	31	
Di-n-octylphthalate	ug/kg	<197	2050	2050	1950	1900	95	93	35-155	2	29	
Dibenz(a,h)anthracene	ug/kg	<146	2050	2050	1690	1690	82	83	30-125	0	35	
Dibenzofuran	ug/kg	<173	2050	2050	1630	1660	79	81	35-125	2	28	
Diethylphthalate	ug/kg	<185	2050	2050	1770	1790	86	87	40-120	1	31	
Dimethylphthalate	ug/kg	<168	2050	2050	1690	1710	82	83	40-120	1	30	
Fluoranthene	ug/kg	<178	2050	2050	1700	1720	82	84	30-130	1	32	
Fluorene	ug/kg	<172	2050	2050	1680	1690	82	82	40-120	1	32	
Hexachloro-1,3-butadiene	ug/kg	<174	2050	2050	1640	1630	80	79	40-120	1	27	
Hexachlorobenzene	ug/kg	<169	2050	2050	1690	1700	82	83	45-120	1	31	
Hexachlorocyclopentadiene	ug/kg	<498	2050	2050	<501	<500	0	0	10-125		61 M1	
Hexachloroethane	ug/kg	<148	2050	2050	1210	1220	59	59	30-120	1	34	
Indeno(1,2,3-cd)pyrene	ug/kg	<166	2050	2050	1680	1690	82	83	30-125	1	38	
Isophorone	ug/kg	<157	2050	2050	1750	1790	85	88	40-120	3	28	
N-Nitroso-di-n-propylamine	ug/kg	<154	2050	2050	1850	1940	90	94	35-120	5	30	
N-Nitrosodiphenylamine	ug/kg	<161	2050	2050	1690	1700	82	83	35-125	1	36	
Naphthalene	ug/kg	<174	2050	2050	1620	1660	79	81	25-125	3	31	
Nitrobenzene	ug/kg	<172	2050	2050	1670	1680	81	82	40-120	1	29	
Pentachlorophenol	ug/kg	<268	2050	2050	1430J	1310J	70	64	15-150		35	
Phenanthrene	ug/kg	<173	2050	2050	1640	1630	80	80	35-125	0	29	
Phenol	ug/kg	<152	2050	2050	1730	1790	84	87	30-120	3	29	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525699		3525700		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450758001 Result	MS Spike Conc.	MSD Spike Conc.									
Pyrene	ug/kg	<173	2050	2050	1680	1610	82	79	35-135	4	38		
Pyridine	ug/kg	<120	2050	2050	1120	1150	54	56	10-120	3	35		
2,4,6-Tribromophenol (S)	%						90	87	35-120				
2-Fluorobiphenyl (S)	%						77	77	40-120				
2-Fluorophenol (S)	%						85	86	40-120				
Nitrobenzene-d5 (S)	%						80	80	30-120			P3	
Phenol-d6 (S)	%						86	88	40-120				
Terphenyl-d14 (S)	%						84	83	45-120				

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch:	890257	Analysis Method:	EPA 8270
QC Batch Method:	EPA 3546	Analysis Description:	8270 MSSV TPH ORO
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450784001, 60450784002

METHOD BLANK: 3523489 Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-DRO	mg/kg	<5.0	14.8	5.0	04/15/24 10:21	
TPH-ORO	mg/kg	<5.0	14.8	5.0	04/15/24 10:21	
2-Fluorobiphenyl (S)	%	97	50-120		04/15/24 10:21	
Nitrobenzene-d5 (S)	%	88	35-120		04/15/24 10:21	
Terphenyl-d14 (S)	%	96	45-120		04/15/24 10:21	

LABORATORY CONTROL SAMPLE: 3523490

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/kg	331	247	75	40-125	
2-Fluorobiphenyl (S)	%			82	50-120	
Nitrobenzene-d5 (S)	%			78	35-120	
Terphenyl-d14 (S)	%			80	45-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3523491 3523492

Parameter	Units	3523491		3523492		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450758001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
TPH-DRO	mg/kg	27.5	411	409	353	339	79	76	40-125	4	38
2-Fluorobiphenyl (S)	%						98	84	50-120		
Nitrobenzene-d5 (S)	%						94	85	35-120		
Terphenyl-d14 (S)	%						95	84	45-120		

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### QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch: 890391

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450784001, 60450784002

METHOD BLANK: 3524113

Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Percent Moisture	%	<0.50	0.50	0.50	04/12/24 13:40	

SAMPLE DUPLICATE: 3524114

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.1	19.6	2	20	

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### QUALITY CONTROL DATA

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch: 2266358

Analysis Method: SM 2540G

QC Batch Method: SM 2540 G

Analysis Description: Total Solids 2540 G-2011

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450784001, 60450784002

METHOD BLANK: R4057571-1

Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	0.00300			04/13/24 16:13	

LABORATORY CONTROL SAMPLE: R4057571-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	90.0-110	

SAMPLE DUPLICATE: R4057571-3

Parameter	Units	L1725199-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	87.9	88.2	0.363	10	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch: 890504

Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1

Analysis Description: 350.1 Ammonia

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450784001, 60450784002

METHOD BLANK: 3524512

Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/kg	<0.76	0.95	0.76	04/16/24 15:33	

LABORATORY CONTROL SAMPLE: 3524513

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/kg	46.1	48.8	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3524514 3524516

Parameter	Units	60450758001		3524516		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Nitrogen, Ammonia	mg/kg	<0.95	67.1	58.4	60.5	51.6	90	88	80-120	16	20

SAMPLE DUPLICATE: 3524515

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/kg	<0.95	2.4		20	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch: 890751	Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E	Analysis Description: 4500CNE Cyanide, Total
	Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450784001, 60450784002

METHOD BLANK: 3525479 Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cyanide	mg/kg	<0.12	0.15	0.12	04/18/24 12:05	

LABORATORY CONTROL SAMPLE: 3525480

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	3	3.0	101	72-115	

MATRIX SPIKE SAMPLE: 3525481

Parameter	Units	60450758001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	<0.16	3.7	2.8	71	10-128	

SAMPLE DUPLICATE: 3525482

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/kg	<0.16	<0.16		35	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

QC Batch:	890759	Analysis Method:	EPA 9056
QC Batch Method:	EPA 9056	Analysis Description:	9056 IC Anions
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450784001, 60450784002

METHOD BLANK: 3525507 Matrix: Solid

Associated Lab Samples: 60450784001, 60450784002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrate as N	mg/kg	<5.6	9.9	5.6	04/19/24 11:36	
Nitrite as N	mg/kg	<5.2	9.9	5.2	04/19/24 11:36	

LABORATORY CONTROL SAMPLE: 3525508

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/kg	199	184	93	80-120	
Nitrite as N	mg/kg	199	210	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525509 3525510

Parameter	Units	60450713001		3525510		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Nitrate as N	mg/kg	ND	499	499	18.0J	90.1	2	16	80-120	15	M1
Nitrite as N	mg/kg	ND	499	499	295	410	57	80	80-120	33	15 M1,R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3526959 3526960

Parameter	Units	60450758001		3526960		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Nitrate as N	mg/kg	<6.9	245	245	246	252	99	101	80-120	2	15
Nitrite as N	mg/kg	<6.4	245	245	287	293	115	118	80-120	2	15

SAMPLE DUPLICATE: 3525511

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrate as N	mg/kg	<6.9	<6.9		15	
Nitrite as N	mg/kg	<6.4	<6.4		15	

SAMPLE DUPLICATE: 3526961

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrate as N	mg/kg	<6.9	<6.9		15	

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**QUALITY CONTROL DATA**

Project: KC Water Treatment Sediment  
 Pace Project No.: 60450784

SAMPLE DUPLICATE: 3526961

Parameter	Units	60450758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/kg	<6.4	<6.4		15	

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### QUALIFIERS

Project: KC Water Treatment Sediment

Pace Project No.: 60450784

#### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

#### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

J Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

P3 Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

P9 RPD between the primary and confirmatory analysis exceeded 40%.

R1 RPD value was outside control limits.

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KC Water Treatment Sediment


Pace Project No.: 60450784

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450784001	SD02/SD-1	3546/3665A	2268528	EPA 8081B	2268528
60450784002	SD01/SD-1	3546/3665A	2268528	EPA 8081B	2268528
60450784001	SD02/SD-1	8151A	2266157	EPA 8151A	2266157
60450784002	SD01/SD-1	8151A	2270175	EPA 8151A	2270175
60450784001	SD02/SD-1	EPA 3546	890827	EPA 8082	891018
60450784002	SD01/SD-1	EPA 3546	890827	EPA 8082	891018
60450784001	SD02/SD-1	3050B	2266780	EPA 6020B	2266780
60450784002	SD01/SD-1	3050B	2266780	EPA 6020B	2266780
60450784001	SD02/SD-1	7471A	2266256	EPA 7471B	2266256
60450784002	SD01/SD-1	7471A	2266256	EPA 7471B	2266256
60450784001	SD02/SD-1	EPA 3546	890829	EPA 8270	891428
60450784002	SD01/SD-1	EPA 3546	890829	EPA 8270	891428
60450784001	SD02/SD-1	EPA 3546	890257	EPA 8270	890364
60450784002	SD01/SD-1	EPA 3546	890257	EPA 8270	890364
60450784001	SD02/SD-1	EPA 5035A/5030B	890390	EPA 8260C	890403
60450784002	SD01/SD-1	EPA 5035A/5030B	890390	EPA 8260C	890403
60450784001	SD02/SD-1	EPA 5035	890681	EPA 8260	890801
60450784002	SD01/SD-1	EPA 5035	890681	EPA 8260	890801
60450784001	SD02/SD-1	ASTM D2974	890391		
60450784002	SD01/SD-1	ASTM D2974	890391		
60450784001	SD02/SD-1	SM 2540 G	2266358	SM 2540G	2266358
60450784002	SD01/SD-1	SM 2540 G	2266358	SM 2540G	2266358
60450784001	SD02/SD-1	EPA 350.1	890504	EPA 350.1	890813
60450784002	SD01/SD-1	EPA 350.1	890504	EPA 350.1	890813
60450784001	SD02/SD-1	SM 4500-CN-E	890751	SM 4500-CN-E	891325
60450784002	SD01/SD-1	SM 4500-CN-E	890751	SM 4500-CN-E	891325
60450784001	SD02/SD-1	EPA 9056	890759	EPA 9056	891554
60450784002	SD01/SD-1	EPA 9056	890759	EPA 9056	891554

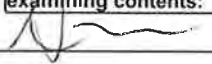
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WO#: 60450784  
  
 60450784

	DC#_Title: ENV-FRM-LENE-0009_Sample		
	Revision: 2	Effective Date: 01/12/2022	Issued By: Lenexa

Client Name: Burns, McDermott  
 Courier: FedEx  UPS  VIA  Clay  PEX  ECI  Pace  Xroads  Client  Other   
 Tracking #: \_\_\_\_\_ Pace Shipping Label Used? Yes  No   
 Custody Seal on Cooler/Box Present: Yes  No  Seals intact: Yes  No   
 Packing Material: Bubble Wrap  Bubble Bags  Foam  None  Other   
 Thermometer Used: T-258 Type of Ice: (Wet) Blue None  
 Cooler Temperature (°C): As-read 7.6 Corr. Factor -0.3 Corrected 7.3

Date and initials of person examining contents:  
 4/11/24

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<u>NO<sup>2</sup>/NO<sup>3</sup></u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>SL</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks:		
Lead acetate strip turns dark? (Record only)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_















April 25, 2024

Justin Carter  
Burns & McDonnell  
9400 Ward Parkway  
Kansas City, MO 64114

RE: Project: KC WATER TREATMENT WT  
Pace Project No.: 60450798

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on April 11, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller  
alice.spiller@pacelabs.com  
(913)599-5665  
PM Lab Management

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL  
Jacquelin Lee, Burns & McDonnell



## REPORT OF LABORATORY ANALYSIS

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### CERTIFICATIONS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

#### Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219  
 Arkansas Inorganic Drinking Water Certification  
 Arkansas Certification #: 88-00679  
 Colorado Division of Oil and Public Safety  
 Illinois Certification #: 2000302023-6  
 Iowa Certification #: 118  
 Kansas Field Laboratory Certification #: E-92587

Kansas/NELAP Certification #: E-10116  
 Louisiana Certification #: 03055  
 Missouri Inorganic Drinking Water Certification  
 Nevada Certification #: KS000212024-1  
 Oklahoma Certification #: 2023-073  
 Texas Certification #: T104704407-23-17  
 Utah Certification #: KS000212022-13

#### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122  
 Alabama Certification #: 40660  
 Alaska Certification 17-026  
 Arizona Certification #: AZ0612  
 Arkansas Certification #: 88-0469  
 California Certification #: 2932  
 Canada Certification #: 1461.01  
 Colorado Certification #: TN00003  
 Connecticut Certification #: PH-0197  
 DOD Certification: #1461.01  
 EPA# TN00003  
 Florida Certification #: E87487  
 Georgia DW Certification #: 923  
 Georgia Certification: NELAP  
 Idaho Certification #: TN00003  
 Illinois Certification #: 200008  
 Indiana Certification #: C-TN-01  
 Iowa Certification #: 364  
 Kansas Certification #: E-10277  
 Kentucky UST Certification #: 16  
 Kentucky Certification #: 90010  
 Louisiana Certification #: AI30792  
 Louisiana DW Certification #: LA180010  
 Maine Certification #: TN0002  
 Maryland Certification #: 324  
 Massachusetts Certification #: M-TN003  
 Michigan Certification #: 9958  
 Minnesota Certification #: 047-999-395  
 Mississippi Certification #: TN00003  
 Missouri Certification #: 340  
 Montana Certification #: CERT0086  
 Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34  
 New Hampshire Certification #: 2975  
 New Jersey Certification #: TN002  
 New Mexico DW Certification  
 New York Certification #: 11742  
 North Carolina Aquatic Toxicity Certification #: 41  
 North Carolina Drinking Water Certification #: 21704  
 North Carolina Environmental Certificate #: 375  
 North Dakota Certification #: R-140  
 Ohio VAP Certification #: CL0069  
 Oklahoma Certification #: 9915  
 Oregon Certification #: TN200002  
 Pennsylvania Certification #: 68-02979  
 Rhode Island Certification #: LAO00356  
 South Carolina Certification #: 84004  
 South Dakota Certification  
 Tennessee DW/Chem/Micro Certification #: 2006  
 Texas Mold Certification #: LAB0152  
 Texas Certification #: T 104704245-17-14  
 USDA Soil Permit #: P330-15-00234  
 Utah Certification #: TN00003  
 Virginia Certification #: VT2006  
 Vermont Dept. of Health: ID# VT-2006  
 Virginia Certification #: 460132  
 Washington Certification #: C847  
 West Virginia Certification #: 233  
 Wisconsin Certification #: 998093910  
 Wyoming UST Certification #: via A2LA 2926.01  
 A2LA-ISO 17025 Certification #: 1461.01  
 A2LA-ISO 17025 Certification #: 1461.02  
 AIHA-LAP/LLC EMLAP Certification #:100789

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: KC WATER TREATMENT WT  
Pace Project No.: 60450798

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60450798001	SW02/SW-1	Water	04/11/24 08:20	04/11/24 11:30
60450798002	TRIP BLANK	Water	04/11/24 08:20	04/11/24 11:30
60450798003	TRIP BLANK	Water	04/11/24 08:00	04/11/24 11:30

### REPORT OF LABORATORY ANALYSIS

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**SAMPLE ANALYTE COUNT**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60450798001	SW02/SW-1	EPA 8081B	HLA	23	PAN
		EPA 8151A	JMB	11	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6020B	LD	23	PAN
		EPA 7470A	AKB	1	PAN
		EPA 8270	WFG	73	PASI-K
		EPA 8270	WDC	5	PASI-K
		EPA 5030B/8260	PGH	69	PASI-K
		EPA 8260	BA, JLO	5	PASI-K
		SM 2320B	SR1	1	PASI-K
		SM 4500-O G	ECF	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 9040	SR1	1	PASI-K
		EPA 300.0	PL	2	PASI-K
		EPA 350.1	RKA	1	PASI-K
		EPA 353.2	RKA	3	PASI-K
		EPA 353.2	RKA	1	PASI-K
		SM 4500-CN-E	ECF	1	PASI-K
		60450798002	TRIP BLANK	EPA 5030B/8260	PGH
EPA 8260	BA, JLO			5	PASI-K
60450798003	TRIP BLANK	EPA 5030B/8260	PGH	69	PASI-K
		EPA 8260	BA, JLO	5	PASI-K

PAN = Pace National - Mt. Juliet

PASI-K = Pace Analytical Services - Kansas City

**REPORT OF LABORATORY ANALYSIS**

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

Date: April 25, 2024

### SW02/SW-1 (Lab ID: 60450798001)

- Chlorinated Acid Herbicides (GC) by Method 8151A - Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** EPA 8081B

**Description:** Pesticides (GC) 8081B

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for EPA 8081B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** EPA 8151A

**Description:** Chlorinated Herb. (GC) 8151A

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for EPA 8151A by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 2266267

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): L1725210-01

R1: RPD value was outside control limits.

- MSD (Lab ID: R4059572-4)
  - 2,4,5-T
  - 2,4,5-TP (Silvex)
  - 2,4-D
  - 2,4-DB
  - Dicamba
  - Dichlorprop

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** EPA 8082

**Description:** 8082 GCS PCB, LV

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** EPA 6020B

**Description:** Metals (ICPMS) 6020B

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for EPA 6020B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 2267363

B: Analyte was detected in the associated method blank.

- R4060374-1 (Lab ID: R4060374-1)
- Thallium

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** EPA 7470A

**Description:** Mercury 7470A

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for EPA 7470A by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** EPA 8270

**Description:** 8270 MSSV Semivolatile Organic

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890658

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450682001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 3525036)

- 3-Nitroaniline

- Pyrene

R1: RPD value was outside control limits.

- MSD (Lab ID: 3525036)

- Pyridine

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** EPA 8270

**Description:** 8270 MSSV DRO/ORO

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3511 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 891022

B: Analyte was detected in the associated method blank.

- BLANK for HBN 891022 [OEXT/955 (Lab ID: 3526517)]
  - TPH-DRO
  - TPH-ORO

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

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**Method:** EPA 5030B/8260

**Description:** 8260 MSV

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

3 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** EPA 8260

**Description:** 8260 MSV GRO and Oxygenates

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

3 samples were analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** SM 2320B

**Description:** 2320B Alkalinity

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for SM 2320B by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** SM 4500-O G

**Description:** 4500 OG Oxygen, Dissolved

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

### General Information:

1 sample was analyzed for SM 4500-O G by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA required holding time.

- SW02/SW-1 (Lab ID: 60450798001)

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** SM 4500-S-2 D

**Description:** 4500S2D Sulfide, Total

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for SM 4500-S-2 D by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890502

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450682001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3524498)
- Sulfide, Total

R1: RPD value was outside control limits.

- MSD (Lab ID: 3524499)
- Sulfide, Total

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** EPA 9040

**Description:** 9040 pH

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for EPA 9040 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA required holding time.

- SW02/SW-1 (Lab ID: 60450798001)

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

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**Method:** EPA 300.0

**Description:** 300.0 IC Anions 28 Days

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

### General Information:

1 sample was analyzed for EPA 300.0 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 890755

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 3525493)
- Fluoride

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890755

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450858002,60450976001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 3525494)
  - Fluoride
- MS (Lab ID: 3525496)
  - Fluoride
- MSD (Lab ID: 3525495)
  - Fluoride

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3525496)
  - Sulfate

R1: RPD value was outside control limits.

- MSD (Lab ID: 3525495)
  - Fluoride

### Additional Comments:

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** EPA 300.0

**Description:** 300.0 IC Anions 28 Days

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

Analyte Comments:

QC Batch: 890755

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 3525492)
  - Fluoride
- LCS (Lab ID: 3525493)
  - Fluoride
- MS (Lab ID: 3525494)
  - Fluoride
- MS (Lab ID: 3525496)
  - Fluoride
- MSD (Lab ID: 3525495)
  - Fluoride
- SW02/SW-1 (Lab ID: 60450798001)
  - Fluoride

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

---

**Method:** EPA 350.1

**Description:** 350.1 Ammonia

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for EPA 350.1 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

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**Method:** EPA 353.2

**Description:** 353.2 Nitrogen, NO2/NO3 unpres

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for EPA 353.2 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890413

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450690003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3524224)
- Nitrogen, NO2 plus NO3

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

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**Method:** EPA 353.2

**Description:** 353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> pres.

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for EPA 353.2 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 890401

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60450796001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3524172)
- Nitrogen, NO<sub>2</sub> plus NO<sub>3</sub>

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

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**Method:** SM 4500-CN-E

**Description:** 4500CNE Cyanide, Total

**Client:** BURNS & MCDONNELL

**Date:** April 25, 2024

**General Information:**

1 sample was analyzed for SM 4500-CN-E by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with SM 4500-CN-E with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Sample: SW02/SW-1 Lab ID: 60450798001 Collected: 04/11/24 08:20 Received: 04/11/24 11:30 Matrix: Water

Comments: Chlorinated Acid Herbicides (GC) by Method 8151A - Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data

Table with 10 columns: Parameters, Results, Units, PQL, MDL, DF, Prepared, Analyzed, CAS No., Qual. Includes sections for Pesticides (GC) 8081B and Chlorinated Herb. (GC) 8151A.

REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Sample: SW02/SW-1 Lab ID: 60450798001 Collected: 04/11/24 08:20 Received: 04/11/24 11:30 Matrix: Water

Comments: • Chlorinated Acid Herbicides (GC) by Method 8151A - Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Pace National - Mt. Juliet									
2,4-DB	<0.000356	mg/L	0.00236	0.000356	1.18	04/16/24 14:37	04/18/24 17:07	94-82-6	
Dicamba	<0.000289	mg/L	0.00236	0.000289	1.18	04/16/24 14:37	04/18/24 17:07	1918-00-9	
Dichlorprop	<0.00123	mg/L	0.00236	0.00123	1.18	04/16/24 14:37	04/18/24 17:07	120-36-5	
Dinoseb	<0.000295	mg/L	0.00236	0.000295	1.18	04/16/24 14:37	04/18/24 17:07	88-85-7	
MCPA	<0.0155	mg/L	0.118	0.0155	1.18	04/16/24 14:37	04/18/24 17:07	94-74-6	
2-(2-methyl-4-chlorophenoxy)pa	<0.0779	mg/L	0.118	0.0779	1.18	04/16/24 14:37	04/18/24 17:07	93-65-2	
2,4,5-T	<0.000304	mg/L	0.00236	0.000304	1.18	04/16/24 14:37	04/18/24 17:07	93-76-5	
2,4,5-TP (Silvex)	<0.000395	mg/L	0.00236	0.000395	1.18	04/16/24 14:37	04/18/24 17:07	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	70.8	%	14.0-158		1.18	04/16/24 14:37	04/18/24 17:07	19719-28-9	
<b>8082 GCS PCB, LV</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<0.15	ug/L	1.0	0.15	1	04/16/24 12:05	04/17/24 14:47	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:47	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:47	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:47	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:47	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:47	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.19	ug/L	1.0	0.19	1	04/16/24 12:05	04/17/24 14:47	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	69	%	20-120		1	04/16/24 12:05	04/17/24 14:47	2051-24-3	
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Aluminum	11.4	mg/L	2.00	0.370	20	04/16/24 14:49	04/22/24 14:37	7429-90-5	
Antimony	<0.00103	mg/L	0.00400	0.00103	1	04/16/24 14:49	04/21/24 21:35	7440-36-0	
Arsenic	0.00925	mg/L	0.00200	0.000180	1	04/16/24 14:49	04/21/24 21:35	7440-38-2	
Barium	0.253	mg/L	0.00200	0.000381	1	04/16/24 14:49	04/21/24 21:35	7440-39-3	
Beryllium	0.000871J	mg/L	0.00200	0.000190	1	04/16/24 14:49	04/22/24 14:34	7440-41-7	J
Cadmium	0.000517J	mg/L	0.00100	0.000150	1	04/16/24 14:49	04/21/24 21:35	7440-43-9	J
Calcium	278	mg/L	20.0	1.87	20	04/16/24 14:49	04/22/24 14:37	7440-70-2	
Chromium	0.0150	mg/L	0.00200	0.00124	1	04/16/24 14:49	04/21/24 21:35	7440-47-3	
Copper	0.0354	mg/L	0.00500	0.00151	1	04/16/24 14:49	04/21/24 21:35	7440-50-8	
Cobalt	0.0132	mg/L	0.00200	0.000059	1	04/16/24 14:49	04/21/24 21:35	7440-48-4	
Iron	27.9	mg/L	2.00	0.562	20	04/16/24 14:49	04/22/24 14:37	7439-89-6	
Lead	0.0238	mg/L	0.00200	0.000849	1	04/16/24 14:49	04/21/24 21:35	7439-92-1	
Magnesium	61.9	mg/L	20.0	1.47	20	04/16/24 14:49	04/22/24 14:37	7439-95-4	
Manganese	1.30	mg/L	0.100	0.0141	20	04/16/24 14:49	04/22/24 14:37	7439-96-5	
Molybdenum	0.00205J	mg/L	0.00500	0.000348	1	04/16/24 14:49	04/21/24 21:35	7439-98-7	J
Nickel	0.0410	mg/L	0.00200	0.000816	1	04/16/24 14:49	04/21/24 21:35	7440-02-0	
Potassium	6.04	mg/L	2.00	0.108	1	04/16/24 14:49	04/21/24 21:35	7440-09-7	
Selenium	0.00136J	mg/L	0.00200	0.000300	1	04/16/24 14:49	04/21/24 21:35	7782-49-2	J

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Sample: SW02/SW-1 Lab ID: 60450798001 Collected: 04/11/24 08:20 Received: 04/11/24 11:30 Matrix: Water

Comments: • Chlorinated Acid Herbicides (GC) by Method 8151A - Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Metals (ICPMS) 6020B</b>									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Silver	0.000435J	mg/L	0.00200	0.000070 0	1	04/16/24 14:49	04/21/24 21:35	7440-22-4	J
Sodium	59.0	mg/L	40.0	7.52	20	04/16/24 14:49	04/22/24 14:37	7440-23-5	
Thallium	0.000264J	mg/L	0.00200	0.000121	1	04/16/24 14:49	04/21/24 21:35	7440-28-0	B,J
Vanadium	0.0213	mg/L	0.00500	0.000664	1	04/16/24 14:49	04/21/24 21:35	7440-62-2	
Zinc	0.0923	mg/L	0.0250	0.00302	1	04/16/24 14:49	04/21/24 21:35	7440-66-6	
<b>Mercury 7470A</b>									
Analytical Method: EPA 7470A Preparation Method: 7470A									
Pace National - Mt. Juliet									
Mercury	<0.000100	mg/L	0.000200	0.000100	1	04/14/24 15:44	04/15/24 16:00	7439-97-6	
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
Acenaphthene	<2.1	ug/L	9.8	2.1	1	04/16/24 18:23	04/19/24 04:59	83-32-9	
Acenaphthylene	<1.8	ug/L	9.8	1.8	1	04/16/24 18:23	04/19/24 04:59	208-96-8	
Anthracene	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	120-12-7	
Benzo(a)anthracene	<1.9	ug/L	9.8	1.9	1	04/16/24 18:23	04/19/24 04:59	56-55-3	
Benzo(a)pyrene	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	50-32-8	
Benzo(b)fluoranthene	<1.8	ug/L	9.8	1.8	1	04/16/24 18:23	04/19/24 04:59	205-99-2	
Benzo(g,h,i)perylene	<1.8	ug/L	9.8	1.8	1	04/16/24 18:23	04/19/24 04:59	191-24-2	
Benzo(k)fluoranthene	<2.1	ug/L	9.8	2.1	1	04/16/24 18:23	04/19/24 04:59	207-08-9	
Benzoic Acid	<4.3	ug/L	49.0	4.3	1	04/16/24 18:23	04/19/24 04:59	65-85-0	
Benzyl alcohol	<1.6	ug/L	19.6	1.6	1	04/16/24 18:23	04/19/24 04:59	100-51-6	
4-Bromophenylphenyl ether	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	101-55-3	
Butylbenzylphthalate	<2.4	ug/L	9.8	2.4	1	04/16/24 18:23	04/19/24 04:59	85-68-7	
Carbazole	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	86-74-8	
4-Chloro-3-methylphenol	<1.9	ug/L	19.6	1.9	1	04/16/24 18:23	04/19/24 04:59	59-50-7	
4-Chloroaniline	<2.0	ug/L	19.6	2.0	1	04/16/24 18:23	04/19/24 04:59	106-47-8	
bis(2-Chloroethoxy)methane	<2.2	ug/L	9.8	2.2	1	04/16/24 18:23	04/19/24 04:59	111-91-1	
bis(2-Chloroethyl) ether	<2.1	ug/L	9.8	2.1	1	04/16/24 18:23	04/19/24 04:59	111-44-4	
bis(2-Chloroisopropyl) ether	<2.2	ug/L	9.8	2.2	1	04/16/24 18:23	04/19/24 04:59	108-60-1	
2-Chloronaphthalene	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	91-58-7	
2-Chlorophenol	<1.8	ug/L	9.8	1.8	1	04/16/24 18:23	04/19/24 04:59	95-57-8	
4-Chlorophenylphenyl ether	<1.9	ug/L	9.8	1.9	1	04/16/24 18:23	04/19/24 04:59	7005-72-3	
Chrysene	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/L	9.8	1.8	1	04/16/24 18:23	04/19/24 04:59	53-70-3	
Dibenzofuran	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	132-64-9	
1,2-Dichlorobenzene	<1.8	ug/L	9.8	1.8	1	04/16/24 18:23	04/19/24 04:59	95-50-1	
1,3-Dichlorobenzene	<1.5	ug/L	9.8	1.5	1	04/16/24 18:23	04/19/24 04:59	541-73-1	
1,4-Dichlorobenzene	<1.7	ug/L	9.8	1.7	1	04/16/24 18:23	04/19/24 04:59	106-46-7	
3,3'-Dichlorobenzidine	<3.8	ug/L	19.6	3.8	1	04/16/24 18:23	04/19/24 04:59	91-94-1	
2,4-Dichlorophenol	<1.7	ug/L	9.8	1.7	1	04/16/24 18:23	04/19/24 04:59	120-83-2	
Diethylphthalate	<2.1	ug/L	9.8	2.1	1	04/16/24 18:23	04/19/24 04:59	84-66-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Sample: SW02/SW-1 Lab ID: 60450798001 Collected: 04/11/24 08:20 Received: 04/11/24 11:30 Matrix: Water

Comments: • Chlorinated Acid Herbicides (GC) by Method 8151A - Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatile Organic</b>		Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Kansas City							
2,4-Dimethylphenol	<1.9	ug/L	9.8	1.9	1	04/16/24 18:23	04/19/24 04:59	105-67-9	
Dimethylphthalate	<1.9	ug/L	9.8	1.9	1	04/16/24 18:23	04/19/24 04:59	131-11-3	
Di-n-butylphthalate	<2.1	ug/L	9.8	2.1	1	04/16/24 18:23	04/19/24 04:59	84-74-2	
4,6-Dinitro-2-methylphenol	<2.1	ug/L	49.0	2.1	1	04/16/24 18:23	04/19/24 04:59	534-52-1	
2,4-Dinitrophenol	<2.4	ug/L	49.0	2.4	1	04/16/24 18:23	04/19/24 04:59	51-28-5	
2,4-Dinitrotoluene	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	121-14-2	
2,6-Dinitrotoluene	<1.9	ug/L	9.8	1.9	1	04/16/24 18:23	04/19/24 04:59	606-20-2	
Di-n-octylphthalate	<2.2	ug/L	9.8	2.2	1	04/16/24 18:23	04/19/24 04:59	117-84-0	
bis(2-Ethylhexyl)phthalate	<2.3	ug/L	9.8	2.3	1	04/16/24 18:23	04/19/24 04:59	117-81-7	
Fluoranthene	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	206-44-0	
Fluorene	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	86-73-7	
Hexachloro-1,3-butadiene	<1.6	ug/L	9.8	1.6	1	04/16/24 18:23	04/19/24 04:59	87-68-3	
Hexachlorobenzene	<2.1	ug/L	9.8	2.1	1	04/16/24 18:23	04/19/24 04:59	118-74-1	
Hexachlorocyclopentadiene	<1.6	ug/L	9.8	1.6	1	04/16/24 18:23	04/19/24 04:59	77-47-4	
Hexachloroethane	<1.4	ug/L	9.8	1.4	1	04/16/24 18:23	04/19/24 04:59	67-72-1	
Indeno(1,2,3-cd)pyrene	<1.8	ug/L	9.8	1.8	1	04/16/24 18:23	04/19/24 04:59	193-39-5	
Isophorone	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	78-59-1	
2-Methylnaphthalene	<2.1	ug/L	9.8	2.1	1	04/16/24 18:23	04/19/24 04:59	91-57-6	
2-Methylphenol(o-Cresol)	<1.7	ug/L	9.8	1.7	1	04/16/24 18:23	04/19/24 04:59	95-48-7	
3&4-Methylphenol(m&p Cresol)	<1.6	ug/L	9.8	1.6	1	04/16/24 18:23	04/19/24 04:59	15831-10-4	
Naphthalene	<2.3	ug/L	9.8	2.3	1	04/16/24 18:23	04/19/24 04:59	91-20-3	
2-Nitroaniline	<1.9	ug/L	49.0	1.9	1	04/16/24 18:23	04/19/24 04:59	88-74-4	
3-Nitroaniline	<1.8	ug/L	49.0	1.8	1	04/16/24 18:23	04/19/24 04:59	99-09-2	
4-Nitroaniline	<2.1	ug/L	49.0	2.1	1	04/16/24 18:23	04/19/24 04:59	100-01-6	
Nitrobenzene	<2.3	ug/L	9.8	2.3	1	04/16/24 18:23	04/19/24 04:59	98-95-3	
2-Nitrophenol	<1.9	ug/L	9.8	1.9	1	04/16/24 18:23	04/19/24 04:59	88-75-5	
4-Nitrophenol	<0.36	ug/L	49.0	0.36	1	04/16/24 18:23	04/19/24 04:59	100-02-7	
N-Nitroso-di-n-propylamine	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	621-64-7	
N-Nitrosodiphenylamine	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	86-30-6	
Pentachlorophenol	<3.5	ug/L	49.0	3.5	1	04/16/24 18:23	04/19/24 04:59	87-86-5	
Phenanthrene	<1.9	ug/L	9.8	1.9	1	04/16/24 18:23	04/19/24 04:59	85-01-8	
Phenol	<0.81	ug/L	9.8	0.81	1	04/16/24 18:23	04/19/24 04:59	108-95-2	
Pyrene	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	129-00-0	
Pyridine	<1.1	ug/L	9.8	1.1	1	04/16/24 18:23	04/19/24 04:59	110-86-1	
1,2,4-Trichlorobenzene	<2.0	ug/L	9.8	2.0	1	04/16/24 18:23	04/19/24 04:59	120-82-1	
2,4,5-Trichlorophenol	<1.7	ug/L	24.5	1.7	1	04/16/24 18:23	04/19/24 04:59	95-95-4	
2,4,6-Trichlorophenol	<1.4	ug/L	9.8	1.4	1	04/16/24 18:23	04/19/24 04:59	88-06-2	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	79	%	30-120		1	04/16/24 18:23	04/19/24 04:59	4165-60-0	
2-Fluorobiphenyl (S)	70	%	25-120		1	04/16/24 18:23	04/19/24 04:59	321-60-8	
Terphenyl-d14 (S)	78	%	35-125		1	04/16/24 18:23	04/19/24 04:59	1718-51-0	
Phenol-d6 (S)	44	%	10-120		1	04/16/24 18:23	04/19/24 04:59	13127-88-3	
2-Fluorophenol (S)	58	%	20-120		1	04/16/24 18:23	04/19/24 04:59	367-12-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Sample: SW02/SW-1 Lab ID: 60450798001 Collected: 04/11/24 08:20 Received: 04/11/24 11:30 Matrix: Water

Comments: • Chlorinated Acid Herbicides (GC) by Method 8151A - Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Semivolatile Organic</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
<b>Surrogates</b>									
2,4,6-Tribromophenol (S)	80	%	25-120		1	04/16/24 18:23	04/19/24 04:59	118-79-6	
<b>8270 MSSV DRO/ORO</b>									
Analytical Method: EPA 8270 Preparation Method: EPA 3511									
Pace Analytical Services - Kansas City									
TPH-ORO	<b>0.61J</b>	mg/L	0.95	0.29	1	04/18/24 13:01	04/18/24 17:24		B
TPH-DRO	<b>0.45J</b>	mg/L	0.95	0.29	1	04/18/24 13:01	04/18/24 17:24		B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	101	%	40-140		1	04/18/24 13:01	04/18/24 17:24	4165-60-0	
2-Fluorobiphenyl (S)	98	%	30-145		1	04/18/24 13:01	04/18/24 17:24	321-60-8	
Terphenyl-d14 (S)	94	%	35-150		1	04/18/24 13:01	04/18/24 17:24	1718-51-0	
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/17/24 12:14	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/17/24 12:14	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/17/24 12:14	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 12:14	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 12:14	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/17/24 12:14	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/17/24 12:14	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/17/24 12:14	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/17/24 12:14	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/17/24 12:14	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 12:14	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/17/24 12:14	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/17/24 12:14	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/17/24 12:14	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/17/24 12:14	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/17/24 12:14	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/17/24 12:14	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/17/24 12:14	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/17/24 12:14	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/17/24 12:14	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/17/24 12:14	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/17/24 12:14	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/17/24 12:14	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 12:14	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 12:14	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 12:14	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 12:14	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/17/24 12:14	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/17/24 12:14	107-06-2	

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## ANALYTICAL RESULTS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Sample: SW02/SW-1 Lab ID: 60450798001 Collected: 04/11/24 08:20 Received: 04/11/24 11:30 Matrix: Water

Comments: • Chlorinated Acid Herbicides (GC) by Method 8151A - Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/17/24 12:14	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/17/24 12:14	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/17/24 12:14	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/17/24 12:14	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/17/24 12:14	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/17/24 12:14	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/17/24 12:14	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/17/24 12:14	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/17/24 12:14	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/17/24 12:14	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 12:14	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/17/24 12:14	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/17/24 12:14	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/17/24 12:14	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/17/24 12:14	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/17/24 12:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/17/24 12:14	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/17/24 12:14	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/17/24 12:14	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 12:14	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/17/24 12:14	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/17/24 12:14	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/17/24 12:14	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/17/24 12:14	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/17/24 12:14	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/17/24 12:14	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/17/24 12:14	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/17/24 12:14	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/17/24 12:14	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/17/24 12:14	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 12:14	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/17/24 12:14	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/17/24 12:14	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/17/24 12:14	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/17/24 12:14	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/17/24 12:14	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	80-120		1		04/17/24 12:14	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		04/17/24 12:14	2199-69-1	
Toluene-d8 (S)	102	%	80-120		1		04/17/24 12:14	2037-26-5	
Preservation pH	1.0		0.10		1		04/17/24 12:14		

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### ANALYTICAL RESULTS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Sample: **SW02/SW-1** Lab ID: **60450798001** Collected: 04/11/24 08:20 Received: 04/11/24 11:30 Matrix: Water

Comments: • Chlorinated Acid Herbicides (GC) by Method 8151A - Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV GRO and Oxygenates</b>	Analytical Method: EPA 8260 Pace Analytical Services - Kansas City								
TPH-GRO	<b>&lt;62.6</b>	ug/L	500	62.6	1		04/20/24 22:04		
<b>Surrogates</b>									
Toluene-d8 (S)	104	%	80-120		1		04/20/24 22:04	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120		1		04/20/24 22:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		04/20/24 22:04	2199-69-1	
Preservation pH	<b>1.0</b>		0.10		1		04/20/24 22:04		
<b>2320B Alkalinity</b>	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	<b>361</b>	mg/L	40.0	21.0	2		04/12/24 12:23		
<b>4500 OG Oxygen, Dissolved</b>	Analytical Method: SM 4500-O G Pace Analytical Services - Kansas City								
Oxygen, Dissolved	<b>8.4</b>	mg/L	0.10	0.10	1		04/15/24 16:10	7782-44-7	H6
<b>4500S2D Sulfide, Total</b>	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	<b>&lt;0.016</b>	mg/L	0.050	0.016	1		04/15/24 09:13	18496-25-8	
<b>9040 pH</b>	Analytical Method: EPA 9040 Pace Analytical Services - Kansas City								
pH at 25 Degrees C	<b>7.5</b>	Std. Units	0.10	0.10	1		04/23/24 14:14		H6
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Fluoride	<b>0.63</b>	mg/L	0.20	0.12	1		04/17/24 17:50	16984-48-8	L1,N2
Sulfate	<b>145</b>	mg/L	50.0	27.5	50		04/17/24 18:02	14808-79-8	
<b>350.1 Ammonia</b>	Analytical Method: EPA 350.1 Pace Analytical Services - Kansas City								
Nitrogen, Ammonia	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/19/24 14:24	7664-41-7	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/12/24 16:49		
Nitrogen, Nitrate	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/12/24 16:49	14797-55-8	
Nitrogen, Nitrite	<b>&lt;0.069</b>	mg/L	0.10	0.069	1		04/12/24 16:49	14797-65-0	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	<b>0.10</b>	mg/L	0.10	0.069	1		04/12/24 17:49		

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### ANALYTICAL RESULTS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

**Sample: SW02/SW-1**      **Lab ID: 60450798001**      Collected: 04/11/24 08:20      Received: 04/11/24 11:30      Matrix: Water

Comments: • Chlorinated Acid Herbicides (GC) by Method 8151A - Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500CNE Cyanide, Total</b>	Analytical Method: SM 4500-CN-E    Preparation Method: SM 4500-CN-E Pace Analytical Services - Kansas City								
Cyanide	<0.0038	mg/L	0.0050	0.0038	1	04/22/24 17:00	04/23/24 14:09	57-12-5	

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## ANALYTICAL RESULTS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Sample: TRIP BLANK Lab ID: 60450798002 Collected: 04/11/24 08:20 Received: 04/11/24 11:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	<2.5	ug/L	10.0	2.5	1		04/17/24 09:41	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/17/24 09:41	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/17/24 09:41	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 09:41	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 09:41	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/17/24 09:41	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/17/24 09:41	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/17/24 09:41	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/17/24 09:41	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/17/24 09:41	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 09:41	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/17/24 09:41	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/17/24 09:41	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/17/24 09:41	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/17/24 09:41	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/17/24 09:41	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/17/24 09:41	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/17/24 09:41	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/17/24 09:41	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/17/24 09:41	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/17/24 09:41	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/17/24 09:41	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/17/24 09:41	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 09:41	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 09:41	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 09:41	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 09:41	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/17/24 09:41	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/17/24 09:41	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/17/24 09:41	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/17/24 09:41	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/17/24 09:41	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/17/24 09:41	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/17/24 09:41	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/17/24 09:41	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/17/24 09:41	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/17/24 09:41	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/17/24 09:41	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/17/24 09:41	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 09:41	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/17/24 09:41	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/17/24 09:41	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/17/24 09:41	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/17/24 09:41	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/17/24 09:41	75-09-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Sample: TRIP BLANK Lab ID: 60450798002 Collected: 04/11/24 08:20 Received: 04/11/24 11:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/17/24 09:41	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/17/24 09:41	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/17/24 09:41	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 09:41	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/17/24 09:41	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/17/24 09:41	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/17/24 09:41	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/17/24 09:41	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/17/24 09:41	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/17/24 09:41	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/17/24 09:41	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/17/24 09:41	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/17/24 09:41	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/17/24 09:41	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 09:41	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/17/24 09:41	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/17/24 09:41	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/17/24 09:41	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/17/24 09:41	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/17/24 09:41	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	103	%	80-120		1		04/17/24 09:41	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		04/17/24 09:41	2199-69-1	
Toluene-d8 (S)	102	%	80-120		1		04/17/24 09:41	2037-26-5	
Preservation pH	1.0		0.10		1		04/17/24 09:41		
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Kansas City									
TPH-GRO	<62.6	ug/L	500	62.6	1		04/20/24 20:23		
<b>Surrogates</b>									
Toluene-d8 (S)	99	%	80-120		1		04/20/24 20:23	2037-26-5	
4-Bromofluorobenzene (S)	103	%	80-120		1		04/20/24 20:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		04/20/24 20:23	2199-69-1	
Preservation pH	1.0		0.10		1		04/20/24 20:23		

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Sample: TRIP BLANK Lab ID: 60450798003 Collected: 04/11/24 08:00 Received: 04/11/24 11:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		04/17/24 09:55	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		04/17/24 09:55	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		04/17/24 09:55	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 09:55	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 09:55	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		04/17/24 09:55	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		04/17/24 09:55	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		04/17/24 09:55	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		04/17/24 09:55	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		04/17/24 09:55	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 09:55	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		04/17/24 09:55	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		04/17/24 09:55	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		04/17/24 09:55	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		04/17/24 09:55	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		04/17/24 09:55	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		04/17/24 09:55	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		04/17/24 09:55	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		04/17/24 09:55	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		04/17/24 09:55	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		04/17/24 09:55	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		04/17/24 09:55	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		04/17/24 09:55	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 09:55	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 09:55	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		04/17/24 09:55	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		04/17/24 09:55	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		04/17/24 09:55	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		04/17/24 09:55	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		04/17/24 09:55	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		04/17/24 09:55	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		04/17/24 09:55	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		04/17/24 09:55	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		04/17/24 09:55	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		04/17/24 09:55	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		04/17/24 09:55	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		04/17/24 09:55	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		04/17/24 09:55	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		04/17/24 09:55	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 09:55	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		04/17/24 09:55	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		04/17/24 09:55	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		04/17/24 09:55	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		04/17/24 09:55	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		04/17/24 09:55	75-09-2	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Sample: TRIP BLANK Lab ID: 60450798003 Collected: 04/11/24 08:00 Received: 04/11/24 11:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		04/17/24 09:55	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		04/17/24 09:55	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		04/17/24 09:55	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		04/17/24 09:55	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		04/17/24 09:55	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		04/17/24 09:55	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		04/17/24 09:55	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		04/17/24 09:55	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		04/17/24 09:55	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		04/17/24 09:55	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		04/17/24 09:55	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		04/17/24 09:55	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		04/17/24 09:55	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		04/17/24 09:55	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		04/17/24 09:55	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		04/17/24 09:55	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		04/17/24 09:55	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		04/17/24 09:55	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/17/24 09:55	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		04/17/24 09:55	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	80-120		1		04/17/24 09:55	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		04/17/24 09:55	2199-69-1	
Toluene-d8 (S)	104	%	80-120		1		04/17/24 09:55	2037-26-5	
Preservation pH	1.0		0.10		1		04/17/24 09:55		
<b>8260 MSV GRO and Oxygenates</b>		Analytical Method: EPA 8260 Pace Analytical Services - Kansas City							
TPH-GRO	<62.6	ug/L	500	62.6	1		04/20/24 22:19		
<b>Surrogates</b>									
Toluene-d8 (S)	97	%	80-120		1		04/20/24 22:19	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120		1		04/20/24 22:19	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		04/20/24 22:19	2199-69-1	
Preservation pH	1.0		0.10		1		04/20/24 22:19		

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch: 2267057

Analysis Method: EPA 8081B

QC Batch Method: 3510C

Analysis Description: Pesticides (GC) 8081B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450798001

METHOD BLANK: R4057968-1

Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aldrin	mg/L	<0.0000198	0.0000500	0.0000198	04/15/24 14:36	
alpha-BHC	mg/L	<0.0000172	0.0000500	0.0000172	04/15/24 14:36	
beta-BHC	mg/L	<0.0000208	0.0000500	0.0000208	04/15/24 14:36	
delta-BHC	mg/L	<0.0000150	0.0000500	0.0000150	04/15/24 14:36	
gamma-BHC (Lindane)	mg/L	<0.0000209	0.0000500	0.0000209	04/15/24 14:36	
Chlordane (Technical)	mg/L	<0.0000198	0.00500	0.0000198	04/15/24 14:36	
4,4'-DDD	mg/L	<0.0000177	0.0000500	0.0000177	04/15/24 14:36	
4,4'-DDE	mg/L	<0.0000154	0.0000500	0.0000154	04/15/24 14:36	
4,4'-DDT	mg/L	<0.0000198	0.0000500	0.0000198	04/15/24 14:36	
Dieldrin	mg/L	<0.0000162	0.0000500	0.0000162	04/15/24 14:36	
Endosulfan I	mg/L	<0.0000160	0.0000500	0.0000160	04/15/24 14:36	
Endosulfan II	mg/L	<0.0000164	0.0000500	0.0000164	04/15/24 14:36	
Endosulfan sulfate	mg/L	<0.0000217	0.0000500	0.0000217	04/15/24 14:36	
Endrin	mg/L	<0.0000161	0.0000500	0.0000161	04/15/24 14:36	
Endrin aldehyde	mg/L	<0.0000237	0.0000500	0.0000237	04/15/24 14:36	
Endrin ketone	mg/L	<0.0000219	0.0000500	0.0000219	04/15/24 14:36	
Hexachlorobenzene	mg/L	<0.0000176	0.0000500	0.0000176	04/15/24 14:36	
Heptachlor	mg/L	<0.0000148	0.0000500	0.0000148	04/15/24 14:36	
Heptachlor epoxide	mg/L	<0.0000183	0.0000500	0.0000183	04/15/24 14:36	
Methoxychlor	mg/L	<0.0000193	0.0000500	0.0000193	04/15/24 14:36	
Toxaphene	mg/L	<0.0000168	0.0000500	0.0000168	04/15/24 14:36	
Decachlorobiphenyl (S)	%	55.5	10.0-128		04/15/24 14:36	
Tetrachloro-m-xylene (S)	%	94.3	10.0-127		04/15/24 14:36	

LABORATORY CONTROL SAMPLE & LCSD: R4057968-4

R4057968-5

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Aldrin	mg/L	0.00100	0.000880	0.000877	88.0	87.7	22.0-124	0.341	34	
alpha-BHC	mg/L	0.00100	0.000938	0.000927	93.8	92.7	54.0-130	1.18	23	
beta-BHC	mg/L	0.00100	0.000952	0.000952	95.2	95.2	53.0-136	0.00	20	
delta-BHC	mg/L	0.00100	0.000897	0.000891	89.7	89.1	54.0-133	0.671	20	
gamma-BHC (Lindane)	mg/L	0.00100	0.000934	0.000929	93.4	92.9	55.0-129	0.537	20	
4,4'-DDD	mg/L	0.00100	0.000919	0.000911	91.9	91.1	56.0-140	0.874	22	
4,4'-DDE	mg/L	0.00100	0.000953	0.000955	95.3	95.5	52.0-128	0.210	22	
4,4'-DDT	mg/L	0.00100	0.000948	0.000987	94.8	98.7	50.0-141	4.03	23	
Dieldrin	mg/L	0.00100	0.000920	0.000914	92.0	91.4	59.0-133	0.654	20	
Endosulfan I	mg/L	0.00100	0.000936	0.000948	93.6	94.8	57.0-131	1.27	20	
Endosulfan II	mg/L	0.00100	0.000911	0.000911	91.1	91.1	58.0-133	0.00	20	
Endosulfan sulfate	mg/L	0.00100	0.000923	0.000911	92.3	91.1	58.0-133	1.31	21	

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Parameter	Units	LABORATORY CONTROL SAMPLE & LCSD: R4057968-4		R4057968-5			% Rec Limits	RPD	Max RPD	Qualifiers
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec				
Endrin	mg/L	0.00100	0.000975	0.000957	97.5	95.7	57.0-134	1.86	21	
Endrin aldehyde	mg/L	0.00100	0.000840	0.000831	84.0	83.1	53.0-129	1.08	20	
Endrin ketone	mg/L	0.00100	0.000879	0.000872	87.9	87.2	60.0-145	0.800	20	
Hexachlorobenzene	mg/L	0.00100	0.000999	0.000979	99.9	97.9	30.0-114	2.02	30	
Heptachlor	mg/L	0.00100	0.000997	0.000993	99.7	99.3	27.0-132	0.402	31	
Heptachlor epoxide	mg/L	0.00100	0.000921	0.000914	92.1	91.4	57.0-130	0.763	20	
Methoxychlor	mg/L	0.00100	0.000956	0.000950	95.6	95.0	54.0-155	0.630	24	
Decachlorobiphenyl (S)	%				71.0	72.3	10.0-128			
Tetrachloro-m-xylene (S)	%				101	97.6	10.0-127			

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch: 2266267

Analysis Method: EPA 8151A

QC Batch Method: 8151A

Analysis Description: Chlorinated Herb. (GC) 8151A

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450798001

METHOD BLANK: R4059572-1

Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4-D	mg/L	<0.000547	0.00200	0.000547	04/18/24 15:25	
Dalapon	mg/L	<0.000344	0.00200	0.000344	04/18/24 15:25	
2,4-DB	mg/L	<0.000302	0.00200	0.000302	04/18/24 15:25	
Dicamba	mg/L	<0.000245	0.00200	0.000245	04/18/24 15:25	
Dichlorprop	mg/L	<0.00104	0.00200	0.00104	04/18/24 15:25	
Dinoseb	mg/L	<0.000250	0.00200	0.000250	04/18/24 15:25	
MCPA	mg/L	<0.0131	0.100	0.0131	04/18/24 15:25	
2-(2-methyl-4-chlorophenoxy)pa	mg/L	<0.0660	0.100	0.0660	04/18/24 15:25	
2,4,5-T	mg/L	<0.000258	0.00200	0.000258	04/18/24 15:25	
2,4,5-TP (Silvex)	mg/L	<0.000335	0.00200	0.000335	04/18/24 15:25	
2,4-DCAA (S)	%	.298	14.0-158		04/18/24 15:25	SR

LABORATORY CONTROL SAMPLE: R4059572-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-D	mg/L	0.00250	0.00202	80.8	50.0-120	
Dalapon	mg/L	0.00250	0.00193	77.2	32.0-120	
2,4-DB	mg/L	0.00250	0.00203	81.2	53.0-140	
Dicamba	mg/L	0.00250	0.00183	73.2	51.0-120	
Dichlorprop	mg/L	0.00250	0.00184	73.6	55.0-127	
Dinoseb	mg/L	0.00250	0.00232	92.8	36.0-134	
MCPA	mg/L	0.250	0.208	83.2	10.0-160	
2-(2-methyl-4-chlorophenoxy)pa	mg/L	0.250	0.157	62.8	10.0-160	
2,4,5-T	mg/L	0.00250	0.00170	68.0	54.0-120	
2,4,5-TP (Silvex)	mg/L	0.00250	0.00215	86.0	50.0-125	
2,4-DCAA (S)	%			1.33	14.0-158	SR

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059572-3

R4059572-4

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1725210-01 Result	Spike Conc.	Spike Conc.	Conc.								
2,4-D	mg/L	ND	0.00258	0.00278	0.00183	0.00247	70.9	88.8	50.0-120	29.8	20	R1	
Dalapon	mg/L	ND	0.00258	0.00278	0.00246	0.00271	95.3	97.5	32.0-120	9.67	20	P9	
2,4-DB	mg/L	ND	0.00258	0.00278	0.00200	0.00278	77.5	100	53.0-140	32.6	20	R1	
Dicamba	mg/L	ND	0.00258	0.00278	0.00167	0.00221	64.7	79.5	51.0-120	27.8	20	R1	
Dichlorprop	mg/L	ND	0.00258	0.00278	0.00181	0.00231	70.2	83.1	55.0-127	24.3	20	R1	
Dinoseb	mg/L	ND	0.00258	0.00278	0.00210	0.00246	81.4	88.5	36.0-134	15.8	20		

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**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Parameter	Units	R4059572-3			R4059572-4			% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		L1725210-01 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
MCPA	mg/L	ND	0.258	0.278	0.215	0.268	83.3	96.4	10.0-160	21.9	40			
2-(2-methyl-4-chlorophenoxy)pa	mg/L	ND	0.258	0.278	0.237	0.271	91.9	97.5	10.0-160	13.4	23			
2,4,5-T	mg/L	ND	0.00258	0.00278	0.00202	0.00258	78.3	92.8	54.0-120	24.3	20	R1		
2,4,5-TP (Silvex)	mg/L	ND	0.00258	0.00278	0.00164	0.00217	63.6	78.1	50.0-125	27.8	20	R1		
2,4-DCAA (S)	%						63.7	79.6	14.0-158					

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### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch: 2267363

Analysis Method: EPA 6020B

QC Batch Method: 3015

Analysis Description: Metals (ICPMS) 6020B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450798001

METHOD BLANK: R4060374-1

Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	mg/L	<0.0185	0.100	0.0185	04/21/24 20:25	
Antimony	mg/L	0.00161J	0.00400	0.00103	04/21/24 20:25	J
Arsenic	mg/L	<0.000180	0.00200	0.000180	04/21/24 20:25	
Barium	mg/L	<0.000381	0.00200	0.000381	04/21/24 20:25	
Beryllium	mg/L	<0.000190	0.00200	0.000190	04/21/24 20:25	
Cadmium	mg/L	<0.000150	0.00100	0.000150	04/21/24 20:25	
Calcium	mg/L	<0.0936	1.00	0.0936	04/21/24 20:25	
Chromium	mg/L	<0.00124	0.00200	0.00124	04/21/24 20:25	
Copper	mg/L	<0.00151	0.00500	0.00151	04/21/24 20:25	
Cobalt	mg/L	<0.0000596	0.00200	0.0000596	04/21/24 20:25	
Iron	mg/L	<0.0281	0.100	0.0281	04/21/24 20:25	
Lead	mg/L	<0.000849	0.00200	0.000849	04/21/24 20:25	
Magnesium	mg/L	<0.0735	1.00	0.0735	04/21/24 20:25	
Manganese	mg/L	<0.000704	0.00500	0.000704	04/21/24 20:25	
Molybdenum	mg/L	<0.000348	0.00500	0.000348	04/21/24 20:25	
Nickel	mg/L	<0.000816	0.00200	0.000816	04/21/24 20:25	
Potassium	mg/L	<0.108	2.00	0.108	04/21/24 20:25	
Selenium	mg/L	<0.000300	0.00200	0.000300	04/21/24 20:25	
Silver	mg/L	<0.0000700	0.00200	0.0000700	04/21/24 20:25	
Sodium	mg/L	<0.376	2.00	0.376	04/21/24 20:25	
Thallium	mg/L	0.000261J	0.00200	0.000121	04/21/24 20:25	J
Vanadium	mg/L	<0.000664	0.00500	0.000664	04/21/24 20:25	
Zinc	mg/L	<0.00302	0.0250	0.00302	04/21/24 20:25	

LABORATORY CONTROL SAMPLE: R4060374-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/L	1.00	1.02	102	80.0-120	
Antimony	mg/L	0.0500	0.0567	113	80.0-120	
Arsenic	mg/L	0.0500	0.0513	103	80.0-120	
Barium	mg/L	0.0500	0.0508	102	80.0-120	
Beryllium	mg/L	0.0500	0.0464	92.7	80.0-120	
Cadmium	mg/L	0.0500	0.0522	104	80.0-120	
Calcium	mg/L	5.00	5.04	101	80.0-120	
Chromium	mg/L	0.0500	0.0522	104	80.0-120	
Copper	mg/L	0.0500	0.0520	104	80.0-120	
Cobalt	mg/L	0.0500	0.0525	105	80.0-120	
Iron	mg/L	1.00	1.04	104	80.0-120	
Lead	mg/L	0.0500	0.0496	99.2	80.0-120	

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

LABORATORY CONTROL SAMPLE: R4060374-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	mg/L	5.00	5.03	101	80.0-120	
Manganese	mg/L	0.0500	0.0513	103	80.0-120	
Molybdenum	mg/L	0.0500	0.0500	100	80.0-120	
Nickel	mg/L	0.0500	0.0527	105	80.0-120	
Potassium	mg/L	5.00	5.12	102	80.0-120	
Selenium	mg/L	0.0500	0.0506	101	80.0-120	
Silver	mg/L	0.0500	0.0510	102	80.0-120	
Sodium	mg/L	5.00	5.27	105	80.0-120	
Thallium	mg/L	0.0500	0.0483	96.6	80.0-120	
Vanadium	mg/L	0.0500	0.0509	102	80.0-120	
Zinc	mg/L	0.0500	0.0520	104	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4060374-4 R4060374-5

Parameter	Units	R4060374-4		R4060374-5		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		L1720680-07 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Aluminum	mg/L	0.199	1.00	1.00	1.21	1.19	101	98.7	75.0-125	2.03	20	
Antimony	mg/L	ND	0.0500	0.0500	0.0584	0.0596	117	119	75.0-125	1.98	20	
Arsenic	mg/L	0.000502	0.0500	0.0500	0.0511	0.0514	101	102	75.0-125	0.603	20	
Barium	mg/L	0.0802	0.0500	0.0500	0.137	0.133	114	105	75.0-125	3.37	20	
Beryllium	mg/L	ND	0.0500	0.0500	0.0465	0.0454	93.0	90.8	75.0-125	2.42	20	
Cadmium	mg/L	ND	0.0500	0.0500	0.0528	0.0534	106	107	75.0-125	1.04	20	
Calcium	mg/L	68.7	5.00	5.00	73.7	72.8	101	82.1	75.0-125	1.28	20	
Chromium	mg/L	ND	0.0500	0.0500	0.0504	0.0507	101	101	75.0-125	0.694	20	
Copper	mg/L	ND	0.0500	0.0500	0.0511	0.0512	102	102	75.0-125	0.065	20	
Cobalt	mg/L	0.000829	0.0500	0.0500	0.0511	0.0508	101	99.9	75.0-125	0.618	20	
Iron	mg/L	0.315	1.00	1.00	1.34	1.41	103	109	75.0-125	4.71	20	
Lead	mg/L	0.000976	0.0500	0.0500	0.0546	0.0533	107	105	75.0-125	2.41	20	
Magnesium	mg/L	19.3	5.00	5.00	23.8	23.7	89.8	88.9	75.0-125	0.203	20	
Manganese	mg/L	0.0470	0.0500	0.0500	0.0956	0.0976	97.0	101	75.0-125	2.10	20	
Molybdenum	mg/L	ND	0.0500	0.0500	0.0541	0.0529	108	106	75.0-125	2.34	20	
Nickel	mg/L	0.000962	0.0500	0.0500	0.0511	0.0533	100	105	75.0-125	4.09	20	
Potassium	mg/L	4.05	5.00	5.00	9.20	9.08	103	101	75.0-125	1.36	20	
Selenium	mg/L	ND	0.0500	0.0500	0.0529	0.0505	106	101	75.0-125	4.64	20	
Silver	mg/L	ND	0.0500	0.0500	0.0522	0.0518	104	104	75.0-125	0.790	20	
Sodium	mg/L	44.9	5.00	5.00	48.6	51.6	73.0	134	75.0-125	6.14	20	P6
Thallium	mg/L	ND	0.0500	0.0500	0.0526	0.0508	105	102	75.0-125	3.41	20	
Vanadium	mg/L	ND	0.0500	0.0500	0.0498	0.0501	99.5	100	75.0-125	0.628	20	
Zinc	mg/L	0.00371	0.0500	0.0500	0.0541	0.0573	101	107	75.0-125	5.84	20	

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch: 2266691

Analysis Method: EPA 7470A

QC Batch Method: 7470A

Analysis Description: Mercury 7470A

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450798001

METHOD BLANK: R4057737-1

Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	<0.000100	0.000200	0.000100	04/15/24 11:24	

LABORATORY CONTROL SAMPLE: R4057737-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00300	0.00320	107	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4057737-4 R4057737-5

Parameter	Units	R4057737-4		R4057737-5		% Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1725661-01 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/L	ND	0.00300	0.00300	0.00328	0.00333	109	111	75.0-125	1.49	20

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QUALITY CONTROL DATA

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch: 890844

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001, 60450798002, 60450798003

METHOD BLANK: 3525758

Matrix: Water

Associated Lab Samples: 60450798001, 60450798002, 60450798003

Table with 7 columns: Parameter, Units, Blank Result, Reporting Limit, MDL, Analyzed, Qualifiers. Lists various chemical compounds and their concentrations.

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

METHOD BLANK: 3525758

Matrix: Water

Associated Lab Samples: 60450798001, 60450798002, 60450798003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	<0.13	1.0	0.13	04/17/24 09:14	
cis-1,3-Dichloropropene	ug/L	<0.078	1.0	0.078	04/17/24 09:14	
Dibromochloromethane	ug/L	<0.30	1.0	0.30	04/17/24 09:14	
Dibromomethane	ug/L	<0.11	1.0	0.11	04/17/24 09:14	
Dichlorodifluoromethane	ug/L	<0.20	1.0	0.20	04/17/24 09:14	
Ethylbenzene	ug/L	<0.12	1.0	0.12	04/17/24 09:14	
Hexachloro-1,3-butadiene	ug/L	<0.42	1.0	0.42	04/17/24 09:14	
Isopropylbenzene (Cumene)	ug/L	<0.097	1.0	0.097	04/17/24 09:14	
Methyl-tert-butyl ether	ug/L	<0.13	1.0	0.13	04/17/24 09:14	
Methylene Chloride	ug/L	<0.39	1.0	0.39	04/17/24 09:14	
n-Butylbenzene	ug/L	<0.15	1.0	0.15	04/17/24 09:14	
n-Propylbenzene	ug/L	<0.12	1.0	0.12	04/17/24 09:14	
Naphthalene	ug/L	<0.82	10.0	0.82	04/17/24 09:14	
p-Isopropyltoluene	ug/L	<0.13	1.0	0.13	04/17/24 09:14	
sec-Butylbenzene	ug/L	<0.11	1.0	0.11	04/17/24 09:14	
Styrene	ug/L	<0.12	1.0	0.12	04/17/24 09:14	
tert-Butylbenzene	ug/L	<0.12	1.0	0.12	04/17/24 09:14	
Tetrachloroethene	ug/L	<0.33	1.0	0.33	04/17/24 09:14	
Toluene	ug/L	<0.25	1.0	0.25	04/17/24 09:14	
trans-1,2-Dichloroethene	ug/L	<0.10	1.0	0.10	04/17/24 09:14	
trans-1,3-Dichloropropene	ug/L	<0.18	1.0	0.18	04/17/24 09:14	
Trichloroethene	ug/L	<0.21	1.0	0.21	04/17/24 09:14	
Trichlorofluoromethane	ug/L	<0.16	1.0	0.16	04/17/24 09:14	
Vinyl chloride	ug/L	<0.17	1.0	0.17	04/17/24 09:14	
Xylene (Total)	ug/L	<0.28	3.0	0.28	04/17/24 09:14	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		04/17/24 09:14	
4-Bromofluorobenzene (S)	%	104	80-120		04/17/24 09:14	
Toluene-d8 (S)	%	105	80-120		04/17/24 09:14	

LABORATORY CONTROL SAMPLE: 3525759

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.6	93	80-120	
1,1,1-Trichloroethane	ug/L	20	17.9	89	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.0	95	70-130	
1,1,2-Trichloroethane	ug/L	20	19.4	97	75-125	
1,1-Dichloroethane	ug/L	20	17.7	89	75-120	
1,1-Dichloroethene	ug/L	20	17.7	88	75-120	
1,1-Dichloropropene	ug/L	20	18.5	93	75-125	
1,2,3-Trichlorobenzene	ug/L	20	19.1	95	70-125	
1,2,3-Trichloropropane	ug/L	20	19.6	98	75-125	
1,2,4-Trichlorobenzene	ug/L	20	18.9	95	75-120	
1,2,4-Trimethylbenzene	ug/L	20	20.3	101	75-120	
1,2-Dibromo-3-chloropropane	ug/L	20	21.2	106	65-125	

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**REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

LABORATORY CONTROL SAMPLE: 3525759

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	18.7	94	80-120	
1,2-Dichlorobenzene	ug/L	20	19.6	98	80-120	
1,2-Dichloroethane	ug/L	20	18.6	93	80-120	
1,2-Dichloroethene (Total)	ug/L	40	34.6	86	80-120	
1,2-Dichloropropane	ug/L	20	17.4	87	80-120	
1,3,5-Trimethylbenzene	ug/L	20	20.2	101	75-120	
1,3-Dichlorobenzene	ug/L	20	20.1	101	80-120	
1,3-Dichloropropane	ug/L	20	18.5	92	80-120	
1,4-Dichlorobenzene	ug/L	20	19.7	98	80-120	
2,2-Dichloropropane	ug/L	20	18.1	90	60-130	
2-Butanone (MEK)	ug/L	100	79.5	79	60-140	
2-Chlorotoluene	ug/L	20	20.4	102	80-120	
2-Hexanone	ug/L	100	87.3	87	55-155	
4-Chlorotoluene	ug/L	20	20.6	103	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	82.3	82	70-135	
Acetone	ug/L	100	88.0	88	25-185	
Benzene	ug/L	20	16.8	84	80-120	
Bromobenzene	ug/L	20	20.5	102	80-120	
Bromochloromethane	ug/L	20	18.5	92	80-120	
Bromodichloromethane	ug/L	20	16.7	84	80-120	
Bromoform	ug/L	20	18.3	92	70-135	
Bromomethane	ug/L	20	14.2	71	50-145	
Carbon disulfide	ug/L	20	17.4	87	70-130	
Carbon tetrachloride	ug/L	20	18.3	92	80-130	
Chlorobenzene	ug/L	20	19.2	96	80-120	
Chloroethane	ug/L	20	17.4	87	60-135	
Chloroform	ug/L	20	17.7	88	75-125	
Chloromethane	ug/L	20	17.3	87	60-130	
cis-1,2-Dichloroethene	ug/L	20	17.0	85	80-120	
cis-1,3-Dichloropropene	ug/L	20	17.8	89	75-125	
Dibromochloromethane	ug/L	20	18.1	90	80-120	
Dibromomethane	ug/L	20	18.6	93	75-125	
Dichlorodifluoromethane	ug/L	20	18.5	92	40-170	
Ethylbenzene	ug/L	20	19.7	99	80-120	
Hexachloro-1,3-butadiene	ug/L	20	19.1	95	70-125	
Isopropylbenzene (Cumene)	ug/L	20	20.2	101	80-130	
Methyl-tert-butyl ether	ug/L	20	17.7	88	75-125	
Methylene Chloride	ug/L	20	19.3	96	70-130	
n-Butylbenzene	ug/L	20	20.3	102	70-120	
n-Propylbenzene	ug/L	20	20.0	100	80-120	
Naphthalene	ug/L	20	19.5	97	60-140	
p-Isopropyltoluene	ug/L	20	20.6	103	80-120	
sec-Butylbenzene	ug/L	20	21.2	106	80-125	
Styrene	ug/L	20	19.5	97	80-155	
tert-Butylbenzene	ug/L	20	20.7	104	75-125	
Tetrachloroethene	ug/L	20	19.3	96	80-125	
Toluene	ug/L	20	19.0	95	80-120	

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## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

LABORATORY CONTROL SAMPLE: 3525759

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	20	17.6	88	75-125	
trans-1,3-Dichloropropene	ug/L	20	17.5	87	70-125	
Trichloroethene	ug/L	20	17.6	88	80-125	
Trichlorofluoromethane	ug/L	20	19.0	95	65-140	
Vinyl chloride	ug/L	20	18.3	91	65-130	
Xylene (Total)	ug/L	60	58.6	98	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			103	80-120	
Toluene-d8 (S)	%			105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525760 3525761

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450682001 Result	Spike Conc.	Spike Conc.	MS Result						
1,1,1,2-Tetrachloroethane	ug/L	<0.084	20	20	18.0	17.2	90	86	80-120	5	15
1,1,1-Trichloroethane	ug/L	<0.11	20	20	18.0	17.9	90	90	75-125	1	15
1,1,2,2-Tetrachloroethane	ug/L	<0.15	20	20	18.1	17.1	90	86	80-120	6	15
1,1,2-Trichloroethane	ug/L	<0.14	20	20	17.6	17.4	88	87	80-120	1	20
1,1-Dichloroethane	ug/L	<0.12	20	20	17.3	17.4	86	87	75-120	1	15
1,1-Dichloroethene	ug/L	<0.22	20	20	17.8	17.7	89	88	75-120	1	25
1,1-Dichloropropene	ug/L	<0.14	20	20	19.1	18.8	95	94	75-125	2	20
1,2,3-Trichlorobenzene	ug/L	<0.93	20	20	17.9	18.6	89	93	60-135	4	25
1,2,3-Trichloropropane	ug/L	<0.41	20	20	16.1	18.5	80	92	75-120	14	20
1,2,4-Trichlorobenzene	ug/L	<0.73	20	20	17.7	16.7	88	84	65-130	6	25
1,2,4-Trimethylbenzene	ug/L	<0.32	20	20	19.8	18.8	99	94	80-120	5	20
1,2-Dibromo-3-chloropropane	ug/L	<0.78	20	20	18.2	15.3	91	76	65-130	17	25
1,2-Dibromoethane (EDB)	ug/L	<0.20	20	20	18.3	17.2	91	86	80-120	6	20
1,2-Dichlorobenzene	ug/L	<0.12	20	20	18.5	18.4	93	92	80-120	1	20
1,2-Dichloroethane	ug/L	<0.21	20	20	18.1	17.1	90	86	80-120	6	25
1,2-Dichloroethene (Total)	ug/L	<0.22	40	40	34.1	34.4	85	86	80-120	1	20
1,2-Dichloropropane	ug/L	<0.14	20	20	17.0	16.3	85	81	80-120	5	20
1,3,5-Trimethylbenzene	ug/L	<0.090	20	20	19.0	19.1	95	95	75-120	0	20
1,3-Dichlorobenzene	ug/L	<0.13	20	20	19.1	18.1	95	91	80-120	5	20
1,3-Dichloropropane	ug/L	<0.10	20	20	17.7	17.0	89	85	80-120	4	20
1,4-Dichlorobenzene	ug/L	<0.13	20	20	18.6	17.9	93	90	80-120	4	20
2,2-Dichloropropane	ug/L	<0.16	20	20	16.9	17.6	84	88	55-135	4	30
2-Butanone (MEK)	ug/L	<0.98	100	100	73.8	68.4	74	68	50-155	8	25
2-Chlorotoluene	ug/L	<0.11	20	20	19.4	19.5	97	97	80-120	0	20
2-Hexanone	ug/L	<1.1	100	100	77.9	73.5	78	74	55-145	6	20
4-Chlorotoluene	ug/L	<0.15	20	20	19.6	18.7	98	93	80-120	5	20
4-Methyl-2-pentanone (MIBK)	ug/L	<0.74	100	100	77.3	75.6	77	76	70-130	2	20
Acetone	ug/L	<2.5	100	100	72.7	67.4	73	67	35-160	8	25
Benzene	ug/L	<0.14	20	20	17.2	16.9	86	85	80-120	1	25
Bromobenzene	ug/L	<0.088	20	20	19.7	18.8	98	94	80-120	5	15

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525760 3525761												
Parameter	Units	60450682001		MS	MSD	3525761		% Rec	% Rec	% Rec	Max	Qual
		Result	Conc.	Spike	Spike	MS	MSD					
Bromochloromethane	ug/L	<0.20	20	20	20	16.7	17.4	83	87	80-120	4	20
Bromodichloromethane	ug/L	<0.16	20	20	20	15.9	16.3	80	81	80-120	2	15
Bromoform	ug/L	<0.68	20	20	20	17.3	16.3	87	81	60-130	6	20
Bromomethane	ug/L	<0.46	20	20	20	15.7	15.9	78	80	50-140	2	45
Carbon disulfide	ug/L	<0.98	20	20	20	17.1	17.6	84	87	75-125	3	25
Carbon tetrachloride	ug/L	<0.17	20	20	20	19.3	19.0	97	95	70-130	2	20
Chlorobenzene	ug/L	<0.089	20	20	20	18.9	18.6	95	93	80-120	2	20
Chloroethane	ug/L	<0.37	20	20	20	20.0	19.0	100	95	70-130	5	20
Chloroform	ug/L	<0.22	20	20	20	17.8	18.1	89	90	75-120	2	20
Chloromethane	ug/L	<0.28	20	20	20	17.3	17.3	86	87	45-145	0	30
cis-1,2-Dichloroethene	ug/L	<0.13	20	20	20	16.8	16.6	84	83	80-120	1	20
cis-1,3-Dichloropropene	ug/L	<0.078	20	20	20	16.3	16.0	82	80	75-125	2	20
Dibromochloromethane	ug/L	<0.30	20	20	20	16.6	17.2	83	86	75-125	4	20
Dibromomethane	ug/L	<0.11	20	20	20	17.5	17.2	87	86	80-120	1	20
Dichlorodifluoromethane	ug/L	<0.20	20	20	20	18.2	17.8	91	89	25-180	2	25
Ethylbenzene	ug/L	<0.12	20	20	20	19.8	18.6	99	93	80-120	6	25
Hexachloro-1,3-butadiene	ug/L	<0.42	20	20	20	18.1	17.2	90	86	65-125	5	30
Isopropylbenzene (Cumene)	ug/L	<0.097	20	20	20	19.5	19.3	97	96	80-125	1	20
Methyl-tert-butyl ether	ug/L	<0.13	20	20	20	17.4	16.4	87	82	75-125	6	30
Methylene Chloride	ug/L	<0.39	20	20	20	18.6	19.2	93	96	70-140	3	25
n-Butylbenzene	ug/L	<0.15	20	20	20	18.5	19.0	93	95	70-125	2	25
n-Propylbenzene	ug/L	<0.12	20	20	20	19.2	19.4	96	97	80-120	1	20
Naphthalene	ug/L	<0.82	20	20	20	18.0	16.7	90	84	60-140	7	25
p-Isopropyltoluene	ug/L	<0.13	20	20	20	19.5	19.4	97	97	80-120	0	20
sec-Butylbenzene	ug/L	<0.11	20	20	20	20.2	19.8	101	99	80-120	2	20
Styrene	ug/L	<0.12	20	20	20	18.7	18.6	93	93	80-120	0	30
tert-Butylbenzene	ug/L	<0.12	20	20	20	19.5	19.8	98	99	80-120	1	20
Tetrachloroethene	ug/L	<0.33	20	20	20	19.1	19.1	96	95	80-125	0	25
Toluene	ug/L	<0.25	20	20	20	18.5	19.0	92	95	80-120	3	25
trans-1,2-Dichloroethene	ug/L	<0.10	20	20	20	17.3	17.8	87	89	80-120	2	20
trans-1,3-Dichloropropene	ug/L	<0.18	20	20	20	16.6	16.2	83	81	75-125	3	15
Trichloroethene	ug/L	<0.21	20	20	20	17.1	17.5	85	88	80-125	3	20
Trichlorofluoromethane	ug/L	<0.16	20	20	20	19.6	19.8	98	99	75-125	1	20
Vinyl chloride	ug/L	<0.17	20	20	20	19.1	19.5	95	98	65-140	2	25
Xylene (Total)	ug/L	<0.28	60	60	60	58.0	57.8	97	96	80-120	0	25
1,2-Dichlorobenzene-d4 (S)	%							96	96	80-120		
4-Bromofluorobenzene (S)	%							101	100	80-120		
Toluene-d8 (S)	%							104	105	80-120		
Preservation pH		1.0				1.0	1.0				0	

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525762 3525763												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		60450724005 Result	Spike Conc.	Spike Conc.	MS Result							
1,1,1,2-Tetrachloroethane	ug/L	ND	400	400	348	350	87	87	80-120	0	15	
1,1,1-Trichloroethane	ug/L	ND	400	400	348	342	87	86	75-125	2	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	400	400	357	366	89	92	80-120	2	15	
1,1,2-Trichloroethane	ug/L	ND	400	400	361	369	90	92	80-120	2	20	
1,1-Dichloroethane	ug/L	14.2J	400	400	361	362	87	87	75-120	0	15	
1,1-Dichloroethene	ug/L	ND	400	400	325	332	81	83	75-120	2	25	
1,1-Dichloropropene	ug/L	ND	400	400	349	350	87	88	75-125	0	20	
1,2,3-Trichlorobenzene	ug/L	ND	400	400	343	369	86	92	60-135	7	25	
1,2,3-Trichloropropane	ug/L	ND	400	400	341	404	85	101	75-120	17	20	
1,2,4-Trichlorobenzene	ug/L	ND	400	400	341	355	85	89	65-130	4	25	
1,2,4-Trimethylbenzene	ug/L	ND	400	400	377	373	94	93	80-120	1	20	
1,2-Dibromo-3-chloropropane	ug/L	ND	400	400	328	401	82	100	65-130	20	25	
1,2-Dibromoethane (EDB)	ug/L	ND	400	400	361	352	90	88	80-120	2	20	
1,2-Dichlorobenzene	ug/L	ND	400	400	375	384	94	96	80-120	2	20	
1,2-Dichloroethane	ug/L	ND	400	400	370	361	92	90	80-120	2	25	
1,2-Dichloroethene (Total)	ug/L	576	800	800	1300	1290	91	89	80-120	1	20	
1,2-Dichloropropane	ug/L	ND	400	400	331	350	83	88	80-120	6	20	
1,3,5-Trimethylbenzene	ug/L	ND	400	400	394	381	98	95	75-120	3	20	
1,3-Dichlorobenzene	ug/L	ND	400	400	373	374	93	93	80-120	0	20	
1,3-Dichloropropane	ug/L	ND	400	400	360	366	90	92	80-120	2	20	
1,4-Dichlorobenzene	ug/L	ND	400	400	360	370	90	93	80-120	3	20	
2,2-Dichloropropane	ug/L	ND	400	400	331	340	83	85	55-135	3	30	
2-Butanone (MEK)	ug/L	ND	2000	2000	1560	1550	78	77	50-155	1	25	
2-Chlorotoluene	ug/L	ND	400	400	380	386	95	97	80-120	2	20	
2-Hexanone	ug/L	ND	2000	2000	1650	1640	82	82	55-145	0	20	
4-Chlorotoluene	ug/L	ND	400	400	399	383	100	96	80-120	4	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2000	2000	1650	1630	82	81	70-130	1	20	
Acetone	ug/L	ND	2000	2000	1430	1480	72	74	35-160	3	25	
Benzene	ug/L	ND	400	400	345	342	86	86	80-120	1	25	
Bromobenzene	ug/L	ND	400	400	384	394	96	99	80-120	3	15	
Bromochloromethane	ug/L	ND	400	400	363	365	91	91	80-120	1	20	
Bromodichloromethane	ug/L	ND	400	400	336	319	84	80	80-120	5	15	
Bromoform	ug/L	ND	400	400	343	354	86	88	60-130	3	20	
Bromomethane	ug/L	ND	400	400	286	317	72	79	50-140	10	45	
Carbon disulfide	ug/L	ND	400	400	331	327	83	82	75-125	1	25	
Carbon tetrachloride	ug/L	ND	400	400	358	356	89	89	70-130	1	20	
Chlorobenzene	ug/L	24.7	400	400	393	393	92	92	80-120	0	20	
Chloroethane	ug/L	ND	400	400	367	351	92	88	70-130	4	20	
Chloroform	ug/L	ND	400	400	359	356	90	89	75-120	1	20	
Chloromethane	ug/L	ND	400	400	316	321	79	80	45-145	2	30	
cis-1,2-Dichloroethene	ug/L	566	400	400	953	957	97	98	80-120	0	20	
cis-1,3-Dichloropropene	ug/L	ND	400	400	330	345	82	86	75-125	5	20	
Dibromochloromethane	ug/L	ND	400	400	357	347	89	87	75-125	3	20	
Dibromomethane	ug/L	ND	400	400	360	349	90	87	80-120	3	20	

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Parameter	Units	60450724005		3525762		3525763		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result								
Dichlorodifluoromethane	ug/L	ND	400	400	345	329	86	82	25-180	5	25			
Ethylbenzene	ug/L	ND	400	400	381	379	95	95	80-120	1	25			
Hexachloro-1,3-butadiene	ug/L	ND	400	400	332	337	83	84	65-125	2	30			
Isopropylbenzene (Cumene)	ug/L	ND	400	400	377	379	94	95	80-125	0	20			
Methyl-tert-butyl ether	ug/L	ND	400	400	346	351	87	88	75-125	2	30			
Methylene Chloride	ug/L	ND	400	400	385	375	96	94	70-140	3	25			
n-Butylbenzene	ug/L	ND	400	400	367	374	92	94	70-125	2	25			
n-Propylbenzene	ug/L	ND	400	400	370	368	93	92	80-120	1	20			
Naphthalene	ug/L	ND	400	400	337	376	84	94	60-140	11	25			
p-Isopropyltoluene	ug/L	ND	400	400	369	371	92	93	80-120	1	20			
sec-Butylbenzene	ug/L	ND	400	400	387	395	97	99	80-120	2	20			
Styrene	ug/L	ND	400	400	364	360	91	90	80-120	1	30			
tert-Butylbenzene	ug/L	ND	400	400	370	376	93	94	80-120	2	20			
Tetrachloroethene	ug/L	ND	400	400	368	373	92	93	80-125	1	25			
Toluene	ug/L	ND	400	400	367	359	92	90	80-120	2	25			
trans-1,2-Dichloroethene	ug/L	9.7J	400	400	347	334	84	81	80-120	4	20			
trans-1,3-Dichloropropene	ug/L	ND	400	400	335	343	84	86	75-125	2	15			
Trichloroethene	ug/L	ND	400	400	348	335	87	84	80-125	4	20			
Trichlorofluoromethane	ug/L	ND	400	400	386	370	97	92	75-125	4	20			
Vinyl chloride	ug/L	71.9	400	400	442	437	93	91	65-140	1	25			
Xylene (Total)	ug/L	ND	1200	1200	1150	1100	95	92	80-120	4	25			
1,2-Dichlorobenzene-d4 (S)	%						98	98	80-120					
4-Bromofluorobenzene (S)	%						97	102	80-120					
Toluene-d8 (S)	%						105	102	80-120					
Preservation pH		1.0			1.0	1.0						0		

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch:	891416	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV MO GRO Oxygenates
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001, 60450798002, 60450798003

METHOD BLANK: 3528205 Matrix: Water  
 Associated Lab Samples: 60450798001, 60450798002, 60450798003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	ug/L	<62.6	500	62.6	04/20/24 20:08	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120		04/20/24 20:08	
4-Bromofluorobenzene (S)	%	101	80-120		04/20/24 20:08	
Toluene-d8 (S)	%	99	80-120		04/20/24 20:08	

LABORATORY CONTROL SAMPLE: 3528206

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	ug/L	4000	3310	83	70-135	
1,2-Dichlorobenzene-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3528207 3528208

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60451238014	Spike Conc.	Spike Conc.	Result						
1,2-Dichlorobenzene-d4 (S)	%					99	101	80-120		10	
4-Bromofluorobenzene (S)	%					98	101	80-120		10	
Toluene-d8 (S)	%					99	100	80-120		10	

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch: 890662

Analysis Method: EPA 8082

QC Batch Method: EPA 3510

Analysis Description: 8082 GCS PCB, LV

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001

METHOD BLANK: 3525041

Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.15	1.0	0.15	04/17/24 11:42	
PCB-1221 (Aroclor 1221)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1232 (Aroclor 1232)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1242 (Aroclor 1242)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1248 (Aroclor 1248)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1254 (Aroclor 1254)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1260 (Aroclor 1260)	ug/L	<0.19	1.0	0.19	04/17/24 11:42	
Decachlorobiphenyl (S)	%	69	20-120		04/17/24 11:42	

LABORATORY CONTROL SAMPLE: 3525042

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	5	3.8	75	23-120	
PCB-1260 (Aroclor 1260)	ug/L	5	3.8	77	28-120	
Decachlorobiphenyl (S)	%			69	20-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525045 3525046

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450682001 Result	Spike Conc.	Spike Conc.	Result						
PCB-1016 (Aroclor 1016)	ug/L	<0.15	5	5	3.5	3.5	70	69	23-120	1	30
PCB-1260 (Aroclor 1260)	ug/L	<0.19	5	5	3.7	3.5	75	71	28-120	6	30
Decachlorobiphenyl (S)	%						70	67	20-120		

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch: 890658

Analysis Method: EPA 8270

QC Batch Method: EPA 3510

Analysis Description: 8270 Water MSSV, RV

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001

METHOD BLANK: 3525033

Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
1,2-Dichlorobenzene	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
1,3-Dichlorobenzene	ug/L	<1.5	10.0	1.5	04/18/24 18:08	
1,4-Dichlorobenzene	ug/L	<1.7	10.0	1.7	04/18/24 18:08	
2,4,5-Trichlorophenol	ug/L	<1.7	25.0	1.7	04/18/24 18:08	
2,4,6-Trichlorophenol	ug/L	<1.4	10.0	1.4	04/18/24 18:08	
2,4-Dichlorophenol	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
2,4-Dimethylphenol	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
2,4-Dinitrophenol	ug/L	<2.5	50.0	2.5	04/18/24 18:08	
2,4-Dinitrotoluene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
2,6-Dinitrotoluene	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
2-Chloronaphthalene	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
2-Chlorophenol	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
2-Methylnaphthalene	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
2-Methylphenol(o-Cresol)	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
2-Nitroaniline	ug/L	<1.9	50.0	1.9	04/18/24 18:08	
2-Nitrophenol	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
3&4-Methylphenol(m&p Cresol)	ug/L	<1.7	10.0	1.7	04/18/24 18:08	
3,3'-Dichlorobenzidine	ug/L	<3.9	20.0	3.9	04/18/24 18:08	
3-Nitroaniline	ug/L	<1.9	50.0	1.9	04/18/24 18:08	
4,6-Dinitro-2-methylphenol	ug/L	<2.2	50.0	2.2	04/18/24 18:08	
4-Bromophenylphenyl ether	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
4-Chloro-3-methylphenol	ug/L	<1.9	20.0	1.9	04/18/24 18:08	
4-Chloroaniline	ug/L	<2.0	20.0	2.0	04/18/24 18:08	
4-Chlorophenylphenyl ether	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
4-Nitroaniline	ug/L	<2.2	50.0	2.2	04/18/24 18:08	
4-Nitrophenol	ug/L	<0.37	50.0	0.37	04/18/24 18:08	
Acenaphthene	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
Acenaphthylene	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
Anthracene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Benzo(a)anthracene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Benzo(a)pyrene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Benzo(b)fluoranthene	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
Benzo(g,h,i)perylene	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
Benzo(k)fluoranthene	ug/L	<2.2	10.0	2.2	04/18/24 18:08	
Benzoic Acid	ug/L	<4.4	50.0	4.4	04/18/24 18:08	
Benzyl alcohol	ug/L	<1.6	20.0	1.6	04/18/24 18:08	
bis(2-Chloroethoxy)methane	ug/L	<2.2	10.0	2.2	04/18/24 18:08	
bis(2-Chloroethyl) ether	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
bis(2-Chloroisopropyl) ether	ug/L	<2.3	10.0	2.3	04/18/24 18:08	

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

METHOD BLANK: 3525033

Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Ethylhexyl)phthalate	ug/L	<2.4	10.0	2.4	04/18/24 18:08	
Butylbenzylphthalate	ug/L	<2.4	10.0	2.4	04/18/24 18:08	
Carbazole	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Chrysene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Di-n-butylphthalate	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
Di-n-octylphthalate	ug/L	<2.2	10.0	2.2	04/18/24 18:08	
Dibenz(a,h)anthracene	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
Dibenzofuran	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Diethylphthalate	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
Dimethylphthalate	ug/L	<1.9	10.0	1.9	04/18/24 18:08	
Fluoranthene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Fluorene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Hexachloro-1,3-butadiene	ug/L	<1.6	10.0	1.6	04/18/24 18:08	
Hexachlorobenzene	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
Hexachlorocyclopentadiene	ug/L	<1.6	10.0	1.6	04/18/24 18:08	
Hexachloroethane	ug/L	<1.4	10.0	1.4	04/18/24 18:08	
Indeno(1,2,3-cd)pyrene	ug/L	<1.8	10.0	1.8	04/18/24 18:08	
Isophorone	ug/L	<2.1	10.0	2.1	04/18/24 18:08	
N-Nitroso-di-n-propylamine	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
N-Nitrosodiphenylamine	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Naphthalene	ug/L	<2.3	10.0	2.3	04/18/24 18:08	
Nitrobenzene	ug/L	<2.4	10.0	2.4	04/18/24 18:08	
Pentachlorophenol	ug/L	<3.5	50.0	3.5	04/18/24 18:08	
Phenanthrene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Phenol	ug/L	<0.83	10.0	0.83	04/18/24 18:08	
Pyrene	ug/L	<2.0	10.0	2.0	04/18/24 18:08	
Pyridine	ug/L	<1.1	10.0	1.1	04/18/24 18:08	
2,4,6-Tribromophenol (S)	%	71	25-120		04/18/24 18:08	
2-Fluorobiphenyl (S)	%	59	25-120		04/18/24 18:08	
2-Fluorophenol (S)	%	52	20-120		04/18/24 18:08	
Nitrobenzene-d5 (S)	%	67	30-120		04/18/24 18:08	
Phenol-d6 (S)	%	40	10-120		04/18/24 18:08	
Terphenyl-d14 (S)	%	72	35-125		04/18/24 18:08	

LABORATORY CONTROL SAMPLE: 3525034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	100	58.5	59	45-120	
1,2-Dichlorobenzene	ug/L	100	55.6	56	45-120	
1,3-Dichlorobenzene	ug/L	100	55.1	55	40-120	
1,4-Dichlorobenzene	ug/L	100	55.2	55	40-120	
2,4,5-Trichlorophenol	ug/L	100	63.4	63	55-120	
2,4,6-Trichlorophenol	ug/L	100	64.2	64	50-120	
2,4-Dichlorophenol	ug/L	100	62.8	63	50-120	

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**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

LABORATORY CONTROL SAMPLE: 3525034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dimethylphenol	ug/L	100	62.0	62	50-120	
2,4-Dinitrophenol	ug/L	100	62.8	63	10-140	
2,4-Dinitrotoluene	ug/L	100	65.7	66	60-120	
2,6-Dinitrotoluene	ug/L	100	66.1	66	55-120	
2-Chloronaphthalene	ug/L	100	61.1	61	50-120	
2-Chlorophenol	ug/L	100	63.8	64	45-120	
2-Methylnaphthalene	ug/L	100	60.1	60	45-120	
2-Methylphenol(o-Cresol)	ug/L	100	62.6	63	40-120	
2-Nitroaniline	ug/L	100	71.7	72	55-120	
2-Nitrophenol	ug/L	100	65.7	66	50-120	
3&4-Methylphenol(m&p Cresol)	ug/L	100	60.9	61	35-120	
3,3'-Dichlorobenzidine	ug/L	100	86.0	86	50-130	
3-Nitroaniline	ug/L	100	74.3	74	65-125	
4,6-Dinitro-2-methylphenol	ug/L	100	67.9	68	35-130	
4-Bromophenylphenyl ether	ug/L	100	66.0	66	58-120	
4-Chloro-3-methylphenol	ug/L	100	67.6	68	55-120	
4-Chloroaniline	ug/L	100	75.6	76	55-125	
4-Chlorophenylphenyl ether	ug/L	100	63.0	63	55-120	
4-Nitroaniline	ug/L	100	69.0	69	60-120	
4-Nitrophenol	ug/L	100	42.3J	42	15-120	
Acenaphthene	ug/L	100	61.7	62	55-120	
Acenaphthylene	ug/L	100	61.0	61	55-120	
Anthracene	ug/L	100	65.3	65	60-120	
Benzo(a)anthracene	ug/L	100	67.8	68	60-120	
Benzo(a)pyrene	ug/L	100	66.1	66	60-120	
Benzo(b)fluoranthene	ug/L	100	66.3	66	60-120	
Benzo(g,h,i)perylene	ug/L	100	69.4	69	60-120	
Benzo(k)fluoranthene	ug/L	100	65.6	66	55-120	
Benzoic Acid	ug/L	100	37.9J	38	10-120	
Benzyl alcohol	ug/L	100	65.2	65	45-120	
bis(2-Chloroethoxy)methane	ug/L	100	67.6	68	50-120	
bis(2-Chloroethyl) ether	ug/L	100	67.5	68	50-120	
bis(2-Chloroisopropyl) ether	ug/L	100	67.1	67	45-120	
bis(2-Ethylhexyl)phthalate	ug/L	100	71.3	71	60-120	
Butylbenzylphthalate	ug/L	100	72.5	72	60-120	
Carbazole	ug/L	100	64.3	64	60-120	
Chrysene	ug/L	100	67.3	67	60-120	
Di-n-butylphthalate	ug/L	100	70.3	70	60-120	
Di-n-octylphthalate	ug/L	100	71.8	72	60-120	
Dibenz(a,h)anthracene	ug/L	100	68.1	68	60-120	
Dibenzofuran	ug/L	100	60.9	61	60-120	
Diethylphthalate	ug/L	100	66.5	67	60-120	
Dimethylphthalate	ug/L	100	64.1	64	55-120	
Fluoranthene	ug/L	100	66.3	66	60-120	
Fluorene	ug/L	100	63.2	63	60-120	
Hexachloro-1,3-butadiene	ug/L	100	56.8	57	35-120	
Hexachlorobenzene	ug/L	100	68.9	69	55-120	

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### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

LABORATORY CONTROL SAMPLE: 3525034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachlorocyclopentadiene	ug/L	100	47.9	48	20-120	
Hexachloroethane	ug/L	100	55.7	56	30-120	
Indeno(1,2,3-cd)pyrene	ug/L	100	68.3	68	55-120	
Isophorone	ug/L	100	68.5	68	55-120	
N-Nitroso-di-n-propylamine	ug/L	100	69.7	70	50-120	
N-Nitrosodiphenylamine	ug/L	100	63.6	64	60-120	
Naphthalene	ug/L	100	60.1	60	45-120	
Nitrobenzene	ug/L	100	68.3	68	45-120	
Pentachlorophenol	ug/L	100	64.7	65	20-145	
Phenanthrene	ug/L	100	64.0	64	60-120	
Phenol	ug/L	100	41.5	41	10-120	
Pyrene	ug/L	100	65.0	65	60-120	
Pyridine	ug/L	100	48.0	48	10-120	
2,4,6-Tribromophenol (S)	%			70	25-120	
2-Fluorobiphenyl (S)	%			59	25-120	
2-Fluorophenol (S)	%			53	20-120	
Nitrobenzene-d5 (S)	%			69	30-120	
Phenol-d6 (S)	%			40	10-120	
Terphenyl-d14 (S)	%			66	35-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525035 3525036

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450682001	Spike Conc.	Spike Conc.	Result								
1,2,4-Trichlorobenzene	ug/L	<2.0	99	100	65.3	55.0	66	55	45-120	17	30		
1,2-Dichlorobenzene	ug/L	<1.8	99	100	64.3	54.4	65	54	45-120	17	30		
1,3-Dichlorobenzene	ug/L	<1.5	99	100	64.5	54.3	65	54	40-120	17	30		
1,4-Dichlorobenzene	ug/L	<1.7	99	100	64.2	54.0	65	54	40-120	17	30		
2,4,5-Trichlorophenol	ug/L	<1.7	99	100	68.2	57.8	69	58	25-135	17	30		
2,4,6-Trichlorophenol	ug/L	<1.4	99	100	68.5	56.8	69	57	50-120	19	30		
2,4-Dichlorophenol	ug/L	<1.8	99	100	66.4	54.8	67	55	45-120	19	25		
2,4-Dimethylphenol	ug/L	<1.9	99	100	63.6	52.3	64	52	35-120	19	30		
2,4-Dinitrophenol	ug/L	<2.5	99	100	65.2	52.8	66	53	10-140	21	35		
2,4-Dinitrotoluene	ug/L	<2.0	99	100	71.1	60.3	72	60	55-120	16	35		
2,6-Dinitrotoluene	ug/L	<1.9	99	100	69.9	60.9	71	61	55-120	14	35		
2-Chloronaphthalene	ug/L	<2.1	99	100	66.3	56.2	67	56	45-120	16	35		
2-Chlorophenol	ug/L	<1.8	99	100	66.8	55.4	67	55	45-120	19	25		
2-Methylnaphthalene	ug/L	<2.1	99	100	66.3	56.4	67	56	45-120	16	30		
2-Methylphenol(o-Cresol)	ug/L	<1.8	99	100	64.5	52.0	65	52	40-120	21	30		
2-Nitroaniline	ug/L	<1.9	99	100	76.5	65.9	77	66	55-120	15	30		
2-Nitrophenol	ug/L	<2.0	99	100	69.2	59.0	70	59	50-120	16	30		
3&4-Methylphenol(m&p Cresol)	ug/L	<1.7	99	100	62.2	51.2	63	51	30-120	19	35		
3,3'-Dichlorobenzidine	ug/L	<3.9	99	100	78.1	67.8	79	68	10-155	14	35		
3-Nitroaniline	ug/L	<1.9	99	100	80.5	64.0	81	64	65-125	23	30 M1		

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525035 3525036												
Parameter	Units	60450682001		MS	MSD	MS		MSD		% Rec Limits	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec			
4,6-Dinitro-2-methylphenol	ug/L	<2.2	99	100	68.5	56.1	69	56	10-155	20	30	
4-Bromophenylphenyl ether	ug/L	<2.0	99	100	69.7	58.2	70	58	50-120	18	35	
4-Chloro-3-methylphenol	ug/L	<1.9	99	100	70.5	59.5	71	59	50-120	17	25	
4-Chloroaniline	ug/L	<2.0	99	100	76.2	56.1	77	56	15-135	30	30	
4-Chlorophenylphenyl ether	ug/L	<1.9	99	100	67.7	58.6	68	59	50-120	15	35	
4-Nitroaniline	ug/L	<2.2	99	100	71.1	59.7	72	60	50-120	17	30	
4-Nitrophenol	ug/L	<0.37	99	100	46.0J	39.6J	46	40	10-120		30	
Acenaphthene	ug/L	<2.1	99	100	67.6	56.6	68	57	55-120	18	30	
Acenaphthylene	ug/L	<1.9	99	100	66.4	56.2	67	56	50-120	17	30	
Anthracene	ug/L	<2.0	99	100	69.8	57.7	71	58	55-120	19	30	
Benzo(a)anthracene	ug/L	<2.0	99	100	70.2	59.3	71	59	55-120	17	25	
Benzo(a)pyrene	ug/L	<2.0	99	100	70.4	59.0	71	59	55-120	18	30	
Benzo(b)fluoranthene	ug/L	<1.9	99	100	69.8	60.8	70	61	55-120	14	30	
Benzo(g,h,i)perylene	ug/L	<1.8	99	100	74.2	60.5	75	61	50-120	20	30	
Benzo(k)fluoranthene	ug/L	<2.2	99	100	70.1	56.4	71	56	50-120	22	30	
Benzoic Acid	ug/L	<4.4	99	100	33.7J	24.0J	34	24	10-120		30	
Benzyl alcohol	ug/L	<1.6	99	100	70.9	58.7	72	59	35-120	19	30	
bis(2-Chloroethoxy)methane	ug/L	<2.2	99	100	70.9	59.9	72	60	50-120	17	30	
bis(2-Chloroethyl) ether	ug/L	<2.1	99	100	71.9	59.8	73	60	45-120	19	30	
bis(2-Chloroisopropyl) ether	ug/L	<2.3	99	100	72.1	60.4	73	60	45-120	18	30	
bis(2-Ethylhexyl)phthalate	ug/L	<2.4	99	100	73.0	62.8	74	63	55-120	15	35	
Butylbenzylphthalate	ug/L	<2.4	99	100	75.4	64.9	76	65	55-120	15	35	
Carbazole	ug/L	<2.0	99	100	67.7	56.0	68	56	55-120	19	35	
Chrysene	ug/L	<2.0	99	100	69.4	58.7	70	59	55-120	17	30	
Di-n-butylphthalate	ug/L	<2.1	99	100	74.5	63.5	75	64	55-120	16	35	
Di-n-octylphthalate	ug/L	<2.2	99	100	76.2	64.3	77	64	60-120	17	35	
Dibenz(a,h)anthracene	ug/L	<1.8	99	100	72.5	61.3	73	61	50-120	17	30	
Dibenzofuran	ug/L	<2.0	99	100	67.9	57.6	69	58	50-120	16	30	
Diethylphthalate	ug/L	<2.1	99	100	72.0	61.2	73	61	55-120	16	35	
Dimethylphthalate	ug/L	<1.9	99	100	68.7	58.3	69	58	50-120	16	35	
Fluoranthene	ug/L	<2.0	99	100	71.1	59.3	72	59	55-120	18	30	
Fluorene	ug/L	<2.0	99	100	68.8	58.1	69	58	55-120	17	30	
Hexachloro-1,3-butadiene	ug/L	<1.6	99	100	64.3	54.4	65	54	35-120	17	35	
Hexachlorobenzene	ug/L	<2.1	99	100	71.4	59.5	72	59	50-120	18	35	
Hexachlorocyclopentadiene	ug/L	<1.6	99	100	49.3	43.0	50	43	15-120	14	40	
Hexachloroethane	ug/L	<1.4	99	100	64.8	55.7	65	56	30-120	15	35	
Indeno(1,2,3-cd)pyrene	ug/L	<1.8	99	100	72.8	60.0	74	60	50-120	19	30	
Isophorone	ug/L	<2.1	99	100	72.2	61.4	73	61	50-120	16	30	
N-Nitroso-di-n-propylamine	ug/L	<2.0	99	100	75.9	62.6	77	63	50-120	19	35	
N-Nitrosodiphenylamine	ug/L	<2.0	99	100	65.2	55.6	66	56	50-120	16	35	
Naphthalene	ug/L	<2.3	99	100	66.3	56.0	67	56	25-120	17	25	
Nitrobenzene	ug/L	<2.4	99	100	72.0	60.8	73	61	45-120	17	35	
Pentachlorophenol	ug/L	<3.5	99	100	67.1	57.3	68	57	20-145	16	40	
Phenanthrene	ug/L	<2.0	99	100	68.1	57.4	69	57	55-120	17	30	
Phenol	ug/L	<0.83	99	100	42.0	35.0	42	35	10-120	18	30	

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### QUALITY CONTROL DATA

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525035		3525036		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450682001 Result	MS Spike Conc.	MSD Spike Conc.									
Pyrene	ug/L	<2.0	99	100	66.9	57.3	68	57	60-120	15	30	M1	
Pyridine	ug/L	<1.1	99	100	60.8	41.5	61	42	10-120	38	35	R1	
2,4,6-Tribromophenol (S)	%						74	62	25-120				
2-Fluorobiphenyl (S)	%						65	54	25-120				
2-Fluorophenol (S)	%						54	44	20-120				
Nitrobenzene-d5 (S)	%						73	62	30-120				
Phenol-d6 (S)	%						41	34	10-120				
Terphenyl-d14 (S)	%						70	58	35-125				

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### QUALITY CONTROL DATA

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch: 891022

Analysis Method: EPA 8270

QC Batch Method: EPA 3511

Analysis Description: 8270 MSSV TPH ORO

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001

METHOD BLANK: 3526517

Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-DRO	mg/L	0.50J	1.0	0.31	04/18/24 17:04	
TPH-ORO	mg/L	0.58J	1.0	0.31	04/18/24 17:04	
2-Fluorobiphenyl (S)	%	99	30-145		04/18/24 17:04	
Nitrobenzene-d5 (S)	%	97	40-140		04/18/24 17:04	
Terphenyl-d14 (S)	%	84	35-150		04/18/24 17:04	

LABORATORY CONTROL SAMPLE: 3526518

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/L	25	21.6	87	45-135	
2-Fluorobiphenyl (S)	%			98	30-145	
Nitrobenzene-d5 (S)	%			101	40-140	
Terphenyl-d14 (S)	%			92	35-150	

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QUALITY CONTROL DATA

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch: 890338

Analysis Method: SM 2320B

QC Batch Method: SM 2320B

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001

METHOD BLANK: 3523756

Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	04/12/24 11:07	

LABORATORY CONTROL SAMPLE: 3523757

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	488	98	90-110	

SAMPLE DUPLICATE: 3523822

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	349	346	1	10	

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### QUALITY CONTROL DATA

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch: 890624

Analysis Method: SM 4500-O G

QC Batch Method: SM 4500-O G

Analysis Description: 4500OG Oxygen, Dissolved

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001

SAMPLE DUPLICATE: 3524961

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Oxygen, Dissolved	mg/L	10.2	11.3	10	10	H6

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch: 890502

Analysis Method: SM 4500-S-2 D

QC Batch Method: SM 4500-S-2 D

Analysis Description: 4500S2D Sulfide, Total

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001

METHOD BLANK: 3524496

Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	<0.016	0.050	0.016	04/15/24 09:13	

LABORATORY CONTROL SAMPLE: 3524497

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.48	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3524498 3524499

Parameter	Units	60450682001		60450682002		60450682003		60450682004		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS Result	MSD Result				
Sulfide, Total	mg/L	0.045J	0.5	0.5	0.36	0.45	63	82	75-125	23	20	M1,R1	

SAMPLE DUPLICATE: 3524500

Parameter	Units	60450682002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	<0.016	0.016J		20	

SAMPLE DUPLICATE: 3524501

Parameter	Units	60450682004 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.021J	630		20	

SAMPLE DUPLICATE: 3525103

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.045J	<0.016		20	

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### QUALITY CONTROL DATA

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch: 891666

Analysis Method: EPA 9040

QC Batch Method: EPA 9040

Analysis Description: 9040 pH

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001

SAMPLE DUPLICATE: 3529112

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.9	8.0	1	10	H6

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch: 890755

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001

METHOD BLANK: 3525492

Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	<0.12	0.20	0.12	04/17/24 16:35	N2
Sulfate	mg/L	<0.55	1.0	0.55	04/17/24 16:35	

LABORATORY CONTROL SAMPLE: 3525493

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	3.0	120	90-110	L1,N2
Sulfate	mg/L	5	5.1	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525494 3525495

Parameter	Units	60450976001		3525495		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
Fluoride	mg/L	ND	25	25	38.6	52.0	154	208	80-120	30	15	M0,N2,R1
Sulfate	mg/L	484	250	250	769	766	114	113	80-120	0	15	

MATRIX SPIKE SAMPLE: 3525496

Parameter	Units	60450858002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	ND	5	9.2	181	80-120	M0,N2
Sulfate	mg/L	247	250	550	121	80-120	M1

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch:	891283	Analysis Method:	EPA 350.1
QC Batch Method:	EPA 350.1	Analysis Description:	350.1 Ammonia
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001

METHOD BLANK: 3527755 Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.069	0.10	0.069	04/19/24 14:11	

LABORATORY CONTROL SAMPLE: 3527756

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	5.4	108	90-110	

MATRIX SPIKE SAMPLE: 3527757

Parameter	Units	60450795001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	3.0	5	8.4	108	90-110	

MATRIX SPIKE SAMPLE: 3527759

Parameter	Units	60450685003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	5	5.1	102	90-110	

SAMPLE DUPLICATE: 3527758

Parameter	Units	60450796001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	12.5	13.4	7	18	

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch:	890413	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, Unpres.
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001

METHOD BLANK: 3524222 Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	<0.069	0.10	0.069	04/12/24 16:45	
Nitrogen, Nitrite	mg/L	<0.069	0.10	0.069	04/12/24 16:45	
Nitrogen, NO2 plus NO3	mg/L	<0.069	0.10	0.069	04/12/24 16:45	

LABORATORY CONTROL SAMPLE: 3524223

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1	1.0	103	70-130	
Nitrogen, Nitrite	mg/L	1	1.1	109	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	106	90-110	

MATRIX SPIKE SAMPLE: 3524224

Parameter	Units	60450690003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	5.9	2	7.2	66	70-130	
Nitrogen, Nitrite	mg/L	<0.20	2	2.0	101	90-110	
Nitrogen, NO2 plus NO3	mg/L	5.9	4	9.3	84	90-110 M1	

SAMPLE DUPLICATE: 3524225

Parameter	Units	60450847001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.4	9	20	
Nitrogen, Nitrite	mg/L	ND	0.13		20	
Nitrogen, NO2 plus NO3	mg/L	1.6	1.6	0	20	

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch:	890401	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, preserved
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001

METHOD BLANK: 3524170 Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.069	0.10	0.069	04/12/24 17:44	

LABORATORY CONTROL SAMPLE: 3524171

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.2	108	90-110	

MATRIX SPIKE SAMPLE: 3524172

Parameter	Units	60450796001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.4	2	3.2	44	90-110	M1

SAMPLE DUPLICATE: 3524173

Parameter	Units	20313374003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	8.0	7.9	1	20	

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**QUALITY CONTROL DATA**

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

QC Batch:	891601	Analysis Method:	SM 4500-CN-E
QC Batch Method:	SM 4500-CN-E	Analysis Description:	4500CNE Cyanide, Total
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60450798001

METHOD BLANK: 3528854 Matrix: Water

Associated Lab Samples: 60450798001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cyanide	mg/L	<0.0038	0.0050	0.0038	04/23/24 13:46	

LABORATORY CONTROL SAMPLE: 3528855

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.1	0.10	100	69-126	

MATRIX SPIKE SAMPLE: 3528856

Parameter	Units	60450682001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	<0.0038	0.1	0.086	85	55-124	

SAMPLE DUPLICATE: 3528857

Parameter	Units	60450682001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	<0.0038	<0.0038		46	

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### QUALIFIERS

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

#### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

#### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

G6 An aliquot for analysis was taken from the original container received due to volume requirements of the laboratory's procedure. Rinsing of the original sample container for inclusion in the sample extraction was not performed.

H6 Analysis initiated outside of the 15 minute EPA required holding time.

J Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.

L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

P9 RPD between the primary and confirmatory analysis exceeded 40%.

R1 RPD value was outside control limits.

SR Surrogate recovery was below laboratory control limits. Results may be biased low.

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KC WATER TREATMENT WT

Pace Project No.: 60450798

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450798001	SW02/SW-1	3510C	2267057	EPA 8081B	2267057
60450798001	SW02/SW-1	8151A	2266267	EPA 8151A	2266267
60450798001	SW02/SW-1	EPA 3510	890662	EPA 8082	890882
60450798001	SW02/SW-1	3015	2267363	EPA 6020B	2267363
60450798001	SW02/SW-1	7470A	2266691	EPA 7470A	2266691
60450798001	SW02/SW-1	EPA 3510	890658	EPA 8270	891183
60450798001	SW02/SW-1	EPA 3511	891022	EPA 8270	891132
60450798001	SW02/SW-1	EPA 5030B/8260	890844		
60450798002	TRIP BLANK	EPA 5030B/8260	890844		
60450798003	TRIP BLANK	EPA 5030B/8260	890844		
60450798001	SW02/SW-1	EPA 8260	891416		
60450798002	TRIP BLANK	EPA 8260	891416		
60450798003	TRIP BLANK	EPA 8260	891416		
60450798001	SW02/SW-1	SM 2320B	890338		
60450798001	SW02/SW-1	SM 4500-O G	890624		
60450798001	SW02/SW-1	SM 4500-S-2 D	890502		
60450798001	SW02/SW-1	EPA 9040	891666		
60450798001	SW02/SW-1	EPA 300.0	890755		
60450798001	SW02/SW-1	EPA 350.1	891283		
60450798001	SW02/SW-1	EPA 353.2	890413		
60450798001	SW02/SW-1	EPA 353.2	890401		
60450798001	SW02/SW-1	SM 4500-CN-E	891601	SM 4500-CN-E	891986

### REPORT OF LABORATORY ANALYSIS

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WO#: 60450798



DC#\_Title: ENV-FRM-LENE-0009\_Sample Co

Revision: 2

Effective Date: 01/12/2022

Issued By: Lenexa

Client Name: Burns + McDonnell

Courier: FedEx [ ] UPS [ ] VIA [ ] Clay [ ] PEX [ ] ECI [ ] Pace [ ] Xroads [ ] Client [x] Other [ ]

Tracking #: Pace Shipping Label Used? Yes [ ] No [x]

Custody Seal on Cooler/Box Present: Yes [x] No [ ] Seals intact: Yes [x] No [ ]

Packing Material: Bubble Wrap [x] Bubble Bags [ ] Foam [ ] None [ ] Other [ ]

Thermometer Used: TAG Type of Ice: Wet Blue None

Cooler Temperature (°C): As-read 12.4 Corr. Factor -0.3 Corrected 12.1

Date and initials of person examining contents:

AF 4/11

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: WT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

LOT#: 6206003/6210006

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

Project Manager Review:

Date:





Client: Burns + McDonnell

Profile #: 10409-21

Site: KL Water Treatment WT

Notes: 2nd COC is just more tests.

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other					
1	WT	3	3	3							2	2							1	1	2		1	1	1	1									
2																																			
3																																			
4																																			
5																																			
6																																			
7																																			
8																																			
9																																			
10																																			
11																																			
12																																			

Container Codes

	Glass		Plastic	Misc.
DG9B	40mL bisulfate clear vial	WGKU	1L NaOH plastic	I Wipe/Swab
DG9H	40mL HCl amber vial	WGFU	1L HNO3 plastic	SP5T 120mL Coliform Na Thiosulfate
DG9M	40mL MeOH clear vial	WG2U	1L H2SO4 plastic	ZPLC Ziploc Bag
DG9Q	40mL TSP amber vial	JGFU	1L unpreserved plastic	AF Air Filter
DG9S	40mL H2SO4 amber vial	AG0U	1L NaOH, Zn Acetate	C Air Cassettes
DG9T	40mL Na Thio amber vial	AG1H	500mL NaOH plastic	R Terracore Kit
DG9U	40mL amber unpreserved	AG1S	500mL HNO3 plastic	U Summa Can
VG9H	40mL HCl clear vial	AG1T	500mL H2SO4 plastic	
VG9T	40mL Na Thio. clear vial	AG1U	500mL unpreserved plastic	
VG9U	40mL unpreserved clear vial	AG2N	500mL NaOH, Zn Acetate	
BG1S	1liter H2SO4 clear glass	AG2S	250mL NaOH plastic	
BG1U	1liter unpres glass	AG3S	250mL HNO3 plastic - field filtered	WT Water
BG3H	250mL HCL Clear glass	AG2U	250mL HNO3 plastic	SL Solid
BG3U	250mL Unpres Clear glass	AG3U	250mL unpreserved plastic	NAL Non-aqueous Liquid
WGDU	16oz clear soil jar	AG4U	250mL H2SO4 plastic	OL OIL
		AG5U	250mL NaOH, Zn Acetate	WP Wipe
			125mL unpreserved plastic	DW Drinking Water
			125mL HNO3 plastic	
			125mL H2SO4 plastic	
			16oz unpreserved plastic	

Work Order Number:

60450708



**ATTACHMENT D - LABORATORY ANALYTICAL REPORT  
(IDW)**

---



April 24, 2024

Justin Carter  
Burns & McDonnell  
9400 Ward Parkway  
Kansas City, MO 64114

RE: Project: KS Water Treatment IDW WT  
Pace Project No.: 60450812

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on April 11, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller  
alice.spiller@pacelabs.com  
(913)599-5665  
PM Lab Management

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL  
Jacquelin Lee, Burns & McDonnell



## REPORT OF LABORATORY ANALYSIS

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### CERTIFICATIONS

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

#### Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219  
 Arkansas Inorganic Drinking Water Certification  
 Arkansas Certification #: 88-00679  
 Illinois Certification #: 2000302023-6  
 Colorado Division of Oil and Public Safety  
 Iowa Certification #: 118  
 Kansas Field Laboratory Certification #: E-92587

Kansas/NELAP Certification #: E-10116  
 Louisiana Certification #: 03055  
 Missouri Inorganic Drinking Water Certification  
 Nevada Certification #: KS000212024-1  
 Oklahoma Certification #: 2023-073  
 Texas Certification #: T104704407-23-17  
 Utah Certification #: KS000212022-13

#### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122  
 Alabama Certification #: 40660  
 Alaska Certification 17-026  
 Arizona Certification #: AZ0612  
 Arkansas Certification #: 88-0469  
 California Certification #: 2932  
 Canada Certification #: 1461.01  
 Colorado Certification #: TN00003  
 Connecticut Certification #: PH-0197  
 DOD Certification: #1461.01  
 EPA# TN00003  
 Florida Certification #: E87487  
 Georgia DW Certification #: 923  
 Georgia Certification: NELAP  
 Idaho Certification #: TN00003  
 Illinois Certification #: 200008  
 Indiana Certification #: C-TN-01  
 Iowa Certification #: 364  
 Kansas Certification #: E-10277  
 Kentucky UST Certification #: 16  
 Kentucky Certification #: 90010  
 Louisiana Certification #: AI30792  
 Louisiana DW Certification #: LA180010  
 Maine Certification #: TN0002  
 Maryland Certification #: 324  
 Massachusetts Certification #: M-TN003  
 Michigan Certification #: 9958  
 Minnesota Certification #: 047-999-395  
 Mississippi Certification #: TN00003  
 Missouri Certification #: 340  
 Montana Certification #: CERT0086  
 Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34  
 New Hampshire Certification #: 2975  
 New Jersey Certification #: TN002  
 New Mexico DW Certification  
 New York Certification #: 11742  
 North Carolina Aquatic Toxicity Certification #: 41  
 North Carolina Drinking Water Certification #: 21704  
 North Carolina Environmental Certificate #: 375  
 North Dakota Certification #: R-140  
 Ohio VAP Certification #: CL0069  
 Oklahoma Certification #: 9915  
 Oregon Certification #: TN200002  
 Pennsylvania Certification #: 68-02979  
 Rhode Island Certification #: LAO00356  
 South Carolina Certification #: 84004  
 South Dakota Certification  
 Tennessee DW/Chem/Micro Certification #: 2006  
 Texas Mold Certification #: LAB0152  
 Texas Certification #: T 104704245-17-14  
 USDA Soil Permit #: P330-15-00234  
 Utah Certification #: TN00003  
 Virginia Certification #: VT2006  
 Vermont Dept. of Health: ID# VT-2006  
 Virginia Certification #: 460132  
 Washington Certification #: C847  
 West Virginia Certification #: 233  
 Wisconsin Certification #: 998093910  
 Wyoming UST Certification #: via A2LA 2926.01  
 A2LA-ISO 17025 Certification #: 1461.01  
 A2LA-ISO 17025 Certification #: 1461.02  
 AIHA-LAP/LLC EMLAP Certification #:100789

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: KS Water Treatment IDW WT  
Pace Project No.: 60450812

---

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60450812001	IDW-01	Water	04/11/24 09:40	04/11/24 11:30

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### SAMPLE ANALYTE COUNT

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

---

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60450812001	IDW-01	EPA 8081B	HCS	9	PAN
		EPA 8151A	JMB, LJD	3	PAN
		EPA 8082	JDS	8	PASI-K
		EPA 6010D	JTM	7	PAN
		EPA 7470A	NDL	1	PAN
		EPA 8270E	DSH	18	PAN
		EPA 8260D	JHH	14	PAN
		EPA 1010	SR1	1	PASI-K
		EPA 9040	SR1	1	PASI-K

---

PAN = Pace National - Mt. Juliet

PASI-K = Pace Analytical Services - Kansas City

### REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

---

**Method:** EPA 8081B

**Description:** Pesticides (GC) 8081B TCLP

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

1 sample was analyzed for EPA 8081B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

---

**Method:** EPA 8151A

**Description:** Chlorinated Herb. (GC) 8151A

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

1 sample was analyzed for EPA 8151A by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

---

**Method:** EPA 8082

**Description:** 8082 GCS PCB, LV

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

1 sample was analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

---

**Method:** EPA 6010D

**Description:** Metals (ICP) 6010D TCLP

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

1 sample was analyzed for EPA 6010D by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

---

**Method:** EPA 7470A

**Description:** Mercury 7470A TCLP

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

1 sample was analyzed for EPA 7470A by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

---

**Method:** EPA 8270E

**Description:** SVOA (GC/MS) 8270E TCLP

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

1 sample was analyzed for EPA 8270E by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

---

**Method:** EPA 8260D

**Description:** VOA (GC/MS) 8260D TCLP

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

1 sample was analyzed for EPA 8260D by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

Analyte Comments:

QC Batch: 2267594

C3: The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.

- IDW-01 (Lab ID: 60450812001)
  - Trichloroethene

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

---

**Method:** EPA 1010

**Description:** 1010 Flashpoint,Closed Cup

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

1 sample was analyzed for EPA 1010 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

---

**Method:** EPA 9040

**Description:** 9040 pH

**Client:** BURNS & MCDONNELL

**Date:** April 24, 2024

**General Information:**

1 sample was analyzed for EPA 9040 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA required holding time.

- IDW-01 (Lab ID: 60450812001)

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

Sample: IDW-01 Lab ID: 60450812001 Collected: 04/11/24 09:40 Received: 04/11/24 11:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Pesticides (GC) 8081B TCLP</b>									
Analytical Method: EPA 8081B Preparation Method: 3510C									
Leachate Method/Date: 1311; 04/13/24 17:59 Initial pH: 6.4; Final pH: 5.36									
Pace National - Mt. Juliet									
Chlordane (Technical)	<0.00150	mg/L	0.00500	0.00150	1	04/15/24 10:52	04/16/24 01:50	57-74-9	
Endrin	<0.00150	mg/L	0.00500	0.00150	1	04/15/24 10:52	04/16/24 01:50	72-20-8	
Heptachlor	<0.00150	mg/L	0.00500	0.00150	1	04/15/24 10:52	04/16/24 01:50	76-44-8	
Heptachlor epoxide	<0.00150	mg/L	0.00500	0.00150	1	04/15/24 10:52	04/16/24 01:50	1024-57-3	
gamma-BHC (Lindane)	<0.00150	mg/L	0.00500	0.00150	1	04/15/24 10:52	04/16/24 01:50	58-89-9	
Methoxychlor	<0.00150	mg/L	0.00500	0.00150	1	04/15/24 10:52	04/16/24 01:50	72-43-5	
Toxaphene	<0.00300	mg/L	0.0100	0.00300	1	04/15/24 10:52	04/16/24 01:50	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	20.1	%	10.0-128		1	04/15/24 10:52	04/16/24 01:50	2051-24-3	
Tetrachloro-m-xylene (S)	56.1	%	10.0-127		1	04/15/24 10:52	04/16/24 01:50	877-09-8	
<b>Chlorinated Herb. (GC) 8151A</b>									
Analytical Method: EPA 8151A Preparation Method: 8151A									
Leachate Method/Date: 1311; 04/13/24 17:59 Initial pH: 6.4; Final pH: 5.36									
Pace National - Mt. Juliet									
2,4,5-TP (Silvex)	<0.000600	mg/L	0.00200	0.000600	1	04/15/24 09:08	04/17/24 01:11	93-72-1	
2,4-D	<0.000600	mg/L	0.00200	0.000600	1	04/15/24 09:08	04/18/24 21:41	94-75-7	
<b>Surrogates</b>									
2,4-DCAA (S)	72.4	%	14.0-158		1	04/15/24 09:08	04/17/24 01:11	19719-28-9	
2,4-DCAA (S)	82.6	%	14.0-158		1	04/15/24 09:08	04/18/24 21:41	19719-28-9	
<b>8082 GCS PCB, LV</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3510									
Pace Analytical Services - Kansas City									
PCB-1016 (Aroclor 1016)	<0.15	ug/L	1.0	0.15	1	04/16/24 12:05	04/17/24 14:55	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:55	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:55	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:55	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:55	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.17	ug/L	1.0	0.17	1	04/16/24 12:05	04/17/24 14:55	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.19	ug/L	1.0	0.19	1	04/16/24 12:05	04/17/24 14:55	11096-82-5	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	27	%	20-120		1	04/16/24 12:05	04/17/24 14:55	2051-24-3	
<b>Metals (ICP) 6010D TCLP</b>									
Analytical Method: EPA 6010D Preparation Method: 3015									
Leachate Method/Date: 1311; 04/13/24 17:59 Initial pH: 6.4; Final pH: 5.36									
Pace National - Mt. Juliet									
Arsenic	<0.0330	mg/L	0.100	0.0330	1	04/16/24 07:53	04/16/24 12:09	7440-38-2	
Barium	<0.0330	mg/L	0.100	0.0330	1	04/16/24 07:53	04/16/24 12:09	7440-39-3	
Cadmium	<0.0330	mg/L	0.100	0.0330	1	04/16/24 07:53	04/16/24 12:09	7440-43-9	
Chromium	<0.0330	mg/L	0.100	0.0330	1	04/16/24 07:53	04/16/24 12:09	7440-47-3	
Lead	<0.0330	mg/L	0.100	0.0330	1	04/16/24 07:53	04/16/24 12:09	7439-92-1	
Selenium	<0.0330	mg/L	0.100	0.0330	1	04/16/24 07:53	04/16/24 12:09	7782-49-2	
Silver	<0.0330	mg/L	0.100	0.0330	1	04/16/24 07:53	04/16/24 12:09	7440-22-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

Sample: IDW-01 Lab ID: 60450812001 Collected: 04/11/24 09:40 Received: 04/11/24 11:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Mercury 7470A TCLP</b>									
Analytical Method: EPA 7470A Preparation Method: 7470A									
Leachate Method/Date: 1311; 04/13/24 17:59 Initial pH: 6.4; Final pH: 5.36									
Pace National - Mt. Juliet									
Mercury	<0.00330	mg/L	0.0100	0.00330	1	04/15/24 12:29	04/15/24 21:13	7439-97-6	
<b>SVOA (GC/MS) 8270E TCLP</b>									
Analytical Method: EPA 8270E Preparation Method: 3510C									
Leachate Method/Date: 1311; 04/13/24 17:59 Initial pH: 6.4; Final pH: 5.36									
Pace National - Mt. Juliet									
1,4-Dichlorobenzene	<0.0333	mg/L	0.100	0.0333	1	04/17/24 21:04	04/18/24 20:37	106-46-7	
2,4-Dinitrotoluene	<0.0333	mg/L	0.100	0.0333	1	04/17/24 21:04	04/18/24 20:37	121-14-2	
Hexachlorobenzene	<0.0333	mg/L	0.100	0.0333	1	04/17/24 21:04	04/18/24 20:37	118-74-1	
Hexachloro-1,3-butadiene	<0.0333	mg/L	0.100	0.0333	1	04/17/24 21:04	04/18/24 20:37	87-68-3	
Hexachloroethane	<0.0333	mg/L	0.100	0.0333	1	04/17/24 21:04	04/18/24 20:37	67-72-1	
Nitrobenzene	<0.0333	mg/L	0.100	0.0333	1	04/17/24 21:04	04/18/24 20:37	98-95-3	
Pyridine	<0.0333	mg/L	0.100	0.0333	1	04/17/24 21:04	04/18/24 20:37	110-86-1	
3&4-Methylphenol(m&p Cresol)	<0.0333	mg/L	0.100	0.0333	1	04/17/24 21:04	04/18/24 20:37	15831-10-4	
2-Methylphenol(o-Cresol)	<0.0333	mg/L	0.100	0.0333	1	04/17/24 21:04	04/18/24 20:37	95-48-7	
Pentachlorophenol	<0.0333	mg/L	0.100	0.0333	1	04/17/24 21:04	04/18/24 20:37	87-86-5	
2,4,5-Trichlorophenol	<0.0333	mg/L	0.100	0.0333	1	04/17/24 21:04	04/18/24 20:37	95-95-4	
2,4,6-Trichlorophenol	<0.0333	mg/L	0.100	0.0333	1	04/17/24 21:04	04/18/24 20:37	88-06-2	
<b>Surrogates</b>									
2-Fluorophenol (S)	35.7	%	10.0-120		1	04/17/24 21:04	04/18/24 20:37	367-12-4	
Phenol-d5 (S)	22.8	%	10.0-120		1	04/17/24 21:04	04/18/24 20:37	4165-62-2	
Nitrobenzene-d5 (S)	64.0	%	10.0-127		1	04/17/24 21:04	04/18/24 20:37	4165-60-0	
2-Fluorobiphenyl (S)	78.1	%	10.0-130		1	04/17/24 21:04	04/18/24 20:37	321-60-8	
2,4,6-Tribromophenol (S)	89.0	%	10.0-155		1	04/17/24 21:04	04/18/24 20:37	118-79-6	
Terphenyl-d14 (S)	76.9	%	10.0-128		1	04/17/24 21:04	04/18/24 20:37	1718-51-0	
<b>VOA (GC/MS) 8260D TCLP</b>									
Analytical Method: EPA 8260D Preparation Method: 8260D									
Leachate Method/Date: 1311; 04/14/24 00:00									
Pace National - Mt. Juliet									
Benzene	<0.0167	mg/L	0.0500	0.0167	1	04/17/24 12:15	04/17/24 12:15	71-43-2	
Carbon tetrachloride	<0.0167	mg/L	0.0500	0.0167	1	04/17/24 12:15	04/17/24 12:15	56-23-5	
Chlorobenzene	<0.0167	mg/L	0.0500	0.0167	1	04/17/24 12:15	04/17/24 12:15	108-90-7	
Chloroform	<0.0833	mg/L	0.250	0.0833	1	04/17/24 12:15	04/17/24 12:15	67-66-3	
1,2-Dichloroethane	<0.0167	mg/L	0.0500	0.0167	1	04/17/24 12:15	04/17/24 12:15	107-06-2	
1,4-Dichlorobenzene	<0.0167	mg/L	0.0500	0.0167	1	04/17/24 12:15	04/17/24 12:15	106-46-7	
1,1-Dichloroethene	<0.0167	mg/L	0.0500	0.0167	1	04/17/24 12:15	04/17/24 12:15	75-35-4	
2-Butanone (MEK)	<0.167	mg/L	0.500	0.167	1	04/17/24 12:15	04/17/24 12:15	78-93-3	
Tetrachloroethene	<0.0167	mg/L	0.0500	0.0167	1	04/17/24 12:15	04/17/24 12:15	127-18-4	
Trichloroethene	<0.0167	mg/L	0.0500	0.0167	1	04/17/24 12:15	04/17/24 12:15	79-01-6	C3
Vinyl chloride	<0.0167	mg/L	0.0500	0.0167	1	04/17/24 12:15	04/17/24 12:15	75-01-4	
<b>Surrogates</b>									
Toluene-d8 (S)	101	%	80.0-120		1	04/17/24 12:15	04/17/24 12:15	2037-26-5	
4-Bromofluorobenzene (S)	84.6	%	77.0-126		1	04/17/24 12:15	04/17/24 12:15	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	70.0-130		1	04/17/24 12:15	04/17/24 12:15	17060-07-0	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

Sample: IDW-01 Lab ID: 60450812001 Collected: 04/11/24 09:40 Received: 04/11/24 11:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>1010 Flashpoint,Closed Cup</b>	Analytical Method: EPA 1010 Pace Analytical Services - Kansas City								
Flashpoint	>200	deg F	78.0		1		04/19/24 16:46		
<b>9040 pH</b>	Analytical Method: EPA 9040 Pace Analytical Services - Kansas City								
pH at 25 Degrees C	7.7	Std. Units	0.10	0.10	1		04/19/24 12:46		H6

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

QC Batch: 2266826

Analysis Method: EPA 8081B

QC Batch Method: 3510C

Analysis Description: Pesticides (GC) 8081B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples:

METHOD BLANK: R4058379-1

Matrix: Solid

Associated Lab Samples: 60450812001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chlordane (Technical)	mg/L	<0.00150	0.00500	0.00150	04/15/24 22:24	
Endrin	mg/L	<0.00150	0.00500	0.00150	04/15/24 22:24	
Heptachlor	mg/L	<0.00150	0.00500	0.00150	04/15/24 22:24	
Heptachlor epoxide	mg/L	<0.00150	0.00500	0.00150	04/15/24 22:24	
gamma-BHC (Lindane)	mg/L	<0.00150	0.00500	0.00150	04/15/24 22:24	
Methoxychlor	mg/L	<0.00150	0.00500	0.00150	04/15/24 22:24	
Toxaphene	mg/L	<0.00300	0.0100	0.00300	04/15/24 22:24	
Decachlorobiphenyl (S)	%	76.7	10.0-128		04/15/24 22:24	
Tetrachloro-m-xylene (S)	%	97	10.0-127		04/15/24 22:24	

LABORATORY CONTROL SAMPLE: R4058379-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	mg/L	0.00100	0.000933	93.3	57.0-134	
Heptachlor	mg/L	0.00100	0.000965	96.5	27.0-132	
Heptachlor epoxide	mg/L	0.00100	0.000973	97.3	57.0-130	
gamma-BHC (Lindane)	mg/L	0.00100	0.00103	103	55.0-129	
Methoxychlor	mg/L	0.00100	0.000906	90.6	54.0-155	
Decachlorobiphenyl (S)	%			79.0	10.0-128	
Tetrachloro-m-xylene (S)	%			95.9	10.0-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058379-3 R4058379-4

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1724737-02 Result	Spike Conc.	Spike Conc.	MS Result						
Endrin	mg/L	ND	0.00100	0.00100	<0.00150 0	<0.00150 0	88.4	96.5	10.0-160	8.76	39
Heptachlor	mg/L	ND	0.00100	0.00100	<0.00150 0	<0.00150 0	89.8	95.9	16.0-136	6.57	40
Heptachlor epoxide	mg/L	ND	0.00100	0.00100	<0.00150 0	<0.00150 0	91.5	99.7	10.0-160	8.58	36
gamma-BHC (Lindane)	mg/L	ND	0.00100	0.00100	<0.00150 0	<0.00150 0	98.5	107	14.0-141	8.27	40
Methoxychlor	mg/L	ND	0.00100	0.00100	<0.00150 0	<0.00150 0	84.5	91.9	10.0-160	8.39	34
Decachlorobiphenyl (S)	%						44.0	57.0	10.0-128		
Tetrachloro-m-xylene (S)	%						87.5	92.9	10.0-127		

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**QUALITY CONTROL DATA**

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

QC Batch: 2266268

Analysis Method: EPA 8151A

QC Batch Method: 8151A

Analysis Description: Chlorinated Herb. (GC) 8151A

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60450812001

METHOD BLANK: R4058653-1

Matrix: Solid

Associated Lab Samples: 60450812001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4,5-TP (Silvex)	mg/L	<0.000600	0.00200	0.000600	04/16/24 13:58	
2,4-D	mg/L	<0.000600	0.00200	0.000600	04/16/24 13:58	
2,4-DCAA (S)	%	80.2	14.0-158		04/16/24 13:58	

LABORATORY CONTROL SAMPLE: R4058653-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,5-TP (Silvex)	mg/L	0.0250	0.0284	114	50.0-125	P9
2,4-D	mg/L	0.0250	0.0259	104	50.0-120	
2,4-DCAA (S)	%			84.6	14.0-158	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058653-3 R4058653-4

Parameter	Units	R4058653-3		R4058653-4		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1724142-02 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
2,4,5-TP (Silvex)	mg/L	ND	0.0250	0.0250	<0.000600	<0.000600	88.8	87.2	50.0-125	1.82	20
2,4-D	mg/L	ND	0.0250	0.0250	<0.000600	<0.000600	86.0	85.2	50.0-120	0.935	20
2,4-DCAA (S)	%						71.6	68.8	14.0-158		

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**QUALITY CONTROL DATA**

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

QC Batch: 2267452

Analysis Method: EPA 6010D

QC Batch Method: 3015

Analysis Description: Metals (ICP) 6010D

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples:

METHOD BLANK: R4058310-1

Matrix: Solid

Associated Lab Samples: 60450812001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/L	<0.0333	0.100	0.0333	04/16/24 11:33	
Barium	mg/L	<0.0333	0.100	0.0333	04/16/24 11:33	
Cadmium	mg/L	<0.0333	0.100	0.0333	04/16/24 11:33	
Chromium	mg/L	<0.0333	0.100	0.0333	04/16/24 11:33	
Lead	mg/L	<0.0333	0.100	0.0333	04/16/24 11:33	
Selenium	mg/L	<0.0333	0.100	0.0333	04/16/24 11:33	
Silver	mg/L	<0.0333	0.100	0.0333	04/16/24 11:33	

LABORATORY CONTROL SAMPLE: R4058310-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	10.0	9.82	98.2	80.0-120	
Barium	mg/L	10.0	9.92	99.2	80.0-120	
Cadmium	mg/L	10.0	9.49	94.9	80.0-120	
Chromium	mg/L	10.0	9.93	99.3	80.0-120	
Lead	mg/L	10.0	9.66	96.6	80.0-120	
Selenium	mg/L	10.0	9.70	97.0	80.0-120	
Silver	mg/L	2.00	1.81	90.7	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058310-4 R4058310-5

Parameter	Units	R4058310-4		R4058310-5		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1725551-02 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Arsenic	mg/L	4.01	10.0	10.0	<0.0333	<0.0333	106	115	75.0-125	5.64	20
Barium	mg/L	0.166	10.0	10.0	<0.0333	<0.0333	88.6	93.3	75.0-125	5.07	20
Cadmium	mg/L	0.174	10.0	10.0	<0.0333	<0.0333	81.1	85.5	75.0-125	5.28	20
Chromium	mg/L	0.459	10.0	10.0	<0.0333	<0.0333	92.5	96.7	75.0-125	4.27	20
Lead	mg/L	0.149	10.0	10.0	<0.0333	<0.0333	81.6	82.2	75.0-125	0.797	20
Selenium	mg/L	0.834	10.0	10.0	<0.0333	<0.0333	109	106	75.0-125	2.30	20
Silver	mg/L	ND	2.00	2.00	<0.0333	<0.0333	69.0	75.4	75.0-125	8.92	20 ML

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058310-6 R4058310-7

Parameter	Units	R4058310-6		R4058310-7		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1725606-05 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Arsenic	mg/L	0.108	10.0	10.0	<0.0333	<0.0333	98.2	98.5	75.0-125	0.287	20

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**QUALITY CONTROL DATA**

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058310-6			R4058310-7			% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		L1725606-05 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Barium	mg/L	1.77	10.0	10.0	<0.0333	<0.0333	96.5	98.9	75.0-125	2.12	20			
Cadmium	mg/L	ND	10.0	10.0	<0.0333	<0.0333	95.0	94.7	75.0-125	0.313	20			
Chromium	mg/L	ND	10.0	10.0	<0.0333	<0.0333	99.8	99.1	75.0-125	0.651	20			
Lead	mg/L	4.84	10.0	10.0	<0.0333	<0.0333	89.2	98.0	75.0-125	6.19	20			
Selenium	mg/L	0.0531	10.0	10.0	<0.0333	<0.0333	96.6	97.2	75.0-125	0.612	20			
Silver	mg/L	ND	2.00	2.00	<0.0333	<0.0333	91.8	92.3	75.0-125	0.557	20			

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**QUALITY CONTROL DATA**

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

QC Batch: 2267284

Analysis Method: EPA 7470A

QC Batch Method: 7470A

Analysis Description: Mercury 7470A

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples:

METHOD BLANK: R4058039-1

Matrix: Solid

Associated Lab Samples: 60450812001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	<0.00330	0.0100	0.00330	04/15/24 20:58	

LABORATORY CONTROL SAMPLE: R4058039-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0300	0.0295	98.2	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058039-4 R4058039-5

Parameter	Units	R4058039-4		R4058039-5		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.							
Mercury	mg/L	L1725335-04 ND	0.0300	0.0300	<0.0033 3	<0.0033 3	79.3	78.4	75.0-125	1.06	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4058039-6 R4058039-7

Parameter	Units	R4058039-6		R4058039-7		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.							
Mercury	mg/L	60450812001 ND	0.0300	0.0300	<0.0033 3	<0.0033 3	105	102	75.0-125	2.19	20	

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**REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

QC Batch: 2268554

Analysis Method: EPA 8270E

QC Batch Method: 3510C

Analysis Description: SVOA (GC/MS) 8270E

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples:

METHOD BLANK: R4059175-2

Matrix: Solid

Associated Lab Samples: 60450812001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dichlorobenzene	mg/L	<0.0333	0.100	0.0333	04/18/24 01:45	
2,4-Dinitrotoluene	mg/L	<0.0333	0.100	0.0333	04/18/24 01:45	
Hexachlorobenzene	mg/L	<0.0333	0.100	0.0333	04/18/24 01:45	
Hexachloro-1,3-butadiene	mg/L	<0.0333	0.100	0.0333	04/18/24 01:45	
Hexachloroethane	mg/L	<0.0333	0.100	0.0333	04/18/24 01:45	
Nitrobenzene	mg/L	<0.0333	0.100	0.0333	04/18/24 01:45	
Pyridine	mg/L	<0.0333	0.100	0.0333	04/18/24 01:45	
3&4-Methylphenol(m&p Cresol)	mg/L	<0.0333	0.100	0.0333	04/18/24 01:45	
2-Methylphenol(o-Cresol)	mg/L	<0.0333	0.100	0.0333	04/18/24 01:45	
Pentachlorophenol	mg/L	<0.0333	0.100	0.0333	04/18/24 01:45	
2,4,5-Trichlorophenol	mg/L	<0.0333	0.100	0.0333	04/18/24 01:45	
2,4,6-Trichlorophenol	mg/L	<0.0333	0.100	0.0333	04/18/24 01:45	
2-Fluorophenol (S)	%	23.4	10.0-120		04/18/24 01:45	
Phenol-d5 (S)	%	15.3	10.0-120		04/18/24 01:45	
Nitrobenzene-d5 (S)	%	44	10.0-127		04/18/24 01:45	
2-Fluorobiphenyl (S)	%	58.8	10.0-130		04/18/24 01:45	
2,4,6-Tribromophenol (S)	%	73	10.0-155		04/18/24 01:45	
Terphenyl-d14 (S)	%	78.4	10.0-128		04/18/24 01:45	

METHOD BLANK: R4059175-5

Matrix: Solid

Associated Lab Samples: 60450812001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dichlorobenzene	mg/L	<0.0333	0.100	0.0333	04/18/24 15:59	
2,4-Dinitrotoluene	mg/L	<0.0333	0.100	0.0333	04/18/24 15:59	
Hexachlorobenzene	mg/L	<0.0333	0.100	0.0333	04/18/24 15:59	
Hexachloro-1,3-butadiene	mg/L	<0.0333	0.100	0.0333	04/18/24 15:59	
Hexachloroethane	mg/L	<0.0333	0.100	0.0333	04/18/24 15:59	
Nitrobenzene	mg/L	<0.0333	0.100	0.0333	04/18/24 15:59	
Pyridine	mg/L	<0.0333	0.100	0.0333	04/18/24 15:59	
3&4-Methylphenol(m&p Cresol)	mg/L	<0.0333	0.100	0.0333	04/18/24 15:59	
2-Methylphenol(o-Cresol)	mg/L	<0.0333	0.100	0.0333	04/18/24 15:59	
Pentachlorophenol	mg/L	<0.0333	0.100	0.0333	04/18/24 15:59	
2,4,5-Trichlorophenol	mg/L	<0.0333	0.100	0.0333	04/18/24 15:59	
2,4,6-Trichlorophenol	mg/L	<0.0333	0.100	0.0333	04/18/24 15:59	
2-Fluorophenol (S)	%	23.5	10.0-120		04/18/24 15:59	
Phenol-d5 (S)	%	15.1	10.0-120		04/18/24 15:59	
Nitrobenzene-d5 (S)	%	43.3	10.0-127		04/18/24 15:59	

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### QUALITY CONTROL DATA

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

METHOD BLANK: R4059175-5

Matrix: Solid

Associated Lab Samples: 60450812001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2-Fluorobiphenyl (S)	%	57.4	10.0-130		04/18/24 15:59	
2,4,6-Tribromophenol (S)	%	68.5	10.0-155		04/18/24 15:59	
Terphenyl-d14 (S)	%	80.5	10.0-128		04/18/24 15:59	

LABORATORY CONTROL SAMPLE: R4059175-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	mg/L	0.500	0.284	56.8	18.0-120	
2,4-Dinitrotoluene	mg/L	0.500	0.414	82.8	49.0-124	
Hexachlorobenzene	mg/L	0.500	0.460	92.0	44.0-120	
Hexachloro-1,3-butadiene	mg/L	0.500	0.309	61.8	19.0-120	
Hexachloroethane	mg/L	0.500	0.269	53.8	15.0-120	
Nitrobenzene	mg/L	0.500	0.252	50.4	27.0-120	
Pyridine	mg/L	0.500	0.100	20.0	10.0-120	
3&4-Methylphenol(m&p Cresol)	mg/L	0.500	0.220	44.0	31.0-120	
2-Methylphenol(o-Cresol)	mg/L	0.500	0.200	40.0	28.0-120	
Pentachlorophenol	mg/L	0.500	0.286	57.2	23.0-120	
2,4,5-Trichlorophenol	mg/L	0.500	0.427	85.4	44.0-120	
2,4,6-Trichlorophenol	mg/L	0.500	0.381	76.2	42.0-120	
2-Fluorophenol (S)	%			30.3	10.0-120	
Phenol-d5 (S)	%			20.3	10.0-120	
Nitrobenzene-d5 (S)	%			51.6	10.0-127	
2-Fluorobiphenyl (S)	%			71.4	10.0-130	
2,4,6-Tribromophenol (S)	%			100	10.0-155	
Terphenyl-d14 (S)	%			80.8	10.0-128	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059175-3 R4059175-4

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1724737-06 Result	Spike Conc.	Spike Conc.	Conc.								
1,4-Dichlorobenzene	mg/L	ND	0.500	0.500	<0.0333	<0.0333	57.6	55.6	17.0-120	3.53	40		
2,4-Dinitrotoluene	mg/L	ND	0.500	0.500	<0.0333	<0.0333	78.0	72.2	39.0-125	7.72	25		
Hexachlorobenzene	mg/L	ND	0.500	0.500	<0.0333	<0.0333	88.2	80.2	35.0-122	9.50	24		
Hexachloro-1,3-butadiene	mg/L	ND	0.500	0.500	<0.0333	<0.0333	60.2	60.2	12.0-120	0.00	34		
Hexachloroethane	mg/L	ND	0.500	0.500	<0.0333	<0.0333	53.6	52.8	10.0-120	1.50	40		
Nitrobenzene	mg/L	ND	0.500	0.500	<0.0333	<0.0333	50.8	49.2	12.0-120	3.20	30		
Pyridine	mg/L	ND	0.500	0.500	<0.0333	<0.0333	9.52	13.4	10.0-120	33.9	37	ML	
3&4-Methylphenol(m&p Cresol)	mg/L	ND	0.500	0.500	<0.0333	<0.0333	41.4	40.4	10.0-120	2.44	36		
2-Methylphenol(o-Cresol)	mg/L	ND	0.500	0.500	<0.0333	<0.0333	38.2	37.6	10.0-120	1.58	30		
Pentachlorophenol	mg/L	ND	0.500	0.500	<0.0333	<0.0333	53.8	46.4	10.0-128	14.8	37		
2,4,5-Trichlorophenol	mg/L	ND	0.500	0.500	<0.0333	<0.0333	81.0	75.8	33.0-120	6.63	31		
2,4,6-Trichlorophenol	mg/L	ND	0.500	0.500	<0.0333	<0.0333	71.6	68.6	26.0-120	4.28	31		

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### QUALITY CONTROL DATA

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059175-3												R4059175-4	
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1724737-06 Result	Spike Conc.	Spike Conc.	MS Result								
2-Fluorophenol (S)	%							29.8	27.9	10.0-120			
Phenol-d5 (S)	%							19.3	18.7	10.0-120			
Nitrobenzene-d5 (S)	%							50.3	48.8	10.0-127			
2-Fluorobiphenyl (S)	%							67.0	63.3	10.0-130			
2,4,6-Tribromophenol (S)	%							98.0	85.5	10.0-155			
Terphenyl-d14 (S)	%							73.9	66.3	10.0-128			

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**QUALITY CONTROL DATA**

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

QC Batch: 2267594

Analysis Method: EPA 8260D

QC Batch Method: 8260B

Analysis Description: VOA (GC/MS) 8260D

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples:

METHOD BLANK: R4059658-2

Matrix: Solid

Associated Lab Samples: 60450812001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	mg/L	<0.0167	0.0500	0.0167	04/17/24 10:53	
Carbon tetrachloride	mg/L	<0.0167	0.0500	0.0167	04/17/24 10:53	
Chlorobenzene	mg/L	<0.0167	0.0500	0.0167	04/17/24 10:53	
Chloroform	mg/L	<0.0833	0.250	0.0833	04/17/24 10:53	
1,2-Dichloroethane	mg/L	<0.0167	0.0500	0.0167	04/17/24 10:53	
1,4-Dichlorobenzene	mg/L	<0.0167	0.0500	0.0167	04/17/24 10:53	
1,1-Dichloroethene	mg/L	<0.0167	0.0500	0.0167	04/17/24 10:53	
2-Butanone (MEK)	mg/L	<0.167	0.500	0.167	04/17/24 10:53	
Tetrachloroethene	mg/L	<0.0167	0.0500	0.0167	04/17/24 10:53	
Trichloroethene	mg/L	<0.0167	0.0500	0.0167	04/17/24 10:53	
Vinyl chloride	mg/L	<0.0167	0.0500	0.0167	04/17/24 10:53	
Toluene-d8 (S)	%	98.9	80.0-120		04/17/24 10:53	
4-Bromofluorobenzene (S)	%	84.7	77.0-126		04/17/24 10:53	
1,2-Dichloroethane-d4 (S)	%	114	70.0-130		04/17/24 10:53	

LABORATORY CONTROL SAMPLE & LCSD: R4059658-1

R4059658-5

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	mg/L	0.250	0.258	0.262	103	105	70.0-123	1.54	20	
Carbon tetrachloride	mg/L	0.250	0.217	0.213	86.8	85.2	68.0-126	1.86	20	
Chlorobenzene	mg/L	0.250	0.225	0.218	90.0	87.2	80.0-121	3.16	20	
Chloroform	mg/L	0.250	0.252	0.248	101	99.2	73.0-120	1.60	20	
1,2-Dichloroethane	mg/L	0.250	0.247	0.245	98.8	98.0	70.0-128	0.813	20	
1,4-Dichlorobenzene	mg/L	0.250	0.254	0.244	102	97.6	79.0-120	4.02	20	
1,1-Dichloroethene	mg/L	0.250	0.252	0.248	101	99.2	71.0-124	1.60	20	
2-Butanone (MEK)	mg/L	1.25	1.29	1.16	103	92.8	44.0-160	10.6	20	
Tetrachloroethene	mg/L	0.250	0.212	0.208	84.8	83.2	72.0-132	1.90	20	
Trichloroethene	mg/L	0.250	0.197	0.200	78.8	80.0	78.0-124	1.51	20	
Vinyl chloride	mg/L	0.250	0.217	0.212	86.8	84.8	67.0-131	2.33	20	
Toluene-d8 (S)	%				101	98.2	80.0-120			
4-Bromofluorobenzene (S)	%				88.4	85.9	77.0-126			
1,2-Dichloroethane-d4 (S)	%				106	103	70.0-130			

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**QUALITY CONTROL DATA**

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4059658-3				R4059658-4				% Rec Limits	Max RPD	Qual
		L1724886-02 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec				
Benzene	mg/L	ND	0.250	0.250	<0.0003 33	<0.0003 33	105	102	17.0-158	3.48	27	
Carbon tetrachloride	mg/L	ND	0.250	0.250	<0.0003 33	<0.0003 33	96.4	93.6	23.0-159	2.95	28	
Chlorobenzene	mg/L	ND	0.250	0.250	<0.0003 33	<0.0003 33	96.4	96.0	33.0-152	0.416	27	
Chloroform	mg/L	ND	0.250	0.250	<0.0005 57	<0.0005 57	110	108	29.0-154	1.84	28	
1,2-Dichloroethane	mg/L	ND	0.250	0.250	<0.0003 33	<0.0003 33	108	101	29.0-151	6.50	27	
1,4-Dichlorobenzene	mg/L	ND	0.250	0.250	<0.0003 33	<0.0003 33	118	114	35.0-142	3.80	27	
1,1-Dichloroethene	mg/L	ND	0.250	0.250	<0.0003 33	<0.0003 33	99.2	96.8	11.0-160	2.45	29	
2-Butanone (MEK)	mg/L	ND	1.25	1.25	<0.0033 3	<0.0033 3	122	110	10.0-160	9.66	32	
Tetrachloroethene	mg/L	ND	0.250	0.250	<0.0003 33	<0.0003 33	81.6	81.2	10.0-160	0.491	27	
Trichloroethene	mg/L	ND	0.250	0.250	<0.0003 33	<0.0003 33	83.2	78.4	10.0-160	5.94	25	
Vinyl chloride	mg/L	ND	0.250	0.250	<0.0003 33	<0.0003 33	51.2	64.8	10.0-160	23.4	27	
Toluene-d8 (S)	%						99.2	99.7	80.0-120			
4-Bromofluorobenzene (S)	%						87.9	88.3	77.0-126			
1,2-Dichloroethane-d4 (S)	%						107	104	70.0-130			

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**QUALITY CONTROL DATA**

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

QC Batch: 890662

Analysis Method: EPA 8082

QC Batch Method: EPA 3510

Analysis Description: 8082 GCS PCB, LV

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450812001

METHOD BLANK: 3525041

Matrix: Water

Associated Lab Samples: 60450812001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.15	1.0	0.15	04/17/24 11:42	
PCB-1221 (Aroclor 1221)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1232 (Aroclor 1232)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1242 (Aroclor 1242)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1248 (Aroclor 1248)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1254 (Aroclor 1254)	ug/L	<0.17	1.0	0.17	04/17/24 11:42	
PCB-1260 (Aroclor 1260)	ug/L	<0.19	1.0	0.19	04/17/24 11:42	
Decachlorobiphenyl (S)	%	69	20-120		04/17/24 11:42	

LABORATORY CONTROL SAMPLE: 3525042

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	5	3.8	75	23-120	
PCB-1260 (Aroclor 1260)	ug/L	5	3.8	77	28-120	
Decachlorobiphenyl (S)	%			69	20-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3525045 3525046

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60450682001 Result	Spike Conc.	Spike Conc.	Result						
PCB-1016 (Aroclor 1016)	ug/L	<0.15	5	5	3.5	3.5	70	69	23-120	1	30
PCB-1260 (Aroclor 1260)	ug/L	<0.19	5	5	3.7	3.5	75	71	28-120	6	30
Decachlorobiphenyl (S)	%						70	67	20-120		

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### QUALITY CONTROL DATA

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

QC Batch: 890510

Analysis Method: EPA 1010

QC Batch Method: EPA 1010

Analysis Description: 1010 Flash Point, Closed Cup

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450812001

METHOD BLANK: 3524534

Matrix: Solid

Associated Lab Samples: 60450812001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Flashpoint	deg F	>200	78.0		04/18/24 16:46	

SAMPLE DUPLICATE: 3524535

Parameter	Units	60450600001 Result	Dup Result	RPD	Max RPD	Qualifiers
Flashpoint	deg F	>200	>200			

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### QUALITY CONTROL DATA

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

QC Batch: 891249

Analysis Method: EPA 9040

QC Batch Method: EPA 9040

Analysis Description: 9040 pH

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60450812001

SAMPLE DUPLICATE: 3527750

Parameter	Units	60451102001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.5	8.5	0	10	H6

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## QUALIFIERS

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

C3 The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.

H6 Analysis initiated outside of the 15 minute EPA required holding time.

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

P9 RPD between the primary and confirmatory analysis exceeded 40%.

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KS Water Treatment IDW WT

Pace Project No.: 60450812

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60450812001	IDW-01	3510C	2266826	EPA 8081B	2266826
60450812001	IDW-01	8151A	2266268	EPA 8151A	2266268
60450812001	IDW-01	EPA 3510	890662	EPA 8082	890882
60450812001	IDW-01	3015	2267452	EPA 6010D	2267452
60450812001	IDW-01	7470A	2267284	EPA 7470A	2267284
60450812001	IDW-01	3510C	2268554	EPA 8270E	2268554
60450812001	IDW-01	8260D	2267594	EPA 8260D	2267594
60450812001	IDW-01	EPA 1010	890510		
60450812001	IDW-01	EPA 9040	891249		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.

WO#: 60450812



60450812



DC#\_ Title: ENV-FRM-LENE-0009\_Sample C

Revision: 2

Effective Date: 01/12/2022

Issued By: Lenexa

Client Name: Burns + McDonnell

Courier: FedEx  UPS  VIA  Clay  PEX  ECI  Pace  Xroads  Client  Other

Tracking #: \_\_\_\_\_ Pace Shipping Label Used? Yes  No

Custody Seal on Cooler/Box Present: Yes  No  Seals intact: Yes  No

Packing Material: Bubble Wrap  Bubble Bags  Foam  None  Other

Thermometer Used: T248 Type of Ice: Wet Blue  None

Cooler Temperature (°C): As-read 12.4 Corr. Factor 0.3 Corrected 12.1

Date and initials of person examining contents:

AF 4/11

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>W/T</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Containers requiring pH preservation in compliance? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Cyanide water sample checks:		
Lead acetate strip turns dark? (Record only)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

Pace® Location Requested (City/State):

Pace Analytical Kansas  
9608 Lohret Blvd., Lenexa, KS 66219

Company Name: BURNS & MCDONNELL  
Street Address: 9400 Ward Parkway, Kansas City, MO 64114

Customer Project #: KS Water Treatment IDW WT  
Project Name:

Site Collection Info/Facility ID (as applicable):

Time Zone Collected: [ ] AK [ ] PT [ ] MT [X] CT [ ] ET  
Data Deliverables:

[ ] Level II [ ] Level III [ ] Level IV  
[ ] EQUIS  
[ ] Other

Rush (Pre-approval required):

[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other

Date Results Requested:

[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

DW PWSID # or WW Permit # as applicable:

Missouri

Reportable [ ] Yes [ ] No

County / State origin of sample(s):

Regulatory Program (DW, RCRA, etc.) as applicable:

Product (IP), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CX), Leachate (LL), Biosolid (BS), Other (OT)

Matrix \*

Comp / Grab

Collected or Composite End

Date

Time

# Cont.

Res. Chlorine

Results

Units

Customer Sample ID

IDW-01

4/11/24 0940

1010 Flashpoint, Closed Cup

8082 GCS PCB, LV

9040 PH

TCLP 8081 Pesticides

TCLP 8321 Herbicides

TCLP Metals/TCLP SVOCs

TCLP VOCs

60490812

Sample Comment

Preservation non-conformance identified for sample

Proj. Mgr:

Alice Spiller

AcctNum / Client ID:

Table #:

Profile / Template:

10409

Prelog / Bottle Ord. ID:

EZ 3093953

Lab Use Only

Analysis Requested

Identify Container Preservative Type \*\*\*

Specify Container Size \*\*

\*\*Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) Encore, (8) TerraCore, (9) 90mL, (10) Other

\*\*\* Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

### CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Contact/Report To: Justin Carter

Phone #: 816-333-9400

E-Mail: jcarter@burnsmcd.com

Cc E-Mail:

Invoice To: Accounts Payable

Invoice E-Mail: accountspayable@burnsmcd.com

Purchase Order # (if applicable): TBD

Quote #:

County / State origin of sample(s): Missouri

Reportable [ ] Yes [ ] No

DW PWSID # or WW Permit # as applicable:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

DW PWSID # or WW Permit # as applicable:

Product (IP), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CX), Leachate (LL), Biosolid (BS), Other (OT)

Matrix \*

Comp / Grab

Collected or Composite End

Date

Time

# Cont.

Res. Chlorine

Results

Units

Customer Sample ID

IDW-01

4/11/24 0940

1010 Flashpoint, Closed Cup

8082 GCS PCB, LV

9040 PH

TCLP 8081 Pesticides

TCLP 8321 Herbicides

TCLP Metals/TCLP SVOCs

TCLP VOCs

60490812

Sample Comment

Preservation non-conformance identified for sample

Proj. Mgr:

Alice Spiller

AcctNum / Client ID:

Table #:

Profile / Template:

10409

Prelog / Bottle Ord. ID:

EZ 3093953

Lab Use Only

Analysis Requested

Identify Container Preservative Type \*\*\*

Specify Container Size \*\*

\*\*Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) Encore, (8) TerraCore, (9) 90mL, (10) Other

\*\*\* Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Additional Instructions from Pace®:

Collected By:

(Printed Name)

Signature:

Eric Brown

Date/Time: 4/11/24 1130

Date/Time:

Received by/Company: (Signature)

Received by/Company: (Signature)

Received by/Company: (Signature)

Received by/Company: (Signature)

Received by/Company: (Signature)

Received by/Company: (Signature)

Received by/Company: (Signature)

# Coolers: Thermometer ID: T-298 Correction Factor (°C): -0.3 Obs. Temp. (°C): 12.4 Corrected Temp. (°C): 12.1 On Ice:

Tracking Number:

411124 1130

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Delivered by: [ ] In-Person [ ] Courier

[ ] FedEx [ ] UPS [ ] Other

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## ATTACHMENT E - DATA VALIDATION MEMORANDUM

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# Memorandum



Date: May 21, 2024  
To: Justin Carter  
From: Jacque Reilly  
Subject: QA/QC Review of Analytical Data  
Limited Phase II Environmental Site Assessment – April 2024  
Primary and Alternate Sites for Proposed Todd Creek Wastewater Treatment Plant  
7800 NW 144<sup>th</sup> Street, Kansas City, Missouri  
Project No. 170011

Soil, sediment, and surface water samples were collected as part of a Limited Phase II Environmental Site Assessment at the Primary and Alternate Sites for Proposed Todd Creek Wastewater Treatment Plant located near 7800 NW 144<sup>th</sup> Street, Kansas City, MO (Site), on April 8, 2024, through April 11, 2024. The samples were analyzed by Pace Analytical Services, LLC (PACE) in Lenexa, Kansas and Pace National in Mt. Juliet, Tennessee (PACE National) for one or more of the following parameters:

<u>Parameter</u>	<u>Analytical Method</u>
Pesticides	SW-846 8081B
Chlorinated Herbicides	SW-846 8151A
Polychlorinated Biphenyls (PCBs)	SW-846 8082
Metals + Mercury	SW-846 6020B/SW-846 7470A/SW-846 7471B
Semivolatile Organic Compounds (SVOCs)	SW-846 8270E
Total Petroleum Hydrocarbons (TPH) Gasoline Range Organics (GRO), Diesel Range Organics (DRO), Oil Range Organics (ORO)	SW-846 8260/SW-846 8270
Volatile Organic Compounds (VOCs)	SW-846 8260/SW-846 8260C
Percent Moisture	ASTM D2974
Total Solids	SM 2540G
Alkalinity	SM 2320B
Oxygen, Dissolved & Sulfide, Total	SM 4500-O G/SM 4500-S-2 D
Anions	EPA 300.0/SW-846 9056
Ammonia	EPA 350.1
Nitrogen NO <sub>2</sub> /NO <sub>3</sub>	EPA 353.2
Cyanide	SM 4500-CN-E
pH	SW-846 9040

\*Total solids and percent moisture were not included in validation as these methods were only performed for purposes of dry weight reporting for the soil samples. No significant laboratory QC problems were noted for these methods.

The quality assurance (QA)/quality control (QC) results in association with the soil, sediment, surface water, and associated field QC samples collected were examined for any method-specific requirements. One investigative-derived waste (IDW) sample was also collected during this sampling event; however, it was not included in this data review. Data qualifiers, when appropriate, were added to the data in accordance with recommendations in United States Environmental Protection Agency's (USEPA) *National Functional Guidelines for Organic Superfund Methods Data Review* (NFGO, 2020) and USEPA's *National Functional Guidelines for Inorganic Superfund Methods Data Review* (NFGI, 2020). The QA/QC review results are discussed below. Data qualifiers added to the April 2024 Limited Phase II Environmental Site Assessment data are presented in **Table 1**.

# Memorandum *(continued)*



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1. Chain-of-Custody (COC) – The relinquished and received signatures, times, and dates on the COCs were present.
2. Requested Analyses Completed – All analyses were completed as requested.
3. Holding Times – All samples were extracted and/or analyzed within their method-required holding times except for the following:
  - Sample delivery group (SDG) 60450516: Due to discrepancies noted for the nitrate and nitrite results between the field duplicate pair, the laboratory was contacted to verify these results. Based upon this inquiry, Pace noted that due to inadvertent laboratory errors, sample SS02/SS-1 was mistakenly spiked as a QC sample. Due to this finding, Pace was also asked to verify results for SS03/SS-2, as it also yielded elevated total nitrate and total nitrite results when compared to other samples collected during these field activities. This sample was also found to have been inadvertently spiked as a QC sample by the laboratory. As a corrective action, these samples were re-extracted and re-analyzed for total nitrate and total nitrite, albeit outside of the 28-day holding time. The following summarizes these reanalyses and the qualifiers applied based on the exceeded holding times:
    - SS02/SS-1: The total nitrate and total nitrite results were both nondetect in the reanalysis, which was performed two days past the 28-day holding time. Typically, NFGI recommends rejection of nondetect results that exceed their holding time. However, since a field duplicate (DUP-01) was collected at this same sample location and confirmed these results, professional judgment was used and these results were qualified as estimated at the reporting limit (UJ), rather than rejected (UR).
    - SS03/SS-2: Both total nitrate and total nitrite results were nondetect in the reanalyses, which were performed eight days past the 28-day holding time. Because of this, these results were rejected (UR).

It is important to note, although the original total nitrate and total nitrite results were not included in the revised Pace results, the concentrations reported with the laboratory spikes added were significantly below the screening criteria for this investigation. Therefore, despite the rejected data for the holding time exceedances, the data were not likely to impact the Site at a significant level as the highest concentrations were 184 mg/kg for total nitrate and 211 mg/kg for total nitrite.

- SDG 60450682: Analyses for SM4500-O G and SW-846 9040 were initiated outside of the recommended 15-minute EPA required holding time for SW07/SW-1, SW67/SW-1, SW05/SW-1, SW04/SW-1, DUP-02, and SW03/SW-1. Therefore, these results were qualified as estimated (J).

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- SDG 60450589: Analyses for SM4500-O G and SW-846 9040 were initiated outside of the recommended 15-minute EPA required holding time for SW10/SW-1, SW09/SW-1, and SW08/SW-1. Therefore, these results were qualified as estimated (J).
  - SDG 60450798: Analyses for SM4500-O G and SW-846 9040 were initiated outside of the 15-minute EPA required holding time for SW02/SW-1. Therefore, these results were qualified as estimated (J).
4. Sample Preservation – All samples were received by PACE and PACE National below or slightly outside the recommended sample temperature range of 4 degrees Celsius ( $^{\circ}\text{C}$ )  $\pm$  2  $^{\circ}\text{C}$ . Because samples were collected and received by the laboratory on the same day, the samples did not have adequate time to cool. Upon receipt, the laboratory stored the samples correctly. Additionally, no samples were in a frozen state. Therefore, all samples were considered viable, and all analyses were completed.
5. Laboratory Method Blanks – Method blanks are analyzed to account for potential cross-contamination during laboratory analyses. No detections of target analytes were noted in the method blanks, except for the following:
- SDG 60450516: A trace detections of antimony were noted in the method blank associated with QC batches 2265034 (0.429 J mg/kg), 2266071 (0.250 J mg/kg), and 2267954 (0.225 J mg/kg). Additionally, trace detections of aluminum (17.0 J mg/kg), copper (0.198 J mg/kg), iron (23.3 J mg/kg), and vanadium (0.316 J mg/kg) were noted in the method blank associated with QC batch 2267954. Also, a trace detection of barium (0.613 J mg/kg) was noted in method blank associated with QC batch 2273362. Lastly, trace detections of nitrate as N (8.2 J mg/kg) and nitrite as N (7.6 J mg/kg). All nondetects and detections greater than five times the associated method blank detections did not require any qualification. While all detections less than five times the associated method blank detections and less than the reporting limit were qualified as nondetect (U) and detections less than five times the associated method blank detections and greater than the reporting limit were qualified as estimated high bias (J+).
  - SDG 60450582: A trace detection of antimony was noted in the method blank associated in QC batch 2265034 (0.429 J mg/kg). All detections were less than five times the associated method blank detection and less than the reporting limit, and therefore, were qualified as nondetect (U).
  - SDG 60450589: A trace detection of thallium (0.000226 J mg/L) was noted in the method blank associated with QC batch 2265598. This detection was not associated with any field samples, and no further review was necessary.

Trace detections of TPH-DRO (0.50 J mg/L) and TPH-ORO (0.69 J mg/L) were noted in the method blank associated with QC batch 890118. All detections were less than five times the associated method blank detections and were qualified as nondetect (U). Note, the associated rinsate blank was not qualified based on this method blank detections as blanks are not typically qualified based off other blanks.

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- SDG 60450682: Trace detections of TPH-DRO (0.50 J mg/L) and TPH-ORO (0.69 J mg/L) were noted in the method blank associated with QC batch 890118. All detections were less than five times the associated method blank detections and therefore, were qualified as nondetect (U). Note, the associated rinsate blank was not qualified based on this method blank detections as blanks are not typically qualified based off other blanks.
  - SDG 60450758: Trace detections of antimony (0.300 J mg/kg) and zinc (1.38 J mg/kg) were noted in the method blank associated with QC batch 2266490. All nondetects and detections greater than five times the associated method blank detections did not require any qualification, while all detections less than five times the associated method blank detections were qualified as nondetect (U).
  - SDG 60450784: A trace detection of antimony (0.469 J mg/kg) was noted in the method blank associated with QC batch 2266780. All detections were less than five times the associated method blank detection and therefore, were qualified as nondetect (U).
  - SDG 60450798: Trace detections of antimony (0.00161 J mg/L) and thallium (0.000261 J mg/L) were noted in the method blank associated with QC batch 2267363. Additionally, trace detections of TPH-DRO (0.50 J mg/L) and TPH-ORO (0.58 J mg/L) were noted in the method blank associated with QC batch 891022. All nondetects did not require any qualification, while all detections less than five times the associated method blank detections were qualified as nondetect (U).
6. Trip Blanks – Trip blanks are supplied by the laboratory and sent to the field with the sample containers to evaluate potential cross-contamination during sample shipment. Five trip blanks were analyzed for this sampling event. No detections of target analytes were noted for the VOC and GRO analyses.
7. Rinsate Blanks – The rinsate blanks were analyzed for all analyses to determine if field procedures were introducing contaminants into the samples. Two rinsate blanks were analyzed for this sampling event, the following detections of target analytes were noted:
- SDG 60450589: A detection of ammonia as N (0.50 mg/L) and trace detections of TPH-ORO (0.42 J mg/L) and TPH-DRO (0.59 J mg/L) were noted in Rinsate-24-04-09. Nondetects did not require qualification while detects less than five time the rinsate blank detections and the reporting limits were qualified as nondetect (U) and detections less than five times the rinsate blank detections but greater than the reporting limit were qualified as estimated (J).
  - SDG 60450682: Trace detections of barium (0.00114 J mg/L), TPH-ORO (0.50 J mg/L), and TPH-DRO (0.57 J mg/L) were noted in RINSATE-24-04-10. All detections were less than five times the associated rinsate blank detection and therefore, were qualified as nondetect (U). Additionally, one or more of these results were previously qualified as nondetect during the laboratory method blank review (see Section 5).

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8. Surrogates – Surrogates are added for organic analyses. Surrogates are compounds not normally found in the environment that are added (spiked) into samples and analyzed for percent recovery (REC). The laboratory sets maximum and minimum limits on the REC for the method used. All surrogate RECs were within their respective QC limits, except for the following:
- SDG 60450516: The surrogate 2,4-DCAA exceeded the QC limits. All associated results were nondetect, and therefore, no qualifiers were necessary.
  - SDG 60450582: The surrogate REC for decachlorobiphenyl exceeded the QC limits. All associated results were nondetect, and therefore, no qualifiers were necessary.
  - Note: One or more extractable organic standards (EIS) were analyzed at a dilution, and therefore, no conclusions could be made regarding these surrogates, and therefore, no qualifiers were applied.
9. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) – The LCS contains a matrix similar to that of the sample that has been spiked with known concentrations of target analytes. The LCS is prepared and analyzed by the same method as the samples. As a measure of analytical accuracy, the results of the LCS are compared against the known analyte concentrations in the spike to determine the REC. The purpose of the LCS is to determine the performance of the laboratory with respect to analyte recovery, independent of field sample matrix interference. The LCSD is a duplicate of this sample and the RECs between the two are compared using the relative percent difference (RPD) to evaluate analytical precision. The following LCS/LCSD results were outside of their respective QC limits:
- SDG 60450516: The LCS RECs for endrin and ammonia as N recovered below their corresponding QC limits (QC batches 2268118 and 890503, respectively). Therefore, all associated detections were qualified as estimated potential low bias (J-) and all nondetects were qualified as estimated at the reporting limit (UJ).
  - SDG 60450582: The LCS REC for endrin recovered below the QC limits (QC batch 2268525). All associated results were nondetect and therefore, were qualified as estimated at the reporting limit (UJ).
  - SDG 60450589: The LCS RECs for nitrite as N in QC batches 890111 and 890187) exceeded the QC limits. All associated results were nondetect, and no qualifiers were necessary.
  - SDG 60450682: The LCS REC for nitrite as N exceeded the QC limits (QC batch 890187). All associated results were nondetect, and no qualifiers were necessary.
  - SDG 60450798: The LCS REC for fluoride exceeded the QC limits (QC batch 890755). The associated detection was therefore qualified as estimated potential high bias (J+).

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10. Matrix Spike/Matrix Spike Duplicates (MS/MSDs) – MS/MSDs are typically run for organic and inorganic analyses. A sample is split into three portions (original, MS and MSD), and a known amount of a target analyte is added (spiked) to two portions (MS and MSD) of the sample. The results of these two portions are compared with each other for reproducibility using the RPD. They are also compared against the unspiked portion of the sample for REC of the spike. Note that only site-specific MS/MSD results were evaluated during this QA/QC review. The following site-specific MS/MSD results were outside of their respective QC limits:

- SDG 60450516; MS/MSD performed on SS04/SS-1:  
The MS/MSD RECs and RPD exceeded the QC limits for MCPA. The associated result was nondetect and no qualifiers were necessary. Additionally, several metals MS/MSD RECs and/or MS/MSD RPDs were outside of their corresponding QC limits, some of which had spike amounts that did not meet the ¼ rule, and therefore, no conclusions could be made regarding the accuracy and precision of these results. All other affected metals results were qualified as estimated potential high bias (J+) since the RECs exceeded their QC limit.

The MS/MSD RPD for TPH-GRO exceeded the QC limits. The associated result was nondetect and no qualifiers were necessary. One or more SVOCs also exhibited MS/MSD RECs and/or RPDs that recovered outside of the corresponding QC limits. Of which, 3,3'-dichlorobenzidine exhibited an MSD REC that was below the 10% QC limit. Since the MS REC recovered within the QC limits, 3,3'-dichlorobenzidine was qualified as estimated at the reporting limit (UJ) instead of rejected (R). All other associated results were nondetect, and therefore, were qualified as estimated at the reporting limit (UJ).

Lastly, the MS/MSD RECs for ammonia as N, nitrate as N, and nitrite as N recovered below their corresponding QC limits. Due to other QC issues, these detections were qualified as estimated (J).

- SDG 60450582; MS/MSD performed on SS06/SS-1:  
The MS and/or MSD RECs and RPDs for nitrate as N and nitrite as N were outside of their corresponding QC limits. Therefore, the associated results were qualified as estimated (J) for all detections and nondetects were qualified as estimated at the reporting limit (UJ).
- SDG 60450582; MS/MSD performed on SS06/SS-2:  
The MS/MSD RPD for endrin exceeded the QC limits, the associated result was nondetect and no qualification was necessary.
- SDG 60450582; MS/MSD performed on SD09/SD-1:  
The MS/MSD RECs and/or RPDs for several metals recovered outside of their corresponding QC limits, some of which had spike amounts that did not meet the ¼ rule, and therefore, no conclusions could be made regarding the accuracy and precision of these results. All other results were qualified as estimated (J) for detections and estimated at the reporting limit (UJ) for nondetects.

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- SDG 60450589; MS/MSD performed on SW10/SW-1:  
The MS/MSD RECs for total sulfide recovered below the QC limits. The associated result was nondetect, and was qualified as estimated at the reporting limit (UJ).
- SDG 60450589; MS/MSD performed on SW09/SW-1:  
The MS REC for ammonia as N recovered below its QC limit and the associated detection was qualified as estimated potential low bias (J-).
- SDG 60450682; MS/MSD performed on SW07/SW-1:  
The MS/MSD RPDs for several herbicide results exceeded the QC limits. All associated results were nondetect, and therefore, did not require qualification.

The MS/MSD RECs and/or RPDs for one or more metals recovered outside of their corresponding QC limits, all of which had spike amounts that did not meet the  $\frac{1}{4}$  rule, and therefore, no conclusions could be made regarding the accuracy and precision of these results.

One or more SVOC MS/MSD RECs and/or RPDs recovered outside their corresponding QC limits. One or more analytes were qualified estimated at the reporting limit (UJ) for the MS/MSD RECs outside QC limits. No qualifiers were added for the MS/MS RPDs since the associated analytes were nondetect.

The total sulfide MS/MSD RECs and RPDs recovered outside of the QC limits. As a result, the associated detection was qualified as estimated (J). The MS/MSD RECs for ammonia as N exceeded the QC limits. The associated result was a nondetect and no qualification was necessary. Lastly, the MS/MSD RECs and/or RPDs were outside of the QC limits for nitrate as N, nitrite as N, and nitrate + nitrite as N. All associated results were nondetect, and qualified as estimated at the reporting limit (UJ).

- SDG 60450682; MS/MSD performed on DUP-02:  
The MS/MSD RECs for ammonia as N exceeded the QC limits. The associated result, as well as the associated parent sample result, was nondetect and no qualifications were necessary.
- SDG 60450758; MS/MSD performed on SD07/SD-1:  
There was a lack of recovery for the MS/MSD spikes for dalapon and hexachlorocyclopentadiene, therefore, the associated nondetect results were rejected (R).

Additionally, the MSD REC for 2,4-Dinitrophenol recovered below its 10% QC limit. However, since the MS REC recovered within the QC limits, 2,4-Dinitrophenol was qualified as estimated at the reporting limit (UJ) instead of rejected (R).

Lastly, several metals MS/MSD RECs and/or RPDs were outside of the QC limits, some of which had spike amounts that did not meet the  $\frac{1}{4}$  rule, and therefore, no conclusions could be made regarding the accuracy and precision of these results. All other affected metals results were qualified respectively as estimated potential high/low bias (J +/-).



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11. Field Duplicate Results – Field duplicate results provide information on the ability to reproduce field results and account for error introduced from handling, shipping, storage, preparation, and analysis of field samples. There are no specific USEPA criteria for qualifying data from field duplicate results. Depending upon the sample concentration, one of the following criteria based in the NFGI is applicable:

- Is the compound detected in both portions?
- If the sample concentrations are greater than 5 times the detection limit, then the maximum allowable RPD is 20 percent for aqueous samples and 30 percent for soil and sediment.
- If the sample concentrations are less than 5 times the detection limit, then a sensitivity test is applied. For the sensitivity test, the sample concentrations must agree within plus or minus ( $\pm$ ) the lower detection limit for aqueous samples and  $\pm$  two times the lower detection limit for soil and sediment samples.
- If the sample concentrations yield one detection and one non-detect result, a replication test is applied. This test is very similar to the sensitivity test except it takes into account the non-detect result. The difference between the detection and the non-detect result must agree within  $\pm$  the lower detection limit for aqueous samples and  $\pm$  two times the lower detection limit for soil and sediment samples.

**Table 2** presents the field duplicate review. The following field duplicate pairs were collected during this sampling event:

- SS02/SS-1 and DUP-01 (SDG 60450516): One or more analytes were detected in one portion of the field duplicate pair but were nondetect in the other portion. Most of the detections were low-level detections (J-flag) and qualifiers were not added. Additionally, a sensitivity test was applied to one or more analytes, of which potassium failed said test and were qualified as estimated (J). Lastly, one or more analytes exhibited RPDs that exceeded the QC limit, and the associated results were qualified as estimated (J). All other results were adequately replicated.
- SW03/SW-1 and DUP-02 (SDG 60450682): One or more analytes were detected in one portion of the field duplicate pair but were nondetect in the other portion. Most of the detections were low-level detections (J-flag) and qualifiers were not added. Additionally, a sensitivity test was applied to one or more analytes, of which cobalt, manganese, and nickel failed said test and detections were qualified as estimated (J) and nondetects were qualified as estimated at the reporting limit (UJ). Lastly, one or more analytes exhibited RPDs that exceeded the QC limit, and the associated results were qualified as estimated (J). All other results were adequately replicated.
- SD03/SD-1 and DUP-3 (SDG 60450758): One or more analytes were detected in one portion of the field duplicate pair but were nondetect in the other portion. Most of the detections were low-level detections (J-flag) and qualifiers were not added.

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Additionally, a sensitivity test was applied to one or more analytes, of which ammonia as nitrogen (N) failed said test and the results were qualified as estimated (J). All other results were adequately replicated.

12. Detection and Quantitation Limits – Some samples required dilutions to bring target analyte concentrations into the linearity range of the instrument calibration, to account for matrix interference(s), and/or due to limited sample volume. In these instances, the reporting limits were adjusted to account for this change in the sample preparation. Also, for nondetect, the dilutions resulted in elevated reporting limits. Reporting limits for each sample are provided in the analytical data reports.
13. Method Requirements – PACE and PACE National flagged any detection greater than or equal to the method detection limit (MDL) and below the practical quantitation level (PQL) with a “J” to indicate the reported value was estimated. Any detection reported with this “J” qualifier should be used as reported by the laboratory, unless otherwise noted during the QA/QC evaluation.

The laboratory also flagged several samples for one or more reasons that were related to upper-level QC review. These associated QC samples/reviews were not included in this scope of work and specific QC results were not provided in the SDGs for review. The following summarizes these laboratory notes, and if any data review qualifiers were added based solely on these laboratory flags.

- In one or more cases, a laboratory QC sample exhibited an analyte concentration that exceeded the calibration range. Because none of the field samples were affected and the laboratory did not note any major issues, no qualifiers were necessary.
  - In one or more cases, a metal analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference, and the associated detections were qualified as estimated (J).
  - One or more internal standard responses for the toluene-d8 for sample SD10/SD-1 (SDG 60450582) and 4-bromofluorobenzene for sample DUP-01 (SDG 60450516) surrogates were outside of the laboratory QC limits and was confirmed by reanalysis. The results reported from the most QC compliance analysis and the associated detections were qualified as estimated (J) and nondetect did not require qualification.
  - The laboratory flagged one or more analytes to indicate it did not meet specific certification criteria. The noted criteria were not specific to this program and/or sample analyses. A review of the flagged data was performed based on the provided QC results for this task. Any qualifiers based on said QC result were applied when applicable.
14. Conclusion – The Limited Phase II Environmental Site Assessment data were reviewed for achievement of any method-specific QA/QC criteria. All data are valid for use, as qualified, in reporting the results of this investigation, with the following exceptions:

# Memorandum *(continued)*



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- SDG 60450516: Two analytes were rejected (R) due to holding time exceedances.
- SDG 60450758: Two analytes were rejected (R) due to extremely low MS/MSD REC recoveries.

## Attachments

Table 1 – Summary of Data Qualifiers

Table 2 – Field Duplicate Review – Detections Only

## **Attachments**

**Table 1**  
**Summary of Data Qualifiers**  
**Limited Phase II Environmental Site Assessment - April 2024**  
**Primary and Alternate Sites for Proposed Todd Creek Wastewater Treatment Plant**  
**7800 NW 144th Street, Kansas City, Missouri**

Sample ID	Lab ID	Analyte(s)	Validation Qualifier(s)	Reason(s) for Qualification
<b>SDG 60450516</b>				
SS03/SS-1	60450516001	Endrin	UJ	LCS REC < QC Limits
		Nitrogen, Ammonia	J (already J by lab)	LCS REC < QC Limits
		Nitrate as N	U (already J by lab)	Associated Method Blank Detection
		Nitrite as N	U (already J by lab)	Associated Method Blank Detection
SS03/SS-2	60450516002	Endrin	UJ	LCS REC < QC Limits
		Nitrogen, Ammonia	UJ	LCS REC < QC Limits
		Nitrite as N	UR	Holding Time Exceedance (See text)
		Nitrate as N	UR	Holding Time Exceedance (See text)
SS02/SS-1	60450516003	Antimony	U (already J by lab)	Associated Method Blank Detection
		Endrin	UJ	LCS REC < QC Limits
		Nitrogen, Ammonia	UJ	LCS REC < QC Limits
		Nitrite as N	UJ	Holding Time Exceedance (See text)
		Nitrate as N	UJ	Holding Time Exceedance (See text)
		Aluminum	J	Field Duplicate Discrepancy
		Lead	J	Field Duplicate Discrepancy
		Potassium	J	Field Duplicate Discrepancy
DUP-01	60450516004	Vanadium	J	Field Duplicate Discrepancy
		Antimony	U (already J by lab)	Associated Method Blank Detection
		Endrin	UJ	LCS REC < QC Limits
		Nitrogen, Ammonia	UJ	LCS REC < QC Limits
		Aluminum	J	Field Duplicate Discrepancy
		Lead	J	Field Duplicate Discrepancy
		Potassium	J	Field Duplicate Discrepancy
		Nitrate as N	U (already J by lab)	Associated Method Blank Detection
SS01/SS-1	60450516005	Antimony	U (already J by lab)	Associated Method Blank Detection
		Endrin	UJ	LCS REC < QC Limits
		Nitrogen, Ammonia	UJ	LCS REC < QC Limits

**Table 1**  
**Summary of Data Qualifiers**  
**Limited Phase II Environmental Site Assessment - April 2024**  
**Primary and Alternate Sites for Proposed Todd Creek Wastewater Treatment Plant**  
**7800 NW 144th Street, Kansas City, Missouri**

SDG 60450516 (cont.)				
SS05/SS-1	60450516006	Antimony	U (already J by lab)	Associated Method Blank Detection
		Endrin	UJ	LCS REC < QC Limits
		Nitrogen, Ammonia	J-	LCS REC < QC Limits
		Nitrate as N	U (already J by lab)	Associated Method Blank Detection
		Nitrite as N	U (already J by lab)	Associated Method Blank Detection
SS05/SS-2	60450516007	Antimony	U (already J by lab)	Associated Method Blank Detection
		Endrin	UJ	LCS REC < QC Limits
		Nitrogen, Ammonia	J (already J by lab)	LCS REC < QC Limits
		Nitrate as N	U (already J by lab)	Associated Method Blank Detection
SS04/SS-1	60450516008	Antimony	U (already J by lab)	Associated Method Blank Detection
		Endrin	UJ	LCS REC < QC Limits
		Nitrogen, Ammonia	UJ	LCS REC < QC Limits MS and/or MSD RECs < QC Limits
		Aluminum	J	Serial Dilution Test Failure
		Barium	J+	MS and/or MSD RECs > QC Limits
		Iron	J	Serial Dilution Test Failure
		Magnesium	J+	MS and/or MSD RECs > QC Limits
		Manganese	J	Serial Dilution Test Failure
		Potassium	J+	MS and/or MSD RECs > QC Limits
		2-Methylphenol	UJ	MS and/or MSD RECs < QC Limits
		3&4-Methylphenol	UJ	MS and/or MSD RECs < QC Limits
		3,3'-Dichlorobenzidine	UJ	MS and/or MSD RECs < QC Limits
		Nitrate as N	J (already J by lab)	MS and/or MSD RECs < QC Limits Associated Method Blank Detection
		Nitrite as N	J (already J by lab)	MS and/or MSD RECs < QC Limits Associated Method Blank Detection
SS04/SS-2	60450516009	Antimony	U (already J by lab)	Associated Method Blank Detection
		Endrin	UJ	LCS REC < QC Limits
		Nitrogen, Ammonia	J-	LCS REC < QC Limits
SS08/SS-1	60450516010	Antimony	U (already J by lab)	Associated Method Blank Detection
		Endrin	UJ	LCS REC < QC Limits
		Nitrogen, Ammonia	UJ	LCS REC < QC Limits
		Nitrate as N	J+	Associated Method Blank Detection
SS08/SS-2	60450516011	Antimony	U (already J by lab)	Associated Method Blank Detection
		Nitrate as N	J+	Associated Method Blank Detection
SS07/SS-1	60450516012	Antimony	U (already J by lab)	Associated Method Blank Detection
		Nitrate as N	U (already J by lab)	Associated Method Blank Detection
SS07/SS-2	60450516013	Antimony	U (already J by lab)	Associated Method Blank Detection

**Table 1**  
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**Primary and Alternate Sites for Proposed Todd Creek Wastewater Treatment Plant**  
**7800 NW 144th Street, Kansas City, Missouri**

SDG 60450582				
SS06/SS-1	60450582001	Antimony	U (already J by lab)	Associated Method Blank Detection
		Nitrate as N	J	MS and/or MSD RECs < QC Limits MS/MSD RPD > QC Limit
		Nitrite as N	UJ	MS and/or MSD RECs < QC Limits MS/MSD RPD > QC Limit
SS06/SS-2	60450582002	Antimony	U (already J by lab)	Associated Method Blank Detection
		Endrin	UJ	LCS REC < QC Limits
SD10/SD-1	60450582003	Antimony	U (already J by lab)	Associated Method Blank Detection
		Endrin	UJ	LCS REC < QC Limits
		TPH-GRO	J	Internal Standard outside QC Limits
SD09/SD-1	60450582004	Antimony	UJ (already J by lab)	Associated Method Blank Detection MS and/or MSD RECs < QC Limits
		Barium	J	MS and/or MSD RECs > QC Limits MS/MSD RPD > QC Limit
		Cadmium	J	Serial Dilution Test Failure
		Calcium	J	Serial Dilution Test Failure
		Iron	J	Serial Dilution Test Failure
		Lead	J	Serial Dilution Test Failure
		Manganese	J	Serial Dilution Test Failure
		Molybdenum	J	Serial Dilution Test Failure
		Potassium	J	MS and/or MSD RECs > QC Limits MS/MSD RPD > QC Limit
		Selenium	J	Serial Dilution Test Failure
		Sodium	J	Serial Dilution Test Failure
		Thallium	J	Serial Dilution Test Failure
		Zinc	J	Serial Dilution Test Failure
		Endrin	UJ	LCS REC < QC Limits
SD08/SD-1	60450582005	Antimony	U (already J by lab)	Associated Method Blank Detection
		Endrin	UJ	LCS REC < QC Limits

**Table 1**  
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**Limited Phase II Environmental Site Assessment - April 2024**  
**Primary and Alternate Sites for Proposed Todd Creek Wastewater Treatment Plant**  
**7800 NW 144th Street, Kansas City, Missouri**

<b>SDG 60450589</b>				
SW10/SW-1	60450589001	Oxygen, Dissolved	J	Holding Time Exceedance
		pH	J	Holding Time Exceedance
		TPH-DRO	U (already J by lab)	Associated Method Blank Detection Associated Rinaste Blank Detection
		TPH-ORO	U (already J by lab)	Associated Method Blank Detection Associated Rinaste Blank Detection
		Sulfide, Total	UJ	MS and/or MSD RECs < QC Limits
SW09/SW-1	60450589002	Oxygen, Dissolved	J	Holding Time Exceedance
		pH	J	Holding Time Exceedance
		TPH-DRO	U (already J by lab)	Associated Method Blank Detection Associated Rinaste Blank Detection
		TPH-ORO	U (already J by lab)	Associated Method Blank Detection Associated Rinaste Blank Detection
		Nitrogen, Ammonia	J	MS and/or MSD RECs < QC Limit Associated Rinsate Blank
SW08/SW-1	60450589003	Oxygen, Dissolved	J	Holding Time Exceedance
		pH	J	Holding Time Exceedance
		TPH-DRO	U (already J by lab)	Associated Method Blank Detection Associated Rinaste Blank Detection
		TPH-ORO	U (already J by lab)	Associated Method Blank Detection Associated Rinaste Blank Detection
<b>SDG 60450682</b>				
SW07/SW-1	60450682001	Oxygen, Dissolved	J	Holding Time Exceedance
		pH	J	Holding Time Exceedance
		TPH-DRO	U (already J by lab)	Associated Method Blank Detection Associated Rinsate Blank Detection
		TPH-ORO	U (already J by lab)	Associated Method Blank Detection Associated Rinsate Blank Detection
		3-Nitroaniline	UJ	MS and/or MSD RECs < QC Limits
		Pyrene	UJ	MS and/or MSD RECs < QC Limits
		Sulfide, Total	J	MS and/or MSD RECs < QC Limits MS/MSD RPD > QC Limit
		Nitrite, Nitrogen	UJ	MS and/or MSD RECs < QC Limits MS/MSD RPD > QC Limit
		Nitrate + Nitrite	UJ	MS and/or MSD RECs < QC Limits MS/MSD RPD > QC Limit



**Table 1**  
**Summary of Data Qualifiers**  
**Limited Phase II Environmental Site Assessment - April 2024**  
**Primary and Alternate Sites for Proposed Todd Creek Wastewater Treatment Plant**  
**7800 NW 144th Street, Kansas City, Missouri**

SDG 60450682 (cont.)				
SW06/SW-1	60450682002	Oxygen, Dissolved	J	Holding Time Exceedance
		pH	J	Holding Time Exceedance
		TPH-DRO	U (already J by lab)	Associated Method Blank Detection Associated Rinsate Blank Detection
		TPH-ORO	U (already J by lab)	Associated Method Blank Detection Associated Rinsate Blank Detection
SW05/SW-1	60450682004	Oxygen, Dissolved	J	Holding Time Exceedance
		pH	J	Holding Time Exceedance
		TPH-DRO	U (already J by lab)	Associated Method Blank Detection Associated Rinsate Blank Detection
		TPH-ORO	U (already J by lab)	Associated Method Blank Detection Associated Rinsate Blank Detection
SW04/SW-1	60450682005	Oxygen, Dissolved	J	Holding Time Exceedance
		pH	J	Holding Time Exceedance
		TPH-DRO	U (already J by lab)	Associated Method Blank Detection Associated Rinsate Blank Detection
		TPH-ORO	U (already J by lab)	Associated Method Blank Detection Associated Rinsate Blank Detection
DUP-02	60450682006	Oxygen, Dissolved	J	Holding Time Exceedance
		pH	J	Holding Time Exceedance
		TPH-DRO	U (already J by lab)	Associated Method Blank Detection Associated Rinsate Blank Detection
		TPH-ORO	U (already J by lab)	Associated Method Blank Detection Associated Rinsate Blank Detection
		Aluminum	J	Field Duplicate Discrepancy
		Cobalt	J	Field Duplicate Discrepancy
		Lead	UJ	Field Duplicate Discrepancy
		Iron	J	Field Duplicate Discrepancy
		Manganese	J	Field Duplicate Discrepancy
Nickel	J	Field Duplicate Discrepancy		

**Table 1**  
**Summary of Data Qualifiers**  
**Limited Phase II Environmental Site Assessment - April 2024**  
**Primary and Alternate Sites for Proposed Todd Creek Wastewater Treatment Plant**  
**7800 NW 144th Street, Kansas City, Missouri**

<b>SDG 60450682 (cont.)</b>				
SW03/SW-1	60450682007	Oxygen, Dissolved	J	Holding Time Exceedance
		pH	J	Holding Time Exceedance
		TPH-DRO	U (already J by lab)	Associated Method Blank Detection Associated Rinsate Blank Detection
		TPH-ORO	U (already J by lab)	Associated Method Blank Detection Associated Rinsate Blank Detection
		Aluminum	J	Field Duplicate Discrepancy
		Cobalt	J	Field Duplicate Discrepancy
		Lead	J	Field Duplicate Discrepancy
		Iron	J	Field Duplicate Discrepancy
		Manganese	J	Field Duplicate Discrepancy
Nickel	J	Field Duplicate Discrepancy		
<b>SDG 60450758</b>				
SD07/SD-1	60450758001	Antimony	U (already J by lab)	Associated Method Blank Detection
		Dalapon	UR	MS and/or MSD RECs < QC Limits
		Aluminum	J+	MS and/or MSD RECs > QC Limits
		2,4-Dinitrophenol	UJ	MS and/or MSD RECs < QC Limits
		Hexachlorocyclopentadiene	UR	MS and/or MSD RECs < QC Limits
		Calcium	J	Serial Dilution Test Failure
		Iron	J	Serial Dilution Test Failure
		Magnesium	J	Serial Dilution Test Failure
Sodium	J	Serial Dilution Test Failure		
SD06/SD-1	60450758002	Antimony	U (already J by lab)	Associated Method Blank Detection
SD05/SD-1	60450758003	Antimony	U (already J by lab)	Associated Method Blank Detection
SD04/SD-1	60450758004	Antimony	U (already J by lab)	Associated Method Blank Detection
SD03/SD-1	60450758005	Antimony	U (already J by lab)	Associated Method Blank Detection
		Nitrogen, Ammonia	J	Field Duplicate Discrepancy
DUP-3	60450758006	Nitrogen, Ammonia	J	Field Duplicate Discrepancy
<b>SDG 60450784</b>				
SD02/SD-1	60450784001	Antimony	U (already J by lab)	Associated Method Blank Detection
SD01/SD-1	60450784002	Antimony	U (already J by lab)	Associated Method Blank Detection
<b>SDG 60450798</b>				
SW02/SW-1	60450798001	Oxygen, Dissolved	J	Holding Time Exceedance
		pH	J	Holding Time Exceedance
		Thallium	U (already J by lab)	Associated Method Blank Detection
		TPH-DRO	U (already J by lab)	Associated Method Blank Detection
		TPH-ORO	U (already J by lab)	Associated Method Blank Detection
		Fluoride	J+	LCS REC > QC Limits

**Table 1**  
**Summary of Data Qualifiers**  
**Limited Phase II Environmental Site Assessment - April 2024**  
**Primary and Alternate Sites for Proposed Todd Creek Wastewater Treatment Plant**  
**7800 NW 144th Street, Kansas City, Missouri**

**Notes:**

- ID = Identification
- DRO = Diesel Range Organics
- J = Trace or estimated value
- J (+/-) = Estimated value (potential high/low) bias
- JU = Trace detection qualified as a nondetect during data review
- LCS = Laboratory Control Sample
- MS/MSD = Matrix Spike/Matirix Spike Duplicate
- ORO = Oil Range Organics
- QC = Quality Control
- REC = Percent Recovery
- RPD = Relative Percent Difference
- SDG = Sample Delivery Group
- TPH = Total Petroleum Hydrocarbons
- U = Nondetect
- UJ = Estimated at the reporting limit
- UR = Nondetect result rejected

**Table 2**  
**Field Duplicate Review - Detections Only**  
**Limited Phase II Environmental Site Assessment - April 2024**  
**Primary and Alternate Sites for Proposed Todd Creek Wastewater Treatment Plant**  
**7800 NW 144th Street, Kansas City, Missouri**

Sample ID:	SS02/SS-1	DUP-1	Units	Meets QC Criteria?
Lab ID:	60450516003	60450516004		
Analytes	Results	Results		
Aluminum	4,250 J	6720 J	mg/kg	<b>No - RPD</b>
Antimony	0.618 JU	0.672 JU	mg/kg	Yes
Arsenic	5.93	6.52	mg/kg	Yes
Barium	62.0	66.3	mg/kg	Yes
Beryllium	0.275 J	0.423 J	mg/kg	Yes
Cadmium	0.296 J	0.164 J	mg/kg	Yes
Calcium	317,000	297000	mg/kg	Yes
Chromium	9.4	12.9	mg/kg	Yes
Cobalt	3.36	4.03	mg/kg	Yes
Copper	6.23	7.38	mg/kg	Yes
Iron	11,300	13400	mg/kg	Yes
Lead	7.71 J	21.50 J	mg/kg	<b>No - RPD</b>
Magnesium	9,320	8730	mg/kg	Yes
Manganese	716	802	mg/kg	Yes
Molybdenum	2.32 J	2.95	mg/kg	Yes
Nickel	13.9	15.7	mg/kg	Yes
Potassium	1,240 J	1880 J	mg/kg	<b>No - STF</b>
Selenium	0.742 J	0.674 J	mg/kg	Yes
Sodium	181 J	178 J	mg/kg	Yes
Thallium	0.110 J	0.143 J	mg/kg	Yes
Vanadium	12.7 J	17.5 J	mg/kg	<b>No - RPD</b>
Zinc	24.6 J	21.2 J	mg/kg	Yes
1,2,4-Trimethylbenzene	1.00 J	0.81 J	ug/kg	Yes
1,3,5-Trimethylbenzene	0.6 J	0.5 U	ug/kg	Yes
TPH-DRO	7.9 J	9.8 J	mg/kg	Yes
TPH-ORO	31.3	25.1	mg/kg	Yes
Nitrate as N	6.2 UJ	10.4 JU	mg/kg	Yes
Nitrite as N	5.7 UJ	5.9 U	mg/kg	Yes

**Table 2**  
**Field Duplicate Review - Detections Only**  
**Limited Phase II Environmental Site Assessment - April 2024**  
**Primary and Alternate Sites for Proposed Todd Creek Wastewater Treatment Plant**  
**7800 NW 144th Street, Kansas City, Missouri**

Sample ID:	SW03/SW-1	DUP-2	Units	Meets QC Criteria?
Lab ID:	60450682007	60450682006		
Analytes	Results	Results		
Fluoride	0.19 J	0.17 J	mg/L	Yes
Sulfate	149	133	mg/L	Yes
Aluminum	1.030 J	0.165 J	mg/L	<b>No - RPD</b>
Arsenic	0.002630	0.000744 J	mg/L	Yes
Barium	0.0868 JU	0.0623 JU	mg/L	Yes
Calcium	121	109	mg/L	Yes
Chromium	0.00204	0.00124 U	mg/L	Yes
Cobalt	0.002450 J	0.000367 J	mg/L	<b>No - STF</b>
Copper	0.00553	0.00172 J	mg/L	Yes
Iron	3.930 J	0.704 J	mg/L	<b>No - RPD</b>
Lead	0.003960 J	0.000849 UJ	mg/L	<b>No - STF</b>
Magnesium	46.4	47.1	mg/L	Yes
Manganese	0.3070 J	0.0752 J	mg/L	<b>No - STF</b>
Molybdenum	0.00104 J	0.00205 J	mg/L	Yes
Nickel	0.00743 J	0.00183 J	mg/L	<b>No - STF</b>
Potassium	4.7	4.7	mg/L	Yes
Sodium	52.5	54.0	mg/L	Yes
Vanadium	0.002770 J	0.000748 J	mg/L	Yes
Zinc	0.01910 J	0.00625 J	mg/L	Yes
TPH-DRO	0.65 JU	0.54 JU	mg/L	Yes
TPH-ORO	0.83 JU	0.67 JU	mg/L	Yes
pH at 25 Degrees C	7.6 J	7.7 J	Std. Units	Yes
Alkalinity, Total as CaCO3	364	364	mg/L	Yes
Oxygen, Dissolved	9 J	9.4 J	mg/L	Yes
Sulfide, Total	0.072	0.028 J	mg/L	Yes

**Table 2**  
**Field Duplicate Review - Detections Only**  
**Limited Phase II Environmental Site Assessment - April 2024**  
**Primary and Alternate Sites for Proposed Todd Creek Wastewater Treatment Plant**  
**7800 NW 144th Street, Kansas City, Missouri**

Sample ID:	SD03/SD-1	DUP-3	Units	Meets QC Criteria?
Lab ID:	60450758005	60450758006		
Analytes	Results	Results		
Nitrogen, Ammonia	3.2 J	1.6 J	mg/kg	<b>No - STF</b>
Aluminum	1,780	1940	mg/kg	Yes
Antimony	0.29 JU	0.191 U	mg/kg	Yes
Arsenic	4.54	3.45	mg/kg	Yes
Barium	24.5	21.0	mg/kg	Yes
Beryllium	0.216 J	0.241 J	mg/kg	Yes
Cadmium	0.14 J	0.099 U	mg/kg	Yes
Calcium	264,000	274000	mg/kg	Yes
Chromium	4.25 J	4.34 J	mg/kg	Yes
Cobalt	2.60	2.46	mg/kg	Yes
Copper	4.82 J	4.56 J	mg/kg	Yes
Iron	8,190	9370	mg/kg	Yes
Lead	4.54	4.44	mg/kg	Yes
Magnesium	6,090	6460	mg/kg	Yes
Manganese	691	720	mg/kg	Yes
Molybdenum	0.518 J	0.890 J	mg/kg	Yes
Nickel	8.91	8.64	mg/kg	Yes
Potassium	589 J	626	mg/kg	Yes
Selenium	0.325 J	0.225 J	mg/kg	Yes
Sodium	184 J	149 J	mg/kg	Yes
Vanadium	5.30	4.82	mg/kg	Yes
Zinc	17.6 J	17.3 J	mg/kg	Yes
2-Hexanone	16.5 U	26.7 J	ug/kg	Yes
Chloroform	3.4 J	2.5 U	ug/kg	Yes
TPH-ORO	8.5 J	11.5 J	mg/kg	Yes

**Notes:**

ID = identification  
DRO = Diesel Range Organics  
J = Trace or estimated value  
JU = Trace detection qualified as a nondetect during data review  
mg/kg = milligrams per kilogram  
mg/L = milligrams per Liter  
ORO = Oil Range Organics  
QC = quality control

RPD = Relative Percent Difference  
Std. Units = Standard Units  
STF = Sensitivity Test Failure  
U = Nondetect  
UJ = Estimated at the reporting limit  
ug/kg = micrograms per kilogram  
ug/L = micrograms per Liter  
% = percent