June 13, 2023

Megan Ledbetter
TM BTR of the Carolinas, LLC
11405 N Community House Road Suite 150
Charlotte, North Carolina 28277

Re: Limited Phase II Environmental Site Assessment
Jefferson Pilot
2800 Highpoint Road
Greensboro, Guilford County, North Carolina

Dear Mrs. Ledbetter:

1.0 Introduction

Kimley-Horn and Associates, Inc. ("Kimley-Horn") is pleased to submit this Limited Phase II Environmental Site Assessment (ESA) report to TM BTR of the Carolinas, LLC (the "Client") for the 17.13-acre Jefferson Pilot property (the "Site") located at 2800 High Point Road, Greensboro, Guilford County, North Carolina. The *Phase I ESA* prepared by Kimley-Horn and Associates in March 2023, revealed evidence of a Vapor Encroachment Condition (VEC) in association with the Site. As such, this Limited Phase II ESA was performed to evaluate the potential soil vapor and groundwater impacts at the Site, relative to the identified VEC.

1.1 Site History

The Site was originally used as the Jefferson Pilot Life Insurance Campus. It consists of landscaped/greenspaces and four, asphalt-paved parking lots. The Site is exclusive of the buildings formerly occupied by Jefferson Pilot Life Insurance. The four parking lots were constructed between 1968 to 1993 and the greenspaces were relatively well maintained throughout this time. In 1997, two petroleum releases were identified during an underground storage tank removal, adjacent to the building, approximately 340 feet from the closest point to the Site. UST #4 was closed in place leaving the tank and contaminated soil on the property. The NCDENR issued a no further action (NFA) in 1998 and acknowledges that 2,200 ppm oil and grease remain in place at the Site.

1.2 Site Location and Description

The 17.13-acre Site is located at 2800 High Point Road, Greensboro, Guilford County North Carolina (**Figure 1**). It is situated within an area characterized by residential and commercial land use (**Figure 2**) and is identified by the Guilford County Property Appraiser as Real Estate ID Number 236006. The property owner, currently listed by the Guilford County Property Appraiser, is KSL Sedgefield Pilot LLC.

1.3 Phase I ESA Summary

The Phase II ESA was completed based on the findings of the Phase I ESA prepared for the Site by Kimley-Horn in March 2023. The Phase I ESA identified the following Vapor Encroachment Condition (VEC) in association with the Site:

- The leaking underground storage tank adjacent to the Fackler Building on the Jefferson Po;pt Life Insurance Co. Site. This tank was closed in place and currently remains on the property. NCDENE issued an NFA in 1988 and acknowledge that 2,200 ppm oil and grease remain in the subsurface material in the vicinity of the underground storage tank.

The location of the UST is depicted on **Figure 2**.

1.4 Data Quality Objectives

The Limited Phase II ESA was performed to evaluate whether the identified VEC contributed to localized ground water contamination or soil vapor encroachment. As such, the data quality objectives (DQO) for this Limited Phase II ESA were to screen localized groundwater and soil vapor for the presence of petroleum hydrocarbons and volatile organic compounds relative to the abandoned UST. The level of data collection and analysis associated with this Limited Phase II ESA is not equivalent to the effort that would be undertaken to characterize the full nature or extent of contamination present in soil or groundwater. For example, temporary soil vapor wells and groundwater monitoring wells were used to facilitate sampling, as opposed to use of permanent soil vapor or groundwater monitoring wells. Thus, the data collected during this investigation should primarily be used for screening purposes. Further evaluation and data collection may be warranted.

2.0 Field Investigation

The following presents a summary of the field investigation and results. Soil vapor and groundwater samples were collected in general accordance with the North Carolina Department of Environmental Quality (NCDEQ) Standard Operating Procedures (SOPs). A sample collection plan was developed for the Site that included the collection of two (2) soil vapor samples and one (1) groundwater sample from locations near the property boundary of the Site, at the closest points to the identified VEC.

The field activities were conducted on March 28 and March 29, 2023. A track mounted hollow stem auger rig was used to install soil vapor extraction wells VEW-1 and VEW-2, and temporary groundwater monitoring well MW-1. Kimley-Horn attempted to install a second temporary groundwater monitoring well adjacent to VEW-1, however refusal was encountered in bedrock at a depth of16 feet below land surface (bls) at this location. VEW-1 and MW-1 were installed along the Site boundary, directly north of the identified VEC on the Jefferson Pilot Life Insurance headquarters building (**Figure 3**). A track mounted hollow stem auger rig was used to install VEW-2 along the Site boundary, directly east of the VEC identified on the Jefferson Pilot Life Insurance headquarters building (**Figure 3**). The groundwater

sample was collected from the Site on March 28, 2023. Kimley-Horn returned to the site on March 29, 2023 to collect soil vapor samples from each soil vapor well. The temporary groundwater monitoring well and soil vapor wells were abandoned after samples were collected. **Table 1** and **Table 2** provides an analyte detection summary for the groundwater and soil samples respectively. Lithologic logs are provided in **Attachment A**.

2.1 Groundwater Sampling

Temporary groundwater monitoring well, MW-1, was installed along the southern Site boundary, directly north of the VEC identified on the Jefferson Pilot Life Insurance headquarters building in the March 2023. Kimley-Horn attempted to install a second temporary groundwater monitoring well along the Site boundary directly east of the VEC; however, refusal was met at 16 feet bls, prior to encountering groundwater.

The temporary monitoring well (MW-1) was constructed of 2-inch diameter PVC casing with ten feet of 0.010-inch machine slotted well screen. Annular space around the well screen was backfilled with 20/30 graded quartz sand. A minimum of three well volumes were purged from each monitoring well during well development. During the well purging, field parameters were measured and recorded. The field parameters include pH, temperature, specific conductivity, dissolved oxygen, oxidation/reduction potential, and turbidity. The sample were taken from the temporary monitoring well once the field parameters stabilized. The groundwater sample was collected in laboratory provided containers and stored on ice. Copies of the groundwater sampling logs are included in **Attachment B**.

The groundwater sample was transported to Eurofins Environmental Testing Southeast, LLC under chain-of-custody protocol. Groundwater sample MW-1 was analyzed for VOCs (EPA Method 8260D), SVOCs (EPA Method 8270E), PAHs (EPA Method 8270E_LL) and lead (EPA Method 6010D).

2.2 Soil Vapor Sampling

Two (2) soil vapor wells, VEW-1 and VEW-2, were installed at the Site to a depths of approximately 16 and 20 feet bls, respectively. VEW-1 was installed adjacent to MW-1 and VEW-2 was installed along the Site boundary east of the VEC. VEW-2 was installed in the general area of where the second groundwater samples was proposed. Soil vapor samples were collected in laboratory provided Summa Canisters and transported to the designated laboratory under chain-of-custody protocol. Both VEW-1 and VEW-2 were analyzed for VOCs (EPA Method TO-15 SIM), carbon dioxide, methane, nitrogen, and oxygen (EPA Method 3C), nonmethane organic compounds (EPA Method 25C), permanent gases and light hydrocarbons (ASTM D-1946), and hydrogen sulfide, carbonyl sulfide and carbon disulfide (EPA Method 15/16).

3.0 Results

Attachment C contains laboratory reports and chain-of-custody forms for the groundwater and soil vapor samples collected from the Site. **Table 1** provides a summary of detected analytes identified in the groundwater samples. **Table 2** provides a summary of the soil vapor quality data.

3.1 Groundwater Quality Data

The groundwater results were compared to the Groundwater Standards found in 15A NCAC 02L .0202. The detected analytes are summarized in **Table 1**.

1,1,2,2-tetrachlorethane was detected in MW-1 at the concentration of 0.4 ug/L exceeding the 15A NCAC 02L .0202 groundwater standard of 0.2 ug/L. 1,2-dibromo-3-chloropropane was detected in MW-1 at the concentration of 1.8 ug/L exceeding the 15A NCAC 02L .0202 groundwater standard of 0.04 ug/L. Both results detected were flagged with a "J" qualifier, indicating that it was reported between values less than the minimum calibration level but higher than the method detection limit.

Detectable concentrations of any other VOCs, SVOCs, Lead or PAHs were not identified in the groundwater sample collect from the Site.

3.2 Soil Vapor Quality Data

The following is a summary of soil vapor analytical results. The North Carolina Department of Environmental Quality Residential and Non-residential Vapor Intrusion Screening Levels are based on the November 2022 United States Environmental Protection Agency's (USEPA's) Regional Screening Tables. The detected analytes are summarized on **Table 2.**

Benzene was reported in the soil vapor sample VEW-2 at a concentration of 15 ug/m^3, which exceeds the residential vapor intrusion levels for sub-slab and exterior soil gas screening level (SGSL) of 12 ug/m^3.

Toluene was reported in the soil vapor samples at 11,000 ug/m^3 and 16,000 ug/m^3 for VEW-1 and VEW-2, respectively, which does not exceed the SGSL of 35,000 ug/m^3.

Ethylbenzene was reported in the soil vapor sample VEW-2 at a concentration of 13 ug/m^3, which does not exceed the SGSL of 37 ug/m^3.

Benzene is the only analyte that was detected at concentrations exceeding the residential sub-slab and exterior soil and gas screening levels at the Jefferson Pilot Site. This sample was collected from VEW-2, located approximately 450 feet from the abandoned UST #4.

4.0 Discussion and Recommendations

The following is a concise summary of the findings of this limited Phase II ESA:

- Detectable concentrations of 1,1,2,2-tetrachlorethane and 1,2-dibromo-3-chloropropane were reported in the groundwater sample collected from the Site. However, the reported concentrations were estimated by the laboratory. As such, the laboratory cannot guarantee the accuracy of the reported value.

- Benzene was identified on the Site at sample location VEW-2 at a concentration exceeding the sub-slab and exterior soil gas screening level.

- Toluene and ethylbenzene were identified in the soil vapor on the Site at concentrations that do not exceed the sub-slab and exterior soil gas screening levels.

1,1,2,2-tetrachlorethane and 1,2-dibromo-3-chloropropane were reported in the groundwater sample collected from MW-1. The reported concentrations exceed the 15A NCAC 02L .0202 groundwater standards. However, the results were reported at a value less than the minimum calibration level but higher than the method detection limit. Analytical results reported at values less than the minimum calibration level and higher than method detection limit cannot be reproduced at a 99% confidence level. Therefore, there is a degree of inaccuracy related to the reported values. Given the absence of other volatile organic compounds in the groundwater, there is the potential that the reported concentrations of 1,1,2,2-tetrachlorethane and 1,2-dibromo-3-chloropropane are false positives due to either cross-contamination, laboratory contamination or laboratory error.

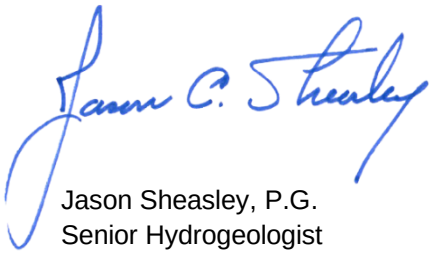
Benzene, ethylbenzene and toluene, which are commonly associated with petroleum release, were reported in the soil vapor samples collected from the Site. Regulatory records from NCDENR indicate a NFA that was issued for the leaking underground storage tank abandoned in place at the Jefferson Pilot Life Insurance headquarters in 1998. The concentration of benzene, ethylbenzene and toluene in the soil vapor samples could potentially be attributed to the residual contamination form the abandoned in place UST. The North Carolina Department of Environmental Quality Residential and Non-residential Vapor Intrusion Screening Levels are based on the November 2022 United States Environmental Protection Agency's (USEPA's) Regional Screening Tables. Benzene was identified on the Site at concentrations exceeding the residential sub-slab and exterior soil gas screening levels.

Depending on the future use of the Site, Kimley-Horn recommends a soil vapor investigation be performed to confirm the results of this investigation and define the limits of soil vapor contamination at the Site.

Kimley-Horn and Associates, Inc. appreciates the opportunity to provide you with environmental services. If you have any questions or comments regarding the information being provided, please do not hesitate to contact me at (904) 828-3900. I can also be contacted via email at jason.sheasley@kimley-horn.com.

Very truly yours,

KIMLEY-HORN AND ASSOCIATES, INC.



Jason Sheasley, P.G.
Senior Hydrogeologist

Austin Breitenstein
Environmental Scientist

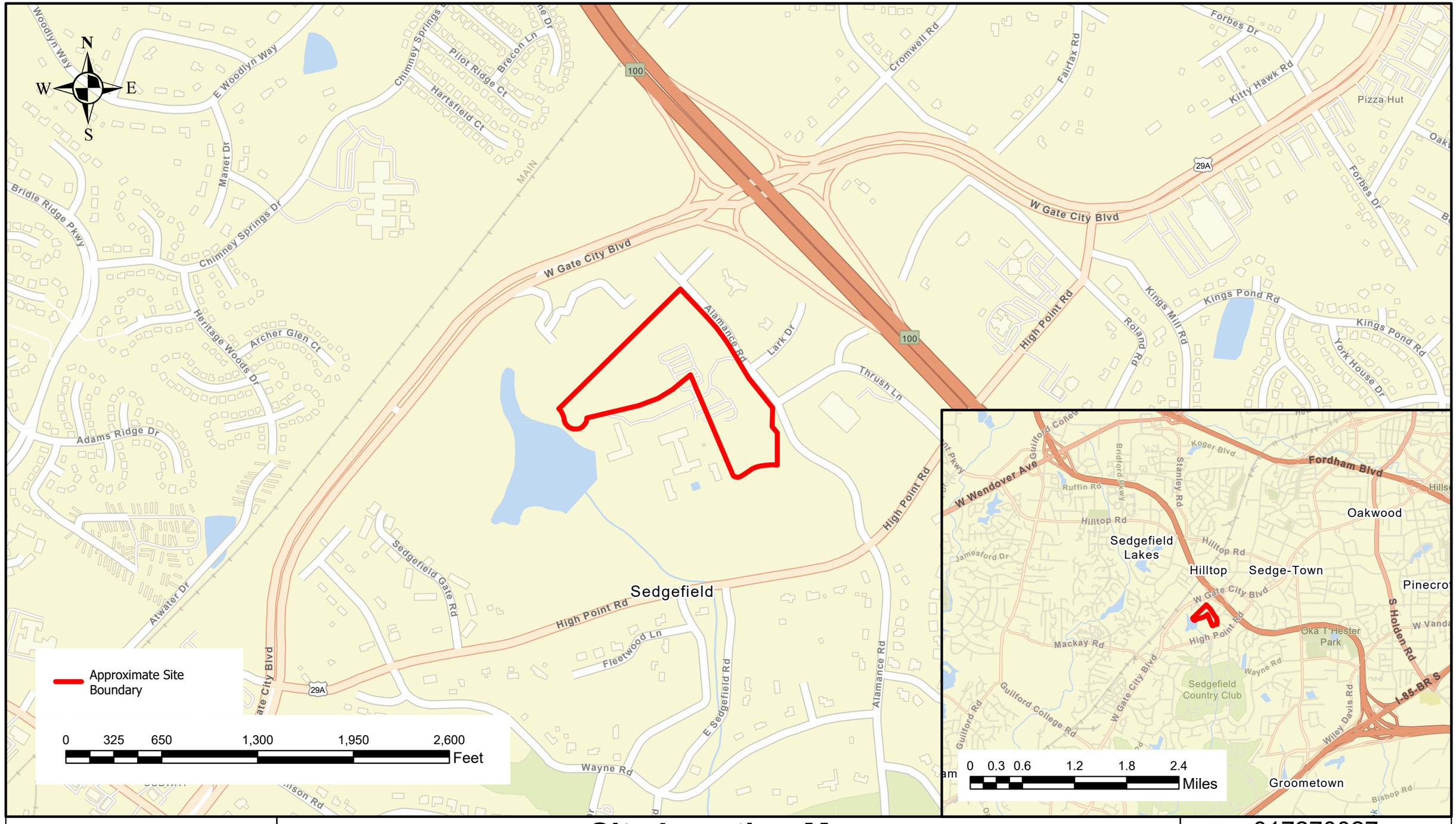
Attachments:

Figures
- Figure 1 – Site Location Map
- Figure 2 – Site Aerial Photograph/VEC Location
- Figure 3 – Groundwater Sample Location Map
- Figure 4 – Soil Vapor Sampling Location Map

Tables
- Table 1 – Groundwater Detected Analyte Summary
- Table 2 – Soil Vapor Detected Analyte Summary

Attachments
- Attachment A – Lithologic Logs
- Attachment B – Groundwater Sampling Log
- Attachment C – Laboratory Report

FIGURES



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Site Location Map

2800 High Point Greensboro, Guilford County North Carolina

017270027

Figure No. 1

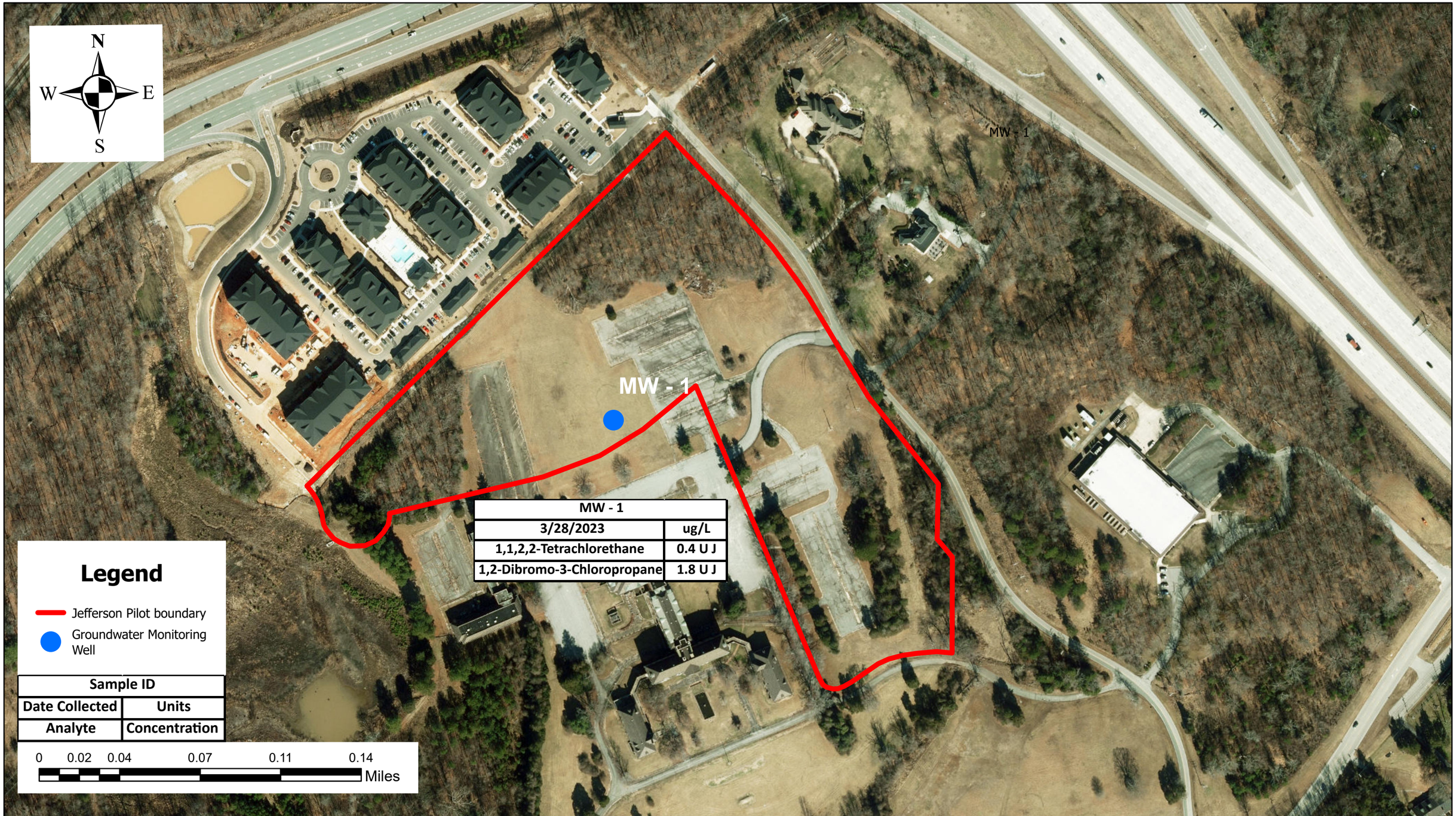
Kimley»Horn

Site Aerial Photograph and VEC Location Map

2800 High Point Greensboro, Guilford County North Carolina

17270027

Figure No. 2



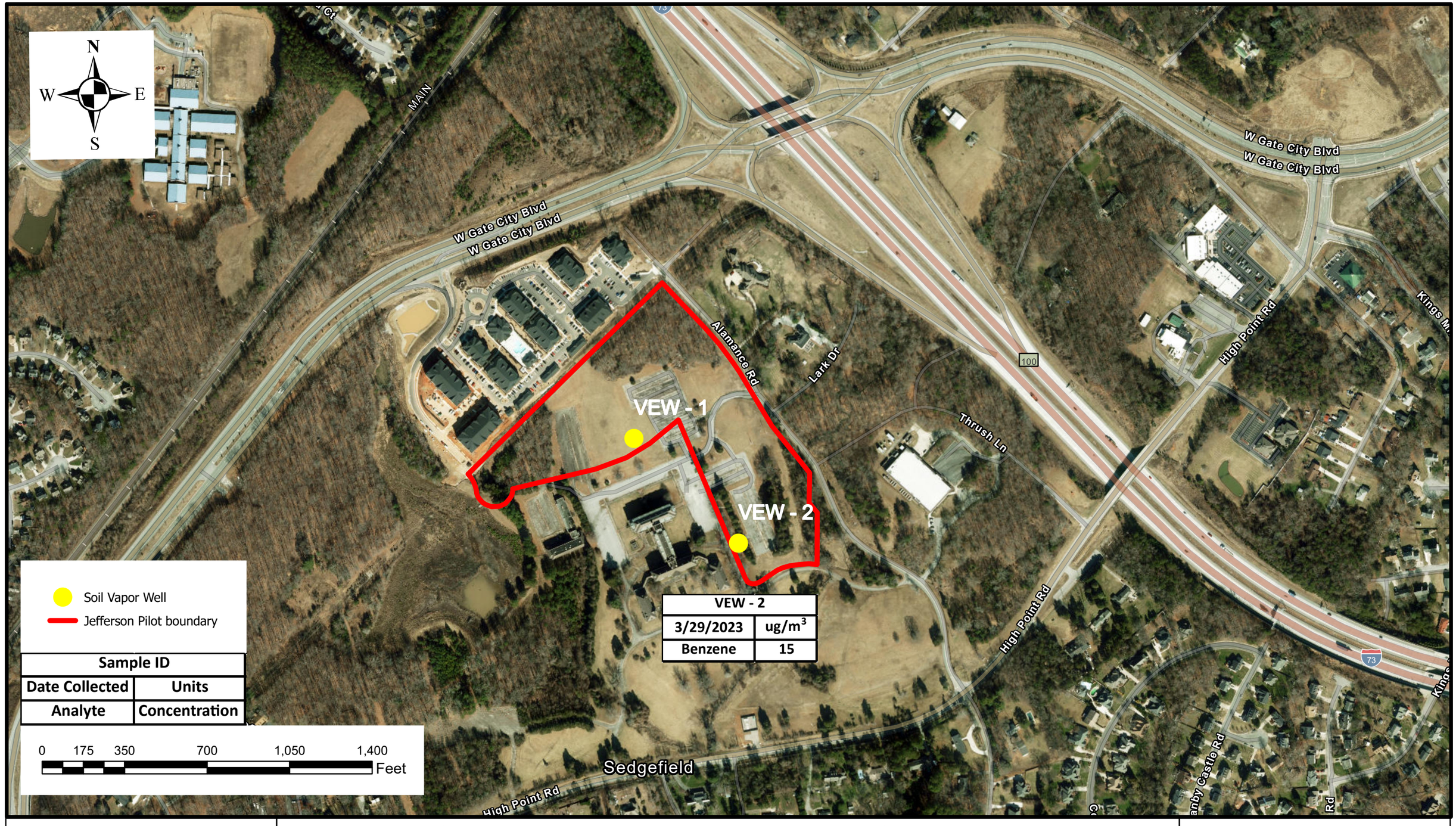
Kimley»Horn

Groundwater Detected Analyte Summary

2800 High Point Greensboro, Guilford County North Carolina

017270027

Figure No. 3



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Soil Vapor Detected Analyte Summary

2800 High Point Greensboro, Guilford County North Carolina

017270027

Figure No. 4

TABLES

TABLE 1
Groundwater Detected Analyte Summary
March 2023

Jefferson Pilot - Greensboro, North Carolina

Sample ID		15 A NCAC 02L .0202 Groundwater Standard	MW - 01
Standard Unit		(ug / L)	
Date Collected		3/28/2023	
Laboratory Analyses	1,1,2,2-Tetrachloroethane	0.2	0.4 U J
	1,2,3-Trichlorobenzene	NR	0.81 U J
	1,2,4-Trichlorobenzene	70	0.53 U J
	1,2-Dibromo-3-Chloropropane	0.04	1.8 U J
	Acetone	6,000	3.7 U J
	Hexachlorobutadiene	0.4	0.22 U J
	Methyl tert-butyl ether	20	0.81 U J
	Naphthalene	6	2.4 U J
	2-Butanone (MEK)	NR	6.4 U J
	Trichlorofluoromethane	2,000	0.33 U J
	Vinyl acetate	NR	0.69 U J
	2-Fluorobiphenyl	NR	4.6
	Nitrobenzene-d5	NR	5.4
	Terphenyl-d14	NR	5.4

Notes

1 Shaded yellow values exceed the 15A NCAC 02L .0202 Groundwater Standards

2 J = Estimated value, value may not be accurate, the value is less than the minimum calibration level but greater than the method detection limit

3 NS = Analyte is not analyzed

4 U = Parameter not detected above the laboratory method detection limit

5 I = Reported value is between the laboratory method detection limit and practical quantiation limit

6 NR = Analyte not regulated, soil cleanup target levels not established for the parameter.

TABLE 2
Soil Vapor Detected Analyte Summary
March 2023

Jefferson Pilot - Greensboro Florida

Sample ID		Residential SGSL	Non-Residential SGSL	VEW - 01	VEW - 02
Standard Unit		(ug / m^3) or ppb			
Date Collected		3/29/2023			
Laboratory Analyses	**Toluene**	35,000	440,000	11,000	16,000
	Benzene	12	160	ND	15
	Ethylbenzene	37	490	ND	13

Notes

1. Shaded yellow values exceed the NCDEQ Residential Vapor Intrusion Screening Levels Sub-slab and exterior soil gas screening level (SGSL)
2. Shaded yellow values exceed the NCDEQ Non-Residential Vapor Intrusion Screening Levels Sub-slab and exterior soil gas screening level (SGSL)
3. NS = Analyte is not analyzed
4. U = Parameter not detected above the laboratory method detection limit
5. I = Reported value is between the laboratory method detection limit and practical quantiation limit
6. NR = Analyte not regulated, soil cleanup target levels not established for the parameter.
7. P = RPD between the primary and confirmatory analysis exceeded 40%.
8. Q = Sample held beyond the accepted holding time
9. ND = Analyte not detched

ATTACHMENT A

BORING LOG

Page 1 of ____

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
MW-01		

Site Name:	Borehole Start Date: 3/28 End Date: 3/28	Borehole Start Time: 1050 ☐ AM ☐ PM End Time: 1210 ☐ AM ☑ PM
Jefferson Pilot		

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Kimley-Horn		Austin Breitenstein

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
Partida well drilling		6"	26'

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): ☐ FID ☐ PID
Hollow-stem	26'		

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	grass			
							2	Brown loamy clay high plasticity	ML	15%	
							3	light blue Brown silty sand	SM	0%	
							4				
							5	Brown loamy clay w/ gravel poorly sorted	OH	0%	
							6				
							7	Blue/gray clay Red mottling			
							8	low plasticity with 25% gravel	OH	0%	
							9				
							10				
							11				
							12				

BORING LOG

13	Blue/gray silty clay Poorly sorted, low plasticity	CL	0%
14			
15			
16			
17	light brown loamy clay		
18	Poorly sorted red mottling	OL	0%
19			
20	white to light red brown		
21	clay/silt poorly sorted	CL	
22			
23	Brown/gray to gray blue		0%
24	loamy clay poorly sorted	CL	
25	yellow brown, well sorted		
26	silty sand, wet	SM	50%
27			
28			
29			
30			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings
Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: MW-02	Permit Number:	FDEP Facility Identification Number: NA
Site Name:	Borehole Start Date: 3/28 End Date: 3/28	Borehole Start Time: 0920 ☑ AM End Time: 1040 ☐ AM
Environmental Contractor: Kimley-Horn	Geologist's Name:	Environmental Technician's Name: Austin, Brotherstan
Drilling Company: Partridge Well Drilling Co.	Pavement Thickness (inches): —	Borehole Diameter (inches): 6" / Borehole Depth (feet): 16.5
Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well): / OVA (list model and check type): NA ☐ FID

Disposition of Drill Cuttings [check method(s)]: *(describe if other or multiple items are checked):* ☐ Dru ☐ Spread ☐ Backfill ☐ Stockpi ☐ Other

Borehole Completion (check one): ☐ We ☐ Grou ☐ Bentonite ☐ Backfill ther (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	grass cover		0	
							2	silty clay Brown low plasticity dry (CL)		0	
							3				
							4 5	Red silty clay low plasticity dry (CL)		0	
							6 7	Red clay, high plasticity dry	CH	0	
							8	Red Brown silty clay low Plasticity dry		0	
							9				
							10				
							11	grey Brown loamy clay dry	CL		
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	FDEP Facility Identification Number:	Site Name: Fleming Island WTP	Borehole Start Date: 10/24/22 End Date: 10/24/22

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							13	~~Gray~~ Blue gray silty clay with gravel dry low plasticity	CL	D	
							14				
							15				
							16	~~Blue~~ gray clayey gravel dry Bedrock	GC	D	
							17				
							18				
							19				
							20				
							21				
							22				
							23				
							24				
							25				
							26				
							27				
							28				
							29				
							30				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

ATTACHMENT B

GROUNDWATER SAMPLING LOG

SITE NAME:	Jefferson Pilot	SITE LOCATION:	Greensboro, NC	
WELL NO:	MW-01	SAMPLE ID:	MW-01	DATE: 3/28/2027

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	5/16	18 feet to 28 feet	16.64	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (28 feet – 16.69 feet) X 0.16 gallons/foot = 1.81 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
21	21	1542	1802	6.63

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation		TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1750	5.43	5.43	0.1	16.90	5.81	19.08	367	1.42	15.5	27.8	Clear	N/A
1753	0.3	5.73	0.1	16.85	5.87	18.89	366	1.38	15.0	24.2	Clear	N/A
1756	0.3	6.03	0.1	16.67	5.97	18.70	364	1.41	14.9	19.7	Clear	N/A
1759	0.3	6.33	0.1	16.80	5.87	18.70	663	1.43	15.1	19.4	Clear	N/A
1802	0.3	6.63	0.1	16.72	6.93	18.55	360	1.39	14.8	18.1	Clear	N/A

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Austin Breitenstein KHA		1803	1804

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
21	HDPE		

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:
Raining

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

ATTACHMENT C

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Matt Fitzpatrick
Kimley-Horn & Associates Inc.
12740 Gran Bay Parkway West
Suite 2350
Jacksonville, Florida 32258

Generated 4/19/2023 8:58:02 AM

JOB DESCRIPTION

Jefferson Pilot

JOB NUMBER

680-232852-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

See page two for job notes and contact information.

Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

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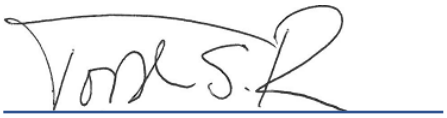
Authorization



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Authorized for release by
Todd Rea, Project Manager
Todd.Rea@et.eurofinsus.com
(407)339-5984

Definitions/Glossary

Client: Kimley-Horn & Associates Inc.
Job ID: 680-232852-1
Project/Site: Jefferson Pilot

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J	Estimated value; value may not be accurate.
L	Off-scale high. Actual value is known to be greater than the value given.
U	Indicates that the compound was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Sample Summary

Client: Kimley-Horn & Associates Inc.
Project/Site: Jefferson Pilot

Job ID: 680-232852-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-232852-1	MW-1	Water	03/28/23 18:03	03/31/23 17:55

Job ID: 680-232852-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-232852-1

Receipt
The sample was received on 3/31/2023 5:55 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) analyzed in batch 680-772705 was outside the method criteria for the following analyte(s): 1,1,2,2-Tetrachloroethane, 1,2,3-Trichlorobenzene, 1,2,3-Trichloropropane, 1,2,4-Trichlorobenzene, 1,2-Dibromo-3-Chloropropane, 2-Hexanone, Acetone, Bromomethane, Chloroethane, Hexachlorobutadiene, Methyl tert-butyl ether, Naphthalene, 4-Methyl-2-pentanone (MIBK), 2-Butanone (MEK), Trichlorofluoromethane and Vinyl acetate. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for analytical batch 680-772705 recovered outside control limits for the following analyte(s): 1,2,3-Trichloropropane, 1,2,4-Trichlorobenzene, 1,2-Dibromo-3-Chloropropane, Naphthalene, 2-Butanone (MEK), Trichlorofluoromethane and Vinyl acetate. 1,2,3-Trichloropropane, 1,2,4-Trichlorobenzene, 1,2-Dibromo-3-Chloropropane, Naphthalene, 2-Butanone (MEK), Trichlorofluoromethane and Vinyl acetate have been identified as a poor performing analytes when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8260D: The laboratory control sample (LCS/LSCD) for analytical batch 680-772705 recovered outside control limits for the following analytes: 1,1,2,2-Tetrachloroethane, Hexachlorobutadiene and Methyl tert-butyl ether. The associated sample(s) was not re-prepared and/or re-analyzed since the holding time expired. A standard at the reporting limit was detected for these analytes. The analytes of concern were not found in the sample so the data was reported and qualified accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270E: The SM-LIST1B-ICV_00037 reagent used in (ICV 680-766903/17) was expired. Unexpired SM-LIST1B-ICV reagent could not be obtained for this analysis.

Method 8270E: A portion of the following sample was used for analysis, rather than testing the entire sample amount in the original container, due to the sample container was not the appropriate size : MW-1 (680-232852-1). As such, the required solvent rinse of the original container could not be performed.

Method 8270E: The following analyte has been identified, in the reference method and/or via historical data, to be poor and/or erratic performers: Pentachlorophenol. This analyte may have a %D >20%, but must be <50%. If >50%, a CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client: Kimley-Horn & Associates Inc.
Project/Site: Jefferson Pilot

Job ID: 680-232852-1

Client Sample ID: MW-1
Date Collected: 03/28/23 18:03
Date Received: 03/31/23 17:55

Lab Sample ID: 680-232852-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.36	U	1.0	0.36	ug/L			04/11/23 17:23	1
1,1,1-Trichloroethane	0.21	U	1.0	0.21	ug/L			04/11/23 17:23	1
1,1,2,2-Tetrachloroethane	0.40	U J	1.0	0.40	ug/L			04/11/23 17:23	1
1,1,2-Trichloroethane	0.32	U	1.0	0.32	ug/L			04/11/23 17:23	1
1,1-Dichloroethane	0.33	U	1.0	0.33	ug/L			04/11/23 17:23	1
1,1-Dichloroethene	0.33	U	1.0	0.33	ug/L			04/11/23 17:23	1
1,1-Dichloropropene	0.28	U	1.0	0.28	ug/L			04/11/23 17:23	1
1,2,3-Trichlorobenzene	0.81	U J	5.0	0.81	ug/L			04/11/23 17:23	1
1,2,3-Trichloropropane	0.48	U	1.0	0.48	ug/L			04/11/23 17:23	1
1,2,4-Trichlorobenzene	0.53	U J	5.0	0.53	ug/L			04/11/23 17:23	1
1,2,4-Trimethylbenzene	0.43	U	1.0	0.43	ug/L			04/11/23 17:23	1
1,2-Dibromo-3-Chloropropane	1.8	U J	5.0	1.8	ug/L			04/11/23 17:23	1
1,2-Dichlorobenzene	0.31	U	1.0	0.31	ug/L			04/11/23 17:23	1
1,2-Dichloroethane	0.25	U	1.0	0.25	ug/L			04/11/23 17:23	1
1,2-Dichloroethene, Total	0.37	U	2.0	0.37	ug/L			04/11/23 17:23	1
1,2-Dichloropropane	0.22	U	1.0	0.22	ug/L			04/11/23 17:23	1
1,3,5-Trimethylbenzene	0.28	U	1.0	0.28	ug/L			04/11/23 17:23	1
1,3-Dichlorobenzene	0.31	U	1.0	0.31	ug/L			04/11/23 17:23	1
1,3-Dichloropropane	0.36	U	1.0	0.36	ug/L			04/11/23 17:23	1
1,4-Dichlorobenzene	0.31	U	1.0	0.31	ug/L			04/11/23 17:23	1
2,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			04/11/23 17:23	1
2-Chlorotoluene	0.25	U	1.0	0.25	ug/L			04/11/23 17:23	1
2-Hexanone	3.2	U	10	3.2	ug/L			04/11/23 17:23	1
4-Chlorotoluene	0.41	U	1.0	0.41	ug/L			04/11/23 17:23	1
Acetone	3.7	U J	10	3.7	ug/L			04/11/23 17:23	1
Benzene	0.27	U	1.0	0.27	ug/L			04/11/23 17:23	1
Bromobenzene	0.24	U	1.0	0.24	ug/L			04/11/23 17:23	1
Bromochloromethane	0.34	U	1.0	0.34	ug/L			04/11/23 17:23	1
Bromoform	0.59	U	1.0	0.59	ug/L			04/11/23 17:23	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			04/11/23 17:23	1
Bromomethane	3.7	U	5.0	3.7	ug/L			04/11/23 17:23	1
Carbon disulfide	0.43	U	2.0	0.43	ug/L			04/11/23 17:23	1
Carbon tetrachloride	0.30	U	1.0	0.30	ug/L			04/11/23 17:23	1
Chlorobenzene	0.15	U	1.0	0.15	ug/L			04/11/23 17:23	1
Chloroethane	4.6	U	5.0	4.6	ug/L			04/11/23 17:23	1
Chloroform	0.27	U	1.0	0.27	ug/L			04/11/23 17:23	1
Chloromethane	0.54	U	1.0	0.54	ug/L			04/11/23 17:23	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.25	ug/L			04/11/23 17:23	1
cis-1,3-Dichloropropene	0.26	U	1.0	0.26	ug/L			04/11/23 17:23	1
Dibromochloromethane	0.39	U	1.0	0.39	ug/L			04/11/23 17:23	1
Dibromomethane	0.34	U	1.0	0.34	ug/L			04/11/23 17:23	1
Ethylbenzene	0.20	U	1.0	0.20	ug/L			04/11/23 17:23	1
Hexachlorobutadiene	0.22	U J	5.0	0.22	ug/L			04/11/23 17:23	1
Isopropylbenzene	0.26	U	1.0	0.26	ug/L			04/11/23 17:23	1
m-Xylene & p-Xylene	0.49	U	1.0	0.49	ug/L			04/11/23 17:23	1
Methyl tert-butyl ether	0.81	U J	5.0	0.81	ug/L			04/11/23 17:23	1
Methylene Chloride	3.2	U	5.0	3.2	ug/L			04/11/23 17:23	1
Naphthalene	2.4	U J	5.0	2.4	ug/L			04/11/23 17:23	1
4-Methyl-2-pentanone (MIBK)	2.7	U	10	2.7	ug/L			04/11/23 17:23	1

Client Sample ID: MW-1
Lab Sample ID: 680-232852-1
Date Collected: 03/28/23 18:03
Matrix: Water
Date Received: 03/31/23 17:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	6.4	U J	10	6.4	ug/L			04/11/23 17:23	1
Ethylene Dibromide	0.33	U	1.0	0.33	ug/L			04/11/23 17:23	1
n-Butylbenzene	0.52	U	1.0	0.52	ug/L			04/11/23 17:23	1
N-Propylbenzene	0.41	U	1.0	0.41	ug/L			04/11/23 17:23	1
o-Xylene	0.26	U	1.0	0.26	ug/L			04/11/23 17:23	1
p-Isopropyltoluene	0.44	U	1.0	0.44	ug/L			04/11/23 17:23	1
sec-Butylbenzene	0.53	U	1.0	0.53	ug/L			04/11/23 17:23	1
Styrene	0.27	U	1.0	0.27	ug/L			04/11/23 17:23	1
tert-Butylbenzene	0.43	U	1.0	0.43	ug/L			04/11/23 17:23	1
Tetrachloroethene	0.35	U	0.50	0.35	ug/L			04/11/23 17:23	1
Toluene	0.25	U	1.0	0.25	ug/L			04/11/23 17:23	1
trans-1,2-Dichloroethene	0.34	U	1.0	0.34	ug/L			04/11/23 17:23	1
trans-1,3-Dichloropropene	0.23	U	1.0	0.23	ug/L			04/11/23 17:23	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			04/11/23 17:23	1
Trichlorofluoromethane	0.33	U J	1.0	0.33	ug/L			04/11/23 17:23	1
Vinyl acetate	0.69	U J	2.0	0.69	ug/L			04/11/23 17:23	1
Vinyl chloride	0.40	U	1.0	0.40	ug/L			04/11/23 17:23	1
Xylenes, Total	0.23	U	1.0	0.23	ug/L			04/11/23 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*118*		*70 - 130*		*04/11/23 17:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*60 - 124*		*04/11/23 17:23*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*04/11/23 17:23*	*1*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*		*04/11/23 17:23*	*1*

Method: SW846 8270E LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.39	U	0.79	0.39	ug/L		04/04/23 19:50	04/11/23 22:17	1
2-Methylnaphthalene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Acenaphthene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Acenaphthylene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Anthracene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Benzo[a]anthracene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Benzo[a]pyrene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Benzo[b]fluoranthene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Benzo[g,h,i]perylene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Benzo[k]fluoranthene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Chrysene	0.044	U	0.20	0.044	ug/L		04/04/23 19:50	04/11/23 22:17	1
Dibenz(a,h)anthracene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Fluoranthene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Fluorene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Indeno[1,2,3-cd]pyrene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Naphthalene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Phenanthrene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1
Pyrene	0.099	U	0.20	0.099	ug/L		04/04/23 19:50	04/11/23 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*47*		*31 - 107*	*04/04/23 19:50*	*04/11/23 22:17*	*1*
Nitrobenzene-d5	*55*		*37 - 103*	*04/04/23 19:50*	*04/11/23 22:17*	*1*
Terphenyl-d14	*55*		*22 - 121*	*04/04/23 19:50*	*04/11/23 22:17*	*1*

Client: Kimley-Horn & Associates Inc.
Job ID: 680-232852-1
Project/Site: Jefferson Pilot

Client Sample ID: MW-1
Lab Sample ID: 680-232852-1
Date Collected: 03/28/23 18:03
Matrix: Water
Date Received: 03/31/23 17:55

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.6	U	10	4.6	ug/L		04/04/23 10:33	04/06/23 00:26	1
2,4,5-Trichlorophenol	3.3	U	10	3.3	ug/L		04/04/23 10:33	04/06/23 00:26	1
2,4,6-Trichlorophenol	2.2	U	10	2.2	ug/L		04/04/23 10:33	04/06/23 00:26	1
2,4-Dichlorophenol	3.7	U	10	3.7	ug/L		04/04/23 10:33	04/06/23 00:26	1
2,4-Dimethylphenol	3.0	U	10	3.0	ug/L		04/04/23 10:33	04/06/23 00:26	1
2,4-Dinitrophenol	16	U	50	16	ug/L		04/04/23 10:33	04/06/23 00:26	1
2,4-Dinitrotoluene	2.3	U	10	2.3	ug/L		04/04/23 10:33	04/06/23 00:26	1
2,6-Dinitrotoluene	2.8	U	10	2.8	ug/L		04/04/23 10:33	04/06/23 00:26	1
2-Chloronaphthalene	4.8	U	10	4.8	ug/L		04/04/23 10:33	04/06/23 00:26	1
2-Chlorophenol	3.2	U	10	3.2	ug/L		04/04/23 10:33	04/06/23 00:26	1
2-Methylnaphthalene	4.6	U	10	4.6	ug/L		04/04/23 10:33	04/06/23 00:26	1
2-Methylphenol	1.8	U	10	1.8	ug/L		04/04/23 10:33	04/06/23 00:26	1
2-Nitroaniline	2.9	U	50	2.9	ug/L		04/04/23 10:33	04/06/23 00:26	1
2-Nitrophenol	3.9	U	10	3.9	ug/L		04/04/23 10:33	04/06/23 00:26	1
3 & 4 Methylphenol	1.4	U	10	1.4	ug/L		04/04/23 10:33	04/06/23 00:26	1
3,3'-Dichlorobenzidine	10	U	60	10	ug/L		04/04/23 10:33	04/06/23 00:26	1
3-Nitroaniline	3.0	U	50	3.0	ug/L		04/04/23 10:33	04/06/23 00:26	1
4,6-Dinitro-2-methylphenol	5.3	U	50	5.3	ug/L		04/04/23 10:33	04/06/23 00:26	1
4-Bromophenyl phenyl ether	4.7	U	10	4.7	ug/L		04/04/23 10:33	04/06/23 00:26	1
4-Chloro-3-methylphenol	2.5	U	10	2.5	ug/L		04/04/23 10:33	04/06/23 00:26	1
4-Chloroaniline	1.0	U	20	1.0	ug/L		04/04/23 10:33	04/06/23 00:26	1
4-Chlorophenyl phenyl ether	5.3	U	10	5.3	ug/L		04/04/23 10:33	04/06/23 00:26	1
4-Nitroaniline	3.0	U	50	3.0	ug/L		04/04/23 10:33	04/06/23 00:26	1
4-Nitrophenol	8.1	U	50	8.1	ug/L		04/04/23 10:33	04/06/23 00:26	1
Acetophenone	2.2	U	10	2.2	ug/L		04/04/23 10:33	04/06/23 00:26	1
Atrazine	2.2	U	10	2.2	ug/L		04/04/23 10:33	04/06/23 00:26	1
Benzaldehyde	4.8	U	10	4.8	ug/L		04/04/23 10:33	04/06/23 00:26	1
bis (2-chloroisopropyl) ether	3.1	U	10	3.1	ug/L		04/04/23 10:33	04/06/23 00:26	1
Bis(2-chloroethoxy)methane	1.8	U	10	1.8	ug/L		04/04/23 10:33	04/06/23 00:26	1
Bis(2-chloroethyl)ether	3.6	U	10	3.6	ug/L		04/04/23 10:33	04/06/23 00:26	1
Bis(2-ethylhexyl) phthalate	3.0	U	10	3.0	ug/L		04/04/23 10:33	04/06/23 00:26	1
Butyl benzyl phthalate	2.8	U	10	2.8	ug/L		04/04/23 10:33	04/06/23 00:26	1
Caprolactam	2.8	U	10	2.8	ug/L		04/04/23 10:33	04/06/23 00:26	1
Carbazole	1.8	U	10	1.8	ug/L		04/04/23 10:33	04/06/23 00:26	1
Dibenzofuran	1.9	U	10	1.9	ug/L		04/04/23 10:33	04/06/23 00:26	1
Diethyl phthalate	2.2	U	10	2.2	ug/L		04/04/23 10:33	04/06/23 00:26	1
Dimethyl phthalate	2.1	U	10	2.1	ug/L		04/04/23 10:33	04/06/23 00:26	1
Di-n-butyl phthalate	2.3	U	10	2.3	ug/L		04/04/23 10:33	04/06/23 00:26	1
Di-n-octyl phthalate	2.8	U	10	2.8	ug/L		04/04/23 10:33	04/06/23 00:26	1
Hexachlorobenzene	1.6	U	10	1.6	ug/L		04/04/23 10:33	04/06/23 00:26	1
Hexachlorobutadiene	4.0	U	10	4.0	ug/L		04/04/23 10:33	04/06/23 00:26	1
Hexachlorocyclopentadiene	3.5	U	10	3.5	ug/L		04/04/23 10:33	04/06/23 00:26	1
Hexachloroethane	3.6	U	10	3.6	ug/L		04/04/23 10:33	04/06/23 00:26	1
Isophorone	2.0	U	10	2.0	ug/L		04/04/23 10:33	04/06/23 00:26	1
Nitrobenzene	3.5	U	10	3.5	ug/L		04/04/23 10:33	04/06/23 00:26	1
N-Nitrosodi-n-propylamine	2.4	U	10	2.4	ug/L		04/04/23 10:33	04/06/23 00:26	1
N-Nitrosodiphenylamine	2.9	U	10	2.9	ug/L		04/04/23 10:33	04/06/23 00:26	1
Pentachlorophenol	9.9	U	50	9.9	ug/L		04/04/23 10:33	04/06/23 00:26	1
Phenol	1.5	U	10	1.5	ug/L		04/04/23 10:33	04/06/23 00:26	1

Client: Kimley-Horn & Associates Inc.
Job ID: 680-232852-1
Project/Site: Jefferson Pilot

Client Sample ID: MW-1
Lab Sample ID: 680-232852-1
Date Collected: 03/28/23 18:03
Matrix: Water
Date Received: 03/31/23 17:55

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	62		30 - 130	04/04/23 10:33	04/06/23 00:26	1
2-Fluorobiphenyl	51		25 - 130	04/04/23 10:33	04/06/23 00:26	1
2-Fluorophenol (Surr)	25		10 - 130	04/04/23 10:33	04/06/23 00:26	1
Nitrobenzene-d5	48		30 - 130	04/04/23 10:33	04/06/23 00:26	1
Phenol-d5 (Surr)	18		10 - 130	04/04/23 10:33	04/06/23 00:26	1
Terphenyl-d14	86		35 - 131	04/04/23 10:33	04/06/23 00:26	1

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.6	U	10	6.6	ug/L		04/04/23 10:05	04/06/23 20:53	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 680-772705/9
Matrix: Water
Analysis Batch: 772705

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.36	U	1.0	0.36	ug/L			04/11/23 17:04	1
1,1,1-Trichloroethane	0.21	U	1.0	0.21	ug/L			04/11/23 17:04	1
1,1,2,2-Tetrachloroethane	0.40	U	1.0	0.40	ug/L			04/11/23 17:04	1
1,1,2-Trichloroethane	0.32	U	1.0	0.32	ug/L			04/11/23 17:04	1
1,1-Dichloroethane	0.33	U	1.0	0.33	ug/L			04/11/23 17:04	1
1,1-Dichloroethene	0.33	U	1.0	0.33	ug/L			04/11/23 17:04	1
1,1-Dichloropropene	0.28	U	1.0	0.28	ug/L			04/11/23 17:04	1
1,2,3-Trichlorobenzene	0.81	U	5.0	0.81	ug/L			04/11/23 17:04	1
1,2,3-Trichloropropane	0.48	U	1.0	0.48	ug/L			04/11/23 17:04	1
1,2,4-Trichlorobenzene	0.53	U	5.0	0.53	ug/L			04/11/23 17:04	1
1,2,4-Trimethylbenzene	0.43	U	1.0	0.43	ug/L			04/11/23 17:04	1
1,2-Dibromo-3-Chloropropane	1.8	U	5.0	1.8	ug/L			04/11/23 17:04	1
1,2-Dichlorobenzene	0.31	U	1.0	0.31	ug/L			04/11/23 17:04	1
1,2-Dichloroethane	0.25	U	1.0	0.25	ug/L			04/11/23 17:04	1
1,2-Dichloroethene, Total	0.37	U	2.0	0.37	ug/L			04/11/23 17:04	1
1,2-Dichloropropane	0.22	U	1.0	0.22	ug/L			04/11/23 17:04	1
1,3,5-Trimethylbenzene	0.28	U	1.0	0.28	ug/L			04/11/23 17:04	1
1,3-Dichlorobenzene	0.31	U	1.0	0.31	ug/L			04/11/23 17:04	1
1,3-Dichloropropane	0.36	U	1.0	0.36	ug/L			04/11/23 17:04	1
1,4-Dichlorobenzene	0.31	U	1.0	0.31	ug/L			04/11/23 17:04	1
2,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			04/11/23 17:04	1
2-Chlorotoluene	0.25	U	1.0	0.25	ug/L			04/11/23 17:04	1
2-Hexanone	3.2	U	10	3.2	ug/L			04/11/23 17:04	1
4-Chlorotoluene	0.41	U	1.0	0.41	ug/L			04/11/23 17:04	1
Acetone	3.7	U	10	3.7	ug/L			04/11/23 17:04	1
Benzene	0.27	U	1.0	0.27	ug/L			04/11/23 17:04	1
Bromobenzene	0.24	U	1.0	0.24	ug/L			04/11/23 17:04	1
Bromochloromethane	0.34	U	1.0	0.34	ug/L			04/11/23 17:04	1
Bromoform	0.59	U	1.0	0.59	ug/L			04/11/23 17:04	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			04/11/23 17:04	1
Bromomethane	3.7	U	5.0	3.7	ug/L			04/11/23 17:04	1
Carbon disulfide	0.43	U	2.0	0.43	ug/L			04/11/23 17:04	1
Carbon tetrachloride	0.30	U	1.0	0.30	ug/L			04/11/23 17:04	1
Chlorobenzene	0.15	U	1.0	0.15	ug/L			04/11/23 17:04	1
Chloroethane	4.6	U	5.0	4.6	ug/L			04/11/23 17:04	1
Chloroform	0.27	U	1.0	0.27	ug/L			04/11/23 17:04	1
Chloromethane	0.54	U	1.0	0.54	ug/L			04/11/23 17:04	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.25	ug/L			04/11/23 17:04	1
cis-1,3-Dichloropropene	0.26	U	1.0	0.26	ug/L			04/11/23 17:04	1
Dibromochloromethane	0.39	U	1.0	0.39	ug/L			04/11/23 17:04	1
Dibromomethane	0.34	U	1.0	0.34	ug/L			04/11/23 17:04	1
Ethylbenzene	0.20	U	1.0	0.20	ug/L			04/11/23 17:04	1
Hexachlorobutadiene	0.22	U	5.0	0.22	ug/L			04/11/23 17:04	1
Isopropylbenzene	0.26	U	1.0	0.26	ug/L			04/11/23 17:04	1
m-Xylene & p-Xylene	0.49	U	1.0	0.49	ug/L			04/11/23 17:04	1
Methyl tert-butyl ether	0.81	U	5.0	0.81	ug/L			04/11/23 17:04	1
Methylene Chloride	3.2	U	5.0	3.2	ug/L			04/11/23 17:04	1
Naphthalene	2.4	U	5.0	2.4	ug/L			04/11/23 17:04	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 680-772705/9
Matrix: Water
Analysis Batch: 772705

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	2.7	U	10	2.7	ug/L			04/11/23 17:04	1
2-Butanone (MEK)	6.4	U	10	6.4	ug/L			04/11/23 17:04	1
Ethylene Dibromide	0.33	U	1.0	0.33	ug/L			04/11/23 17:04	1
n-Butylbenzene	0.52	U	1.0	0.52	ug/L			04/11/23 17:04	1
N-Propylbenzene	0.41	U	1.0	0.41	ug/L			04/11/23 17:04	1
o-Xylene	0.26	U	1.0	0.26	ug/L			04/11/23 17:04	1
p-Isopropyltoluene	0.44	U	1.0	0.44	ug/L			04/11/23 17:04	1
sec-Butylbenzene	0.53	U	1.0	0.53	ug/L			04/11/23 17:04	1
Styrene	0.27	U	1.0	0.27	ug/L			04/11/23 17:04	1
tert-Butylbenzene	0.43	U	1.0	0.43	ug/L			04/11/23 17:04	1
Tetrachloroethene	0.35	U	0.50	0.35	ug/L			04/11/23 17:04	1
Toluene	0.25	U	1.0	0.25	ug/L			04/11/23 17:04	1
trans-1,2-Dichloroethene	0.34	U	1.0	0.34	ug/L			04/11/23 17:04	1
trans-1,3-Dichloropropene	0.23	U	1.0	0.23	ug/L			04/11/23 17:04	1
Trichloroethene	0.20	U	1.0	0.20	ug/L			04/11/23 17:04	1
Trichlorofluoromethane	0.33	U	1.0	0.33	ug/L			04/11/23 17:04	1
Vinyl acetate	0.69	U	2.0	0.69	ug/L			04/11/23 17:04	1
Vinyl chloride	0.40	U	1.0	0.40	ug/L			04/11/23 17:04	1
Xylenes, Total	0.23	U	1.0	0.23	ug/L			04/11/23 17:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*70 - 130*		*04/11/23 17:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*60 - 124*		*04/11/23 17:04*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*04/11/23 17:04*	*1*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*		*04/11/23 17:04*	*1*

Lab Sample ID: LCS 680-772705/5
Matrix: Water
Analysis Batch: 772705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	49.1		ug/L		98	70 - 130
1,1,1-Trichloroethane	50.0	50.3		ug/L		101	70 - 130
1,1,2,2-Tetrachloroethane	50.0	30.8	J	ug/L		62	70 - 130
1,1,2-Trichloroethane	50.0	56.5		ug/L		113	70 - 130
1,1-Dichloroethane	50.0	56.3		ug/L		113	70 - 130
1,1-Dichloroethene	50.0	57.4		ug/L		115	70 - 130
1,1-Dichloropropene	50.0	49.1		ug/L		98	70 - 130
1,2,3-Trichlorobenzene	50.0	0.934	I J	ug/L		2	61 - 141
1,2,3-Trichloropropane	50.0	38.5		ug/L		77	70 - 130
1,2,4-Trichlorobenzene	50.0	8.92	J	ug/L		18	70 - 130
1,2,4-Trimethylbenzene	50.0	50.6		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	5.97	J	ug/L		12	70 - 130
1,2-Dichlorobenzene	50.0	47.9		ug/L		96	70 - 130
1,2-Dichloroethane	50.0	46.5		ug/L		93	70 - 130
1,2-Dichloroethene, Total	100	112		ug/L		112	70 - 130
1,2-Dichloropropane	50.0	55.2		ug/L		110	70 - 130
1,3,5-Trimethylbenzene	50.0	51.8		ug/L		104	70 - 130

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 680-772705/5
Matrix: Water
Analysis Batch: 772705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3-Dichlorobenzene	50.0	55.9		ug/L		112	70 - 130
1,3-Dichloropropane	50.0	54.4		ug/L		109	70 - 130
1,4-Dichlorobenzene	50.0	52.5		ug/L		105	70 - 130
2,2-Dichloropropane	50.0	49.5		ug/L		99	70 - 130
2-Chlorotoluene	50.0	51.5		ug/L		103	70 - 130
2-Hexanone	250	189		ug/L		75	70 - 130
4-Chlorotoluene	50.0	50.7		ug/L		101	70 - 130
Acetone	250	172		ug/L		69	67 - 120
Benzene	50.0	52.7		ug/L		105	70 - 130
Bromobenzene	50.0	50.3		ug/L		101	70 - 130
Bromochloromethane	50.0	44.7		ug/L		89	70 - 130
Bromoform	50.0	39.9		ug/L		80	69 - 129
Bromodichloromethane	50.0	53.3		ug/L		107	70 - 130
Bromomethane	50.0	69.1		ug/L		138	28 - 192
Carbon disulfide	50.0	52.4		ug/L		105	70 - 130
Carbon tetrachloride	50.0	46.1		ug/L		92	70 - 130
Chlorobenzene	50.0	52.0		ug/L		104	70 - 130
Chloroethane	50.0	64.1		ug/L		128	31 - 213
Chloroform	50.0	52.7		ug/L		105	70 - 130
Chloromethane	50.0	50.3		ug/L		101	59 - 127
cis-1,2-Dichloroethene	50.0	56.4		ug/L		113	70 - 130
cis-1,3-Dichloropropene	50.0	54.2		ug/L		108	70 - 130
Dibromochloromethane	50.0	54.2		ug/L		108	70 - 130
Dibromomethane	50.0	53.2		ug/L		106	70 - 130
Ethylbenzene	50.0	51.3		ug/L		103	70 - 130
Hexachlorobutadiene	50.0	33.4	J	ug/L		67	70 - 130
Isopropylbenzene	50.0	52.8		ug/L		106	70 - 130
m-Xylene & p-Xylene	50.0	53.0		ug/L		106	70 - 130
Methyl tert-butyl ether	50.0	29.3	J	ug/L		59	70 - 130
Methylene Chloride	50.0	57.7		ug/L		115	70 - 130
Naphthalene	50.0	2.4	U J	ug/L		2	57 - 149
4-Methyl-2-pentanone (MIBK)	250	180		ug/L		72	68 - 120
2-Butanone (MEK)	250	124	J	ug/L		50	69 - 120
Ethylene Dibromide	50.0	54.6		ug/L		109	70 - 130
n-Butylbenzene	50.0	53.6		ug/L		107	70 - 130
N-Propylbenzene	50.0	53.0		ug/L		106	70 - 130
o-Xylene	50.0	53.3		ug/L		107	70 - 130
p-Isopropyltoluene	50.0	59.5		ug/L		119	70 - 130
sec-Butylbenzene	50.0	51.6		ug/L		103	70 - 130
Styrene	50.0	53.0		ug/L		106	70 - 130
tert-Butylbenzene	50.0	52.0		ug/L		104	70 - 130
Tetrachloroethene	50.0	49.4		ug/L		99	70 - 130
Toluene	50.0	54.8		ug/L		110	70 - 130
trans-1,2-Dichloroethene	50.0	55.7		ug/L		111	70 - 130
trans-1,3-Dichloropropene	50.0	52.8		ug/L		106	70 - 130
Trichloroethene	50.0	53.0		ug/L		106	70 - 130
Trichlorofluoromethane	50.0	152	L J	ug/L		304	63 - 142
Vinyl acetate	100	70.6		ug/L		71	67 - 135
Vinyl chloride	50.0	51.0		ug/L		102	66 - 129

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 680-772705/5
Matrix: Water
Analysis Batch: 772705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Xylenes, Total			100	106		ug/L		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*108*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*60 - 124*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*

Lab Sample ID: LCSD 680-772705/6
Matrix: Water
Analysis Batch: 772705

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			50.0	47.8		ug/L		96	70 - 130	3	30
1,1,1-Trichloroethane			50.0	49.0		ug/L		98	70 - 130	3	30
1,1,2,2-Tetrachloroethane			50.0	30.2	J	ug/L		60	70 - 130	2	30
1,1,2-Trichloroethane			50.0	55.9		ug/L		112	70 - 130	1	30
1,1-Dichloroethane			50.0	56.8		ug/L		114	70 - 130	1	30
1,1-Dichloroethene			50.0	55.9		ug/L		112	70 - 130	3	20
1,1-Dichloropropene			50.0	48.7		ug/L		97	70 - 130	1	20
1,2,3-Trichlorobenzene			50.0	0.918	I J	ug/L		2	61 - 141	2	30
1,2,3-Trichloropropane			50.0	38.6		ug/L		77	70 - 130	0	30
1,2,4-Trichlorobenzene			50.0	8.35	J	ug/L		17	70 - 130	7	30
1,2,4-Trimethylbenzene			50.0	50.1		ug/L		100	70 - 130	1	30
1,2-Dibromo-3-Chloropropane			50.0	5.21	J	ug/L		10	70 - 130	14	30
1,2-Dichlorobenzene			50.0	47.9		ug/L		96	70 - 130	0	30
1,2-Dichloroethane			50.0	46.0		ug/L		92	70 - 130	1	50
1,2-Dichloroethene, Total			100	111		ug/L		111	70 - 130	1	20
1,2-Dichloropropane			50.0	55.2		ug/L		110	70 - 130	0	20
1,3,5-Trimethylbenzene			50.0	50.5		ug/L		101	70 - 130	3	30
1,3-Dichlorobenzene			50.0	56.4		ug/L		113	70 - 130	1	30
1,3-Dichloropropane			50.0	54.1		ug/L		108	70 - 130	0	20
1,4-Dichlorobenzene			50.0	53.1		ug/L		106	70 - 130	1	30
2,2-Dichloropropane			50.0	48.3		ug/L		97	70 - 130	2	20
2-Chlorotoluene			50.0	50.2		ug/L		100	70 - 130	3	30
2-Hexanone			250	190		ug/L		76	70 - 130	1	20
4-Chlorotoluene			50.0	49.0		ug/L		98	70 - 130	3	30
Acetone			250	166	J	ug/L		66	67 - 120	4	30
Benzene			50.0	52.7		ug/L		105	70 - 130	0	30
Bromobenzene			50.0	48.9		ug/L		98	70 - 130	3	30
Bromochloromethane			50.0	43.2		ug/L		86	70 - 130	3	30
Bromoform			50.0	39.8		ug/L		80	69 - 129	0	30
Bromodichloromethane			50.0	52.8		ug/L		106	70 - 130	1	30
Bromomethane			50.0	67.0		ug/L		134	28 - 192	3	30
Carbon disulfide			50.0	52.1		ug/L		104	70 - 130	1	30
Carbon tetrachloride			50.0	45.6		ug/L		91	70 - 130	1	30
Chlorobenzene			50.0	51.7		ug/L		103	70 - 130	1	30
Chloroethane			50.0	58.3		ug/L		117	31 - 213	9	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 680-772705/6
Matrix: Water
Analysis Batch: 772705

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloroform	50.0	52.7		ug/L		105	70 - 130	0	30
Chloromethane	50.0	50.2		ug/L		100	59 - 127	0	30
cis-1,2-Dichloroethene	50.0	57.0		ug/L		114	70 - 130	1	30
cis-1,3-Dichloropropene	50.0	53.4		ug/L		107	70 - 130	2	20
Dibromochloromethane	50.0	52.9		ug/L		106	70 - 130	2	30
Dibromomethane	50.0	52.4		ug/L		105	70 - 130	1	30
Ethylbenzene	50.0	50.4		ug/L		101	70 - 130	2	20
Hexachlorobutadiene	50.0	33.0	J	ug/L		66	70 - 130	1	20
Isopropylbenzene	50.0	52.7		ug/L		105	70 - 130	0	30
m-Xylene & p-Xylene	50.0	52.9		ug/L		106	70 - 130	0	30
Methyl tert-butyl ether	50.0	28.6	J	ug/L		57	70 - 130	2	30
Methylene Chloride	50.0	57.8		ug/L		116	70 - 130	0	30
Naphthalene	50.0	2.4	U J	ug/L		2	57 - 149	7	30
4-Methyl-2-pentanone (MIBK)	250	181		ug/L		72	68 - 120	1	30
2-Butanone (MEK)	250	127	J	ug/L		51	69 - 120	2	30
Ethylene Dibromide	50.0	54.4		ug/L		109	70 - 130	0	30
n-Butylbenzene	50.0	53.8		ug/L		108	70 - 130	0	30
N-Propylbenzene	50.0	51.6		ug/L		103	70 - 130	3	30
o-Xylene	50.0	53.3		ug/L		107	70 - 130	0	30
p-Isopropyltoluene	50.0	58.9		ug/L		118	70 - 130	1	30
sec-Butylbenzene	50.0	50.0		ug/L		100	70 - 130	3	30
Styrene	50.0	51.5		ug/L		103	70 - 130	3	30
tert-Butylbenzene	50.0	50.8		ug/L		102	70 - 130	2	30
Tetrachloroethene	50.0	48.5		ug/L		97	70 - 130	2	30
Toluene	50.0	54.8		ug/L		110	70 - 130	0	30
trans-1,2-Dichloroethene	50.0	54.5		ug/L		109	70 - 130	2	30
trans-1,3-Dichloropropene	50.0	53.0		ug/L		106	70 - 130	0	30
Trichloroethene	50.0	52.6		ug/L		105	70 - 130	1	30
Trichlorofluoromethane	50.0	148	L J	ug/L		297	63 - 142	2	30
Vinyl acetate	100	66.1	J	ug/L		66	67 - 135	7	30
Vinyl chloride	50.0	50.6		ug/L		101	66 - 129	1	30
Xylenes, Total	100	106		ug/L		106	70 - 130	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*108*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 124*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-771280/1-A
Matrix: Water
Analysis Batch: 771613

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 771280

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.6	U	10	4.6	ug/L		04/04/23 10:33	04/05/23 18:27	1
2,4,5-Trichlorophenol	3.3	U	10	3.3	ug/L		04/04/23 10:33	04/05/23 18:27	1
2,4,6-Trichlorophenol	2.2	U	10	2.2	ug/L		04/04/23 10:33	04/05/23 18:27	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-771280/1-A
Matrix: Water
Analysis Batch: 771613

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 771280

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	3.7	U	10	3.7	ug/L		04/04/23 10:33	04/05/23 18:27	1
2,4-Dimethylphenol	3.0	U	10	3.0	ug/L		04/04/23 10:33	04/05/23 18:27	1
2,4-Dinitrophenol	16	U	50	16	ug/L		04/04/23 10:33	04/05/23 18:27	1
2,4-Dinitrotoluene	2.3	U	10	2.3	ug/L		04/04/23 10:33	04/05/23 18:27	1
2,6-Dinitrotoluene	2.8	U	10	2.8	ug/L		04/04/23 10:33	04/05/23 18:27	1
2-Chloronaphthalene	4.8	U	10	4.8	ug/L		04/04/23 10:33	04/05/23 18:27	1
2-Chlorophenol	3.2	U	10	3.2	ug/L		04/04/23 10:33	04/05/23 18:27	1
2-Methylnaphthalene	4.6	U	10	4.6	ug/L		04/04/23 10:33	04/05/23 18:27	1
2-Methylphenol	1.8	U	10	1.8	ug/L		04/04/23 10:33	04/05/23 18:27	1
2-Nitroaniline	2.9	U	50	2.9	ug/L		04/04/23 10:33	04/05/23 18:27	1
2-Nitrophenol	3.9	U	10	3.9	ug/L		04/04/23 10:33	04/05/23 18:27	1
3 & 4 Methylphenol	1.4	U	10	1.4	ug/L		04/04/23 10:33	04/05/23 18:27	1
3,3'-Dichlorobenzidine	10	U	60	10	ug/L		04/04/23 10:33	04/05/23 18:27	1
3-Nitroaniline	3.0	U	50	3.0	ug/L		04/04/23 10:33	04/05/23 18:27	1
4,6-Dinitro-2-methylphenol	5.3	U	50	5.3	ug/L		04/04/23 10:33	04/05/23 18:27	1
4-Bromophenyl phenyl ether	4.7	U	10	4.7	ug/L		04/04/23 10:33	04/05/23 18:27	1
4-Chloro-3-methylphenol	2.5	U	10	2.5	ug/L		04/04/23 10:33	04/05/23 18:27	1
4-Chloroaniline	1.0	U	20	1.0	ug/L		04/04/23 10:33	04/05/23 18:27	1
4-Chlorophenyl phenyl ether	5.3	U	10	5.3	ug/L		04/04/23 10:33	04/05/23 18:27	1
4-Nitroaniline	3.0	U	50	3.0	ug/L		04/04/23 10:33	04/05/23 18:27	1
4-Nitrophenol	8.1	U	50	8.1	ug/L		04/04/23 10:33	04/05/23 18:27	1
Acetophenone	2.2	U	10	2.2	ug/L		04/04/23 10:33	04/05/23 18:27	1
Atrazine	2.2	U	10	2.2	ug/L		04/04/23 10:33	04/05/23 18:27	1
Benzaldehyde	4.8	U	10	4.8	ug/L		04/04/23 10:33	04/05/23 18:27	1
bis (2-chloroisopropyl) ether	3.1	U	10	3.1	ug/L		04/04/23 10:33	04/05/23 18:27	1
Bis(2-chloroethoxy)methane	1.8	U	10	1.8	ug/L		04/04/23 10:33	04/05/23 18:27	1
Bis(2-chloroethyl)ether	3.6	U	10	3.6	ug/L		04/04/23 10:33	04/05/23 18:27	1
Bis(2-ethylhexyl) phthalate	3.0	U	10	3.0	ug/L		04/04/23 10:33	04/05/23 18:27	1
Butyl benzyl phthalate	2.8	U	10	2.8	ug/L		04/04/23 10:33	04/05/23 18:27	1
Caprolactam	2.8	U	10	2.8	ug/L		04/04/23 10:33	04/05/23 18:27	1
Carbazole	1.8	U	10	1.8	ug/L		04/04/23 10:33	04/05/23 18:27	1
Dibenzofuran	1.9	U	10	1.9	ug/L		04/04/23 10:33	04/05/23 18:27	1
Diethyl phthalate	2.2	U	10	2.2	ug/L		04/04/23 10:33	04/05/23 18:27	1
Dimethyl phthalate	2.1	U	10	2.1	ug/L		04/04/23 10:33	04/05/23 18:27	1
Di-n-butyl phthalate	2.3	U	10	2.3	ug/L		04/04/23 10:33	04/05/23 18:27	1
Di-n-octyl phthalate	2.8	U	10	2.8	ug/L		04/04/23 10:33	04/05/23 18:27	1
Hexachlorobenzene	1.6	U	10	1.6	ug/L		04/04/23 10:33	04/05/23 18:27	1
Hexachlorobutadiene	4.0	U	10	4.0	ug/L		04/04/23 10:33	04/05/23 18:27	1
Hexachlorocyclopentadiene	3.5	U	10	3.5	ug/L		04/04/23 10:33	04/05/23 18:27	1
Hexachloroethane	3.6	U	10	3.6	ug/L		04/04/23 10:33	04/05/23 18:27	1
Isophorone	2.0	U	10	2.0	ug/L		04/04/23 10:33	04/05/23 18:27	1
Nitrobenzene	3.5	U	10	3.5	ug/L		04/04/23 10:33	04/05/23 18:27	1
N-Nitrosodi-n-propylamine	2.4	U	10	2.4	ug/L		04/04/23 10:33	04/05/23 18:27	1
N-Nitrosodiphenylamine	2.9	U	10	2.9	ug/L		04/04/23 10:33	04/05/23 18:27	1
Pentachlorophenol	9.9	U	50	9.9	ug/L		04/04/23 10:33	04/05/23 18:27	1
Phenol	1.5	U	10	1.5	ug/L		04/04/23 10:33	04/05/23 18:27	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-771280/1-A
Matrix: Water
Analysis Batch: 771613

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 771280

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	88		30 - 130	04/04/23 10:33	04/05/23 18:27	1
2-Fluorobiphenyl	87		25 - 130	04/04/23 10:33	04/05/23 18:27	1
2-Fluorophenol (Surr)	46		10 - 130	04/04/23 10:33	04/05/23 18:27	1
Nitrobenzene-d5	83		30 - 130	04/04/23 10:33	04/05/23 18:27	1
Phenol-d5 (Surr)	30		10 - 130	04/04/23 10:33	04/05/23 18:27	1
Terphenyl-d14	88		35 - 131	04/04/23 10:33	04/05/23 18:27	1

Lab Sample ID: LCS 680-771280/2-A
Matrix: Water
Analysis Batch: 771613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 771280

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	200	190		ug/L		95	26 - 130
2,4,5-Trichlorophenol	200	194		ug/L		97	26 - 130
2,4,6-Trichlorophenol	200	190		ug/L		95	28 - 130
2,4-Dichlorophenol	200	176		ug/L		88	27 - 130
2,4-Dimethylphenol	200	161		ug/L		80	26 - 130
2,4-Dinitrophenol	400	413		ug/L		103	23 - 130
2,4-Dinitrotoluene	200	200		ug/L		100	37 - 130
2,6-Dinitrotoluene	200	198		ug/L		99	35 - 130
2-Chloronaphthalene	200	187		ug/L		93	25 - 130
2-Chlorophenol	200	162		ug/L		81	24 - 130
2-Methylnaphthalene	200	200		ug/L		100	22 - 130
2-Methylphenol	200	141		ug/L		70	21 - 130
2-Nitroaniline	200	208		ug/L		104	36 - 130
2-Nitrophenol	200	174		ug/L		87	27 - 130
3 & 4 Methylphenol	200	126		ug/L		63	19 - 130
3,3'-Dichlorobenzidine	200	219		ug/L		109	35 - 130
3-Nitroaniline	200	179		ug/L		89	14 - 130
4,6-Dinitro-2-methylphenol	400	420		ug/L		105	38 - 130
4-Bromophenyl phenyl ether	200	192		ug/L		96	34 - 130
4-Chloro-3-methylphenol	200	171		ug/L		85	28 - 130
4-Chloroaniline	200	168		ug/L		84	10 - 130
4-Chlorophenyl phenyl ether	200	192		ug/L		96	31 - 130
4-Nitroaniline	200	199		ug/L		100	36 - 130
4-Nitrophenol	400	165		ug/L		41	10 - 130
Acetophenone	200	189		ug/L		94	28 - 130
Atrazine	200	201		ug/L		101	10 - 142
Benzaldehyde	200	203		ug/L		102	22 - 130
bis (2-chloroisopropyl) ether	200	183		ug/L		92	33 - 130
Bis(2-chloroethoxy)methane	200	181		ug/L		90	31 - 130
Bis(2-chloroethyl)ether	200	178		ug/L		89	30 - 130
Bis(2-ethylhexyl) phthalate	200	215		ug/L		108	33 - 138
Butyl benzyl phthalate	200	216		ug/L		108	35 - 135
Caprolactam	200	57.6		ug/L		29	10 - 130
Carbazole	200	196		ug/L		98	36 - 130
Dibenzofuran	200	190		ug/L		95	31 - 130
Diethyl phthalate	200	204		ug/L		102	36 - 130

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-771280/2-A
Matrix: Water
Analysis Batch: 771613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 771280

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dimethyl phthalate	200	198		ug/L		99	34 - 130
Di-n-butyl phthalate	200	215		ug/L		107	35 - 130
Di-n-octyl phthalate	200	225		ug/L		113	34 - 139
Hexachlorobenzene	200	191		ug/L		96	30 - 130
Hexachlorobutadiene	200	185		ug/L		92	12 - 130
Hexachlorocyclopentadiene	200	186		ug/L		93	15 - 130
Hexachloroethane	200	174		ug/L		87	12 - 130
Isophorone	200	187		ug/L		94	27 - 130
Nitrobenzene	200	187		ug/L		94	32 - 130
N-Nitrosodi-n-propylamine	200	182		ug/L		91	33 - 130
N-Nitrosodiphenylamine	200	191		ug/L		96	35 - 130
Pentachlorophenol	400	477		ug/L		119	24 - 130
Phenol	200	80.1		ug/L		40	10 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*80*		*30 - 130*
2-Fluorobiphenyl	*78*		*25 - 130*
2-Fluorophenol (Surr)	*43*		*10 - 130*
Nitrobenzene-d5	*78*		*30 - 130*
Phenol-d5 (Surr)	*28*		*10 - 130*
Terphenyl-d14	*79*		*35 - 131*

Method: 8270E LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-771413/2-A
Matrix: Water
Analysis Batch: 771809

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 771413

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.40	U	0.80	0.40	ug/L		04/04/23 19:50	04/11/23 21:08	1
2-Methylnaphthalene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Acenaphthene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Acenaphthylene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Anthracene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Benzo[a]anthracene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Benzo[a]pyrene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Benzo[b]fluoranthene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Benzo[g,h,i]perylene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Benzo[k]fluoranthene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Chrysene	0.045	U	0.20	0.045	ug/L		04/04/23 19:50	04/11/23 21:08	1
Dibenz(a,h)anthracene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Fluoranthene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Fluorene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Indeno[1,2,3-cd]pyrene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Naphthalene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Phenanthrene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1
Pyrene	0.10	U	0.20	0.10	ug/L		04/04/23 19:50	04/11/23 21:08	1

Method: 8270E LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-771413/2-A
Matrix: Water
Analysis Batch: 771809

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 771413

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	70		31 - 107	04/04/23 19:50	04/11/23 21:08	1
Nitrobenzene-d5	85		37 - 103	04/04/23 19:50	04/11/23 21:08	1
Terphenyl-d14	93		22 - 121	04/04/23 19:50	04/11/23 21:08	1

Lab Sample ID: LCS 680-771413/3-A
Matrix: Water
Analysis Batch: 771809

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 771413

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	10.0	5.34		ug/L		53	39 - 130
2-Methylnaphthalene	10.0	5.73		ug/L		57	33 - 130
Acenaphthene	10.0	5.79		ug/L		58	41 - 130
Acenaphthylene	10.0	6.54		ug/L		65	37 - 130
Anthracene	10.0	7.98		ug/L		80	48 - 130
Benzo[a]anthracene	10.0	7.76		ug/L		78	52 - 130
Benzo[a]pyrene	10.0	8.03		ug/L		80	44 - 130
Benzo[b]fluoranthene	10.0	8.29		ug/L		83	44 - 130
Benzo[g,h,i]perylene	10.0	8.23		ug/L		82	31 - 130
Benzo[k]fluoranthene	10.0	7.62		ug/L		76	39 - 131
Chrysene	10.0	8.14		ug/L		81	47 - 130
Dibenz(a,h)anthracene	10.0	8.10		ug/L		81	36 - 130
Fluoranthene	10.0	9.10		ug/L		91	50 - 130
Fluorene	10.0	6.46		ug/L		65	43 - 130
Indeno[1,2,3-cd]pyrene	10.0	8.45		ug/L		85	30 - 130
Naphthalene	10.0	5.29		ug/L		53	40 - 130
Phenanthrene	10.0	7.52		ug/L		75	49 - 130
Pyrene	10.0	8.85		ug/L		89	45 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	66		31 - 107
Nitrobenzene-d5	76		37 - 103
Terphenyl-d14	86		22 - 121

Lab Sample ID: LCSD 680-771413/4-A
Matrix: Water
Analysis Batch: 771809

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 771413

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	10.0	5.17		ug/L		52	39 - 130	3	30
2-Methylnaphthalene	10.0	5.50		ug/L		55	33 - 130	4	30
Acenaphthene	10.0	5.56		ug/L		56	41 - 130	4	20
Acenaphthylene	10.0	6.16		ug/L		62	37 - 130	6	30
Anthracene	10.0	7.74		ug/L		77	48 - 130	3	20
Benzo[a]anthracene	10.0	7.71		ug/L		77	52 - 130	1	20
Benzo[a]pyrene	10.0	7.92		ug/L		79	44 - 130	1	30
Benzo[b]fluoranthene	10.0	7.73		ug/L		77	44 - 130	7	40
Benzo[g,h,i]perylene	10.0	8.23		ug/L		82	31 - 130	0	40
Benzo[k]fluoranthene	10.0	6.64		ug/L		66	39 - 131	14	30

Method: 8270E LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCSD 680-771413/4-A
Matrix: Water
Analysis Batch: 771809

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 771413

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chrysene			10.0	8.22		ug/L		82	47 - 130	1	30
Dibenz(a,h)anthracene			10.0	8.14		ug/L		81	36 - 130	0	30
Fluoranthene			10.0	8.72		ug/L		87	50 - 130	4	20
Fluorene			10.0	6.14		ug/L		61	43 - 130	5	20
Indeno[1,2,3-cd]pyrene			10.0	8.52		ug/L		85	30 - 130	1	30
Naphthalene			10.0	5.18		ug/L		52	40 - 130	2	30
Phenanthrene			10.0	7.32		ug/L		73	49 - 130	3	20
Pyrene			10.0	8.82		ug/L		88	45 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*31 - 107*
Nitrobenzene-d5	*71*		*37 - 103*
Terphenyl-d14	*79*		*22 - 121*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 680-771268/1-A
Matrix: Water
Analysis Batch: 771873

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 771268

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.6	U	10	6.6	ug/L		04/04/23 10:05	04/06/23 20:33	1

Lab Sample ID: LCS 680-771268/2-A
Matrix: Water
Analysis Batch: 771873

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 771268

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lead			505	519		ug/L		103	80 - 120		

QC Association Summary

Client: Kimley-Horn & Associates Inc.
Project/Site: Jefferson Pilot

Job ID: 680-232852-1

GC/MS VOA

Analysis Batch: 772705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232852-1	MW-1	Total/NA	Water	8260D	
MB 680-772705/9	Method Blank	Total/NA	Water	8260D	
LCS 680-772705/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 680-772705/6	Lab Control Sample Dup	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 771280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232852-1	MW-1	Total/NA	Water	3510C	
MB 680-771280/1-A	Method Blank	Total/NA	Water	3510C	
LCS 680-771280/2-A	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 771413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232852-1	MW-1	Total/NA	Water	3520C	
MB 680-771413/2-A	Method Blank	Total/NA	Water	3520C	
LCS 680-771413/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 680-771413/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 771613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232852-1	MW-1	Total/NA	Water	8270E	771280
MB 680-771280/1-A	Method Blank	Total/NA	Water	8270E	771280
LCS 680-771280/2-A	Lab Control Sample	Total/NA	Water	8270E	771280

Analysis Batch: 771809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232852-1	MW-1	Total/NA	Water	8270E LL	771413
MB 680-771413/2-A	Method Blank	Total/NA	Water	8270E LL	771413
LCS 680-771413/3-A	Lab Control Sample	Total/NA	Water	8270E LL	771413
LCSD 680-771413/4-A	Lab Control Sample Dup	Total/NA	Water	8270E LL	771413

Metals

Prep Batch: 771268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232852-1	MW-1	Total Recoverable	Water	3005A	
MB 680-771268/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-771268/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 771873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232852-1	MW-1	Total Recoverable	Water	6010D	771268
MB 680-771268/1-A	Method Blank	Total Recoverable	Water	6010D	771268
LCS 680-771268/2-A	Lab Control Sample	Total Recoverable	Water	6010D	771268

Lab Chronicle

Client: Kimley-Horn & Associates Inc.
Job ID: 680-232852-1
Project/Site: Jefferson Pilot

Client Sample ID: MW-1
Lab Sample ID: 680-232852-1
Date Collected: 03/28/23 18:03
Matrix: Water
Date Received: 03/31/23 17:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	772705	04/11/23 17:23	EMA	EET SAV
	Instrument ID: CMSAD									
Total/NA	Prep	3510C			500 mL	1 mL	771280	04/04/23 10:33	LA	EET SAV
Total/NA	Analysis	8270E		1	1 mL	1 mL	771613	04/06/23 00:26	OK	EET SAV
	Instrument ID: CMSN									
Total/NA	Prep	3520C			1013.3 mL	1 mL	771413	04/04/23 19:50	IR	EET SAV
Total/NA	Analysis	8270E LL		1			771809	04/11/23 22:17	NED	EET SAV
	Instrument ID: CMSAE									
Total Recoverable	Prep	3005A			25 mL	25 mL	771268	04/04/23 10:05	RR	EET SAV
Total Recoverable	Analysis	6010D		1			771873	04/06/23 20:53	BCB	EET SAV
	Instrument ID: ICPH									

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: Kimley-Horn & Associates Inc. Job ID: 680-232852-1
Project/Site: Jefferson Pilot

Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
North Carolina (WW/SW)	State	269	12-31-23

Method Summary

Client: Kimley-Horn & Associates Inc.
Project/Site: Jefferson Pilot

Job ID: 680-232852-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET SAV
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET SAV
8270E LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	EET SAV
6010D	Metals (ICP)	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET SAV
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET SAV
5030B	Purge and Trap	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone. 912-354-7858 Fax: 912-352-0165

Chain of Custody Record

eurofins

Client Information	Sampler: Austin Breitenstein	Lab PM: Rea, Todd	Carrier Tracking No(s):	COC No: 670-6422-2838.1
Client Contact: Mr Matt Fitzpatrick	Phone: 904 837 0844	E-Mail: Todd Rea@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: Kimley-Horn & Associates Inc.	PWSID:			Job #:
Address: 12740 Gran Bay Parkway West Suite 2350	Due Date Requested:			
City: Jacksonville	TAT Requested (days):			
State, Zip: FL, 32258	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: Matt.Fitzpatrick@kimley-horn com	WO #:			
Project Name: Jefferson Pilot	Project #: 67002405			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - VOCs	8270E - SVOCs	6010D - Lead	8270E_LL - PAHs	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	D	N		
MW-1	3/28	1803	G	Water			✓	✓	✓	✓		
				Water								

680-232852 Chain of Custody

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Austin Breitenstein	3/30	KHA	Gianna Di Cola	15:55 3-30-23	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 4.6/4.6

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Kimley-Horn & Associates Inc.

Job Number: 680-232852-1

Login Number: 232852

List Source: Eurofins Savannah

List Number: 1

Creator: Johnson, Corey M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Matt Fitzpatrick
Kimley-Horn & Associates Inc.
12740 Gran Bay Parkway West
Suite 2350
Jacksonville, Florida 32258

Generated 4/17/2023 2:29:47 PM

JOB DESCRIPTION

Jefferson Pilot

JOB NUMBER

670-17451-1

Eurofins Orlando
481 Newburyport Avenue
Altamonte Springs FL 32701

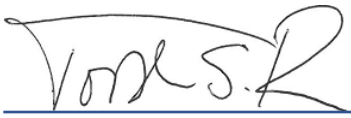
See page two for job notes and contact information.

Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Authorized for release by
Todd Rea, Project Manager
Todd.Rea@et.eurofinsus.com
(407)339-5984

Table of Contents

Definitions/Glossary

Client: Kimley-Horn & Associates Inc. Job ID: 670-17451-1
Project/Site: Jefferson Pilot

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J	Estimated value; value may not be accurate.
U	Indicates that the compound was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 670-17451-1

Laboratory: Eurofins Orlando

Narrative

Job Narrative
670-17451-1

Receipt
The samples were received on 4/4/2023 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Air - GC/MS VOA
Method TO15_LL_PF: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by Eurofins TestAmerica Knoxville.

Method TO15_LL_PF: The laboratory control sample (LCS) for analytical batch 140-72219 recovered outside control limits for the following analytes: 1,3,5-Trimethylbenzene and Styrene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Kimley-Horn & Associates Inc.
Project/Site: Jefferson Pilot

Job ID: 670-17451-1

Client Sample ID: VEW-1 — Lab Sample ID: 670-17451-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	11000		160	32	ppb v/v	41.13		TO 15 LL	Total/NA

Client Sample ID: VEW-2 — Lab Sample ID: 670-17451-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	15	I	78	13	ppb v/v	39.1		TO 15 LL	Total/NA
Ethylbenzene	13	I	78	13	ppb v/v	39.1		TO 15 LL	Total/NA
Toluene	16000		120	22	ppb v/v	39.1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Kimley-Horn & Associates Inc.
Project/Site: Jefferson Pilot

Job ID: 670-17451-1

Client Sample ID: VEW-1
Date Collected: 03/29/23 12:15
Date Received: 04/04/23 09:45
Sample Container: Summa Canister 6L

Lab Sample ID: 670-17451-1
Matrix: Air

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	40	U	110	40	ppb v/v			04/14/23 19:51	41.13
1,1,2,2-Tetrachloroethane	19	U	110	19	ppb v/v			04/14/23 19:51	41.13
1,1,2-Trichloro-1,2,2-trifluoroethane	14	U	110	14	ppb v/v			04/14/23 19:51	41.13
1,1,2-Trichloroethane	21	U	110	21	ppb v/v			04/14/23 19:51	41.13
1,1-Dichloroethane	15	U	110	15	ppb v/v			04/14/23 19:51	41.13
1,1-Dichloroethene	18	U	110	18	ppb v/v			04/14/23 19:51	41.13
1,2,4-Trichlorobenzene	48	U	550	48	ppb v/v			04/14/23 19:51	41.13
1,2,4-Trimethylbenzene	27	U	110	27	ppb v/v			04/14/23 19:51	41.13
1,2-Dichloro-1,1,2,2-tetrafluoroethane	16	U	110	16	ppb v/v			04/14/23 19:51	41.13
1,2-Dichlorobenzene	43	U	110	43	ppb v/v			04/14/23 19:51	41.13
1,2-Dichloroethane	14	U	110	14	ppb v/v			04/14/23 19:51	41.13
1,2-Dichloropropane	14	U	110	14	ppb v/v			04/14/23 19:51	41.13
1,3,5-Trimethylbenzene	89	U J	220	89	ppb v/v			04/14/23 19:51	41.13
1,3-Dichlorobenzene	22	U	110	22	ppb v/v			04/14/23 19:51	41.13
1,4-Dichlorobenzene	22	U	110	22	ppb v/v			04/14/23 19:51	41.13
Benzene	18	U	110	18	ppb v/v			04/14/23 19:51	41.13
Benzyl chloride	52	U	220	52	ppb v/v			04/14/23 19:51	41.13
Bromomethane	30	U	110	30	ppb v/v			04/14/23 19:51	41.13
Carbon tetrachloride	18	U	110	18	ppb v/v			04/14/23 19:51	41.13
Chlorobenzene	30	U	110	30	ppb v/v			04/14/23 19:51	41.13
Chloroethane	44	U	110	44	ppb v/v			04/14/23 19:51	41.13
Chloroform	19	U	110	19	ppb v/v			04/14/23 19:51	41.13
Chloromethane	90	U	270	90	ppb v/v			04/14/23 19:51	41.13
cis-1,2-Dichloroethene	14	U	110	14	ppb v/v			04/14/23 19:51	41.13
cis-1,3-Dichloropropene	26	U	110	26	ppb v/v			04/14/23 19:51	41.13
Dichlorodifluoromethane	19	U	110	19	ppb v/v			04/14/23 19:51	41.13
Ethylbenzene	18	U	110	18	ppb v/v			04/14/23 19:51	41.13
Ethylene Dibromide	16	U	110	16	ppb v/v			04/14/23 19:51	41.13
Hexachlorobutadiene	44	U	550	44	ppb v/v			04/14/23 19:51	41.13
Methylene Chloride	190	U	550	190	ppb v/v			04/14/23 19:51	41.13
m-Xylene & p-Xylene	40	U	110	40	ppb v/v			04/14/23 19:51	41.13
o-Xylene	21	U	110	21	ppb v/v			04/14/23 19:51	41.13
Styrene	33	U J	110	33	ppb v/v			04/14/23 19:51	41.13
Tetrachloroethene	16	U	110	16	ppb v/v			04/14/23 19:51	41.13
Toluene	**11000**		160	32	ppb v/v			04/14/23 19:51	41.13
trans-1,3-Dichloropropene	27	U	110	27	ppb v/v			04/14/23 19:51	41.13
Trichloroethene	18	U	55	18	ppb v/v			04/14/23 19:51	41.13
Trichlorofluoromethane	15	U	110	15	ppb v/v			04/14/23 19:51	41.13
Vinyl chloride	36	U	55	36	ppb v/v			04/14/23 19:51	41.13
1,4-Dioxane	41	U	270	41	ppb v/v			04/14/23 19:51	41.13
2-Butanone (MEK)	100	U	550	100	ppb v/v			04/14/23 19:51	41.13
4-Methyl-2-pentanone (MIBK)	74	U	270	74	ppb v/v			04/14/23 19:51	41.13
Acetone	780	U	2700	780	ppb v/v			04/14/23 19:51	41.13
Bromodichloromethane	25	U	110	25	ppb v/v			04/14/23 19:51	41.13
Bromoform	37	U	110	37	ppb v/v			04/14/23 19:51	41.13
Carbon disulfide	48	U	270	48	ppb v/v			04/14/23 19:51	41.13
Cyclohexane	51	U	270	51	ppb v/v			04/14/23 19:51	41.13
Dibromochloromethane	19	U	110	19	ppb v/v			04/14/23 19:51	41.13

Client: Kimley-Horn & Associates Inc.
Job ID: 670-17451-1
Project/Site: Jefferson Pilot

Client Sample ID: VEW-1
Lab Sample ID: 670-17451-1

Date Collected: 03/29/23 12:15
Matrix: Air
Date Received: 04/04/23 09:45
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexane	34	U	270	34	ppb v/v			04/14/23 19:51	41.13
Isopropyl alcohol	130	U	1100	130	ppb v/v			04/14/23 19:51	41.13
Isopropylbenzene	23	U	220	23	ppb v/v			04/14/23 19:51	41.13
Methyl tert-butyl ether	71	U	550	71	ppb v/v			04/14/23 19:51	41.13
Naphthalene	53	U	270	53	ppb v/v			04/14/23 19:51	41.13
Tetrahydrofuran	30	U	550	30	ppb v/v			04/14/23 19:51	41.13
trans-1,2-Dichloroethene	18	U	110	18	ppb v/v			04/14/23 19:51	41.13
Vinyl acetate	38	U	550	38	ppb v/v			04/14/23 19:51	41.13
Vinyl bromide	27	U	110	27	ppb v/v			04/14/23 19:51	41.13

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*		*04/14/23 19:51*	*41.13*

Client Sample ID: VEW-2
Lab Sample ID: 670-17451-2

Date Collected: 03/29/23 12:37
Matrix: Air
Date Received: 04/04/23 09:45
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	28	U	78	28	ppb v/v			04/12/23 19:15	39.1
1,1,2,2-Tetrachloroethane	14	U	78	14	ppb v/v			04/12/23 19:15	39.1
1,1,2-Trichloro-1,2,2-trifluoroethane	9.8	U	78	9.8	ppb v/v			04/12/23 19:15	39.1
1,1,2-Trichloroethane	15	U	78	15	ppb v/v			04/12/23 19:15	39.1
1,1-Dichloroethane	11	U	78	11	ppb v/v			04/12/23 19:15	39.1
1,1-Dichloroethene	13	U	78	13	ppb v/v			04/12/23 19:15	39.1
1,2,4-Trichlorobenzene	34	U	390	34	ppb v/v			04/12/23 19:15	39.1
1,2,4-Trimethylbenzene	20	U	78	20	ppb v/v			04/12/23 19:15	39.1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	12	U	78	12	ppb v/v			04/12/23 19:15	39.1
1,2-Dichlorobenzene	30	U	78	30	ppb v/v			04/12/23 19:15	39.1
1,2-Dichloroethane	9.8	U	78	9.8	ppb v/v			04/12/23 19:15	39.1
1,2-Dichloropropane	9.8	U	78	9.8	ppb v/v			04/12/23 19:15	39.1
1,3,5-Trimethylbenzene	64	U	160	64	ppb v/v			04/12/23 19:15	39.1
1,3-Dichlorobenzene	16	U	78	16	ppb v/v			04/12/23 19:15	39.1
1,4-Dichlorobenzene	16	U	78	16	ppb v/v			04/12/23 19:15	39.1
Benzene	**15**	**I**	78	13	ppb v/v			04/12/23 19:15	39.1
Benzyl chloride	37	U	160	37	ppb v/v			04/12/23 19:15	39.1
Bromomethane	22	U	78	22	ppb v/v			04/12/23 19:15	39.1
Carbon tetrachloride	13	U	78	13	ppb v/v			04/12/23 19:15	39.1
Chlorobenzene	22	U	78	22	ppb v/v			04/12/23 19:15	39.1
Chloroethane	31	U	78	31	ppb v/v			04/12/23 19:15	39.1
Chloroform	14	U	78	14	ppb v/v			04/12/23 19:15	39.1
Chloromethane	65	U	200	65	ppb v/v			04/12/23 19:15	39.1
cis-1,2-Dichloroethene	9.8	U	78	9.8	ppb v/v			04/12/23 19:15	39.1
cis-1,3-Dichloropropene	19	U	78	19	ppb v/v			04/12/23 19:15	39.1
Dichlorodifluoromethane	14	U	78	14	ppb v/v			04/12/23 19:15	39.1
Ethylbenzene	**13**	**I**	78	13	ppb v/v			04/12/23 19:15	39.1
Ethylene Dibromide	12	U	78	12	ppb v/v			04/12/23 19:15	39.1
Hexachlorobutadiene	31	U	390	31	ppb v/v			04/12/23 19:15	39.1

Client: Kimley-Horn & Associates Inc.
Job ID: 670-17451-1
Project/Site: Jefferson Pilot

Client Sample ID: VEW-2
Lab Sample ID: 670-17451-2
Date Collected: 03/29/23 12:37
Matrix: Air
Date Received: 04/04/23 09:45
Sample Container: Summa Canister 6L

Method: EPA TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	140	U	390	140	ppb v/v			04/12/23 19:15	39.1
m-Xylene & p-Xylene	28	U	78	28	ppb v/v			04/12/23 19:15	39.1
o-Xylene	15	U	78	15	ppb v/v			04/12/23 19:15	39.1
Styrene	23	U	78	23	ppb v/v			04/12/23 19:15	39.1
Tetrachloroethene	12	U	78	12	ppb v/v			04/12/23 19:15	39.1
Toluene	**16000**		120	22	ppb v/v			04/12/23 19:15	39.1
trans-1,3-Dichloropropene	20	U	78	20	ppb v/v			04/12/23 19:15	39.1
Trichloroethene	13	U	39	13	ppb v/v			04/12/23 19:15	39.1
Trichlorofluoromethane	11	U	78	11	ppb v/v			04/12/23 19:15	39.1
Vinyl chloride	25	U	39	25	ppb v/v			04/12/23 19:15	39.1
1,4-Dioxane	29	U	200	29	ppb v/v			04/12/23 19:15	39.1
2-Butanone (MEK)	71	U	390	71	ppb v/v			04/12/23 19:15	39.1
4-Methyl-2-pentanone (MIBK)	53	U	200	53	ppb v/v			04/12/23 19:15	39.1
Acetone	560	U	2000	560	ppb v/v			04/12/23 19:15	39.1
Bromodichloromethane	18	U	78	18	ppb v/v			04/12/23 19:15	39.1
Bromoform	26	U	78	26	ppb v/v			04/12/23 19:15	39.1
Carbon disulfide	34	U	200	34	ppb v/v			04/12/23 19:15	39.1
Cyclohexane	36	U	200	36	ppb v/v			04/12/23 19:15	39.1
Dibromochloromethane	14	U	78	14	ppb v/v			04/12/23 19:15	39.1
Hexane	24	U	200	24	ppb v/v			04/12/23 19:15	39.1
Isopropyl alcohol	96	U	780	96	ppb v/v			04/12/23 19:15	39.1
Isopropylbenzene	17	U	160	17	ppb v/v			04/12/23 19:15	39.1
Methyl tert-butyl ether	51	U	390	51	ppb v/v			04/12/23 19:15	39.1
Naphthalene	38	U	200	38	ppb v/v			04/12/23 19:15	39.1
Tetrahydrofuran	22	U	390	22	ppb v/v			04/12/23 19:15	39.1
trans-1,2-Dichloroethene	13	U	78	13	ppb v/v			04/12/23 19:15	39.1
Vinyl acetate	27	U	390	27	ppb v/v			04/12/23 19:15	39.1
Vinyl bromide	20	U	78	20	ppb v/v			04/12/23 19:15	39.1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*04/12/23 19:15*	*39.1*

Surrogate Summary

Client: Kimley-Horn & Associates Inc.
Project/Site: Jefferson Pilot

Job ID: 670-17451-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB								
Lab Sample ID	**Client Sample ID**	**(60-140)**								
670-17451-1	VEW-1	97								
670-17451-2	VEW-2	96								
LCS 140-72172/1002	Lab Control Sample	102								
LCS 140-72219/1002	Lab Control Sample	112								
MB 140-72172/7	Method Blank	92								
MB 140-72219/5	Method Blank	94								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Client: Kimley-Horn & Associates Inc.
Project/Site: Jefferson Pilot

Job ID: 670-17451-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 140-72172/7
Matrix: Air
Analysis Batch: 72172

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.029	U	0.080	0.029	ppb v/v			04/12/23 10:15	1
1,1,2,2-Tetrachloroethane	0.014	U	0.080	0.014	ppb v/v			04/12/23 10:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.010	U	0.080	0.010	ppb v/v			04/12/23 10:15	1
1,1,2-Trichloroethane	0.015	U	0.080	0.015	ppb v/v			04/12/23 10:15	1
1,1-Dichloroethane	0.011	U	0.080	0.011	ppb v/v			04/12/23 10:15	1
1,1-Dichloroethene	0.013	U	0.080	0.013	ppb v/v			04/12/23 10:15	1
1,2,4-Trichlorobenzene	0.035	U	0.40	0.035	ppb v/v			04/12/23 10:15	1
1,2,4-Trimethylbenzene	0.020	U	0.080	0.020	ppb v/v			04/12/23 10:15	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.012	U	0.080	0.012	ppb v/v			04/12/23 10:15	1
1,2-Dichlorobenzene	0.031	U	0.080	0.031	ppb v/v			04/12/23 10:15	1
1,2-Dichloroethane	0.010	U	0.080	0.010	ppb v/v			04/12/23 10:15	1
1,2-Dichloropropane	0.010	U	0.080	0.010	ppb v/v			04/12/23 10:15	1
1,3,5-Trimethylbenzene	0.065	U	0.16	0.065	ppb v/v			04/12/23 10:15	1
1,3-Dichlorobenzene	0.016	U	0.080	0.016	ppb v/v			04/12/23 10:15	1
1,4-Dichlorobenzene	0.016	U	0.080	0.016	ppb v/v			04/12/23 10:15	1
Benzene	0.013	U	0.080	0.013	ppb v/v			04/12/23 10:15	1
Benzyl chloride	0.038	U	0.16	0.038	ppb v/v			04/12/23 10:15	1
Bromomethane	0.022	U	0.080	0.022	ppb v/v			04/12/23 10:15	1
Carbon tetrachloride	0.013	U	0.080	0.013	ppb v/v			04/12/23 10:15	1
Chlorobenzene	0.022	U	0.080	0.022	ppb v/v			04/12/23 10:15	1
Chloroethane	0.032	U	0.080	0.032	ppb v/v			04/12/23 10:15	1
Chloroform	0.014	U	0.080	0.014	ppb v/v			04/12/23 10:15	1
Chloromethane	0.066	U	0.20	0.066	ppb v/v			04/12/23 10:15	1
cis-1,2-Dichloroethene	0.010	U	0.080	0.010	ppb v/v			04/12/23 10:15	1
cis-1,3-Dichloropropene	0.019	U	0.080	0.019	ppb v/v			04/12/23 10:15	1
Dichlorodifluoromethane	0.014	U	0.080	0.014	ppb v/v			04/12/23 10:15	1
Ethylbenzene	0.013	U	0.080	0.013	ppb v/v			04/12/23 10:15	1
Ethylene Dibromide	0.012	U	0.080	0.012	ppb v/v			04/12/23 10:15	1
Hexachlorobutadiene	0.032	U	0.40	0.032	ppb v/v			04/12/23 10:15	1
Methylene Chloride	0.14	U	0.40	0.14	ppb v/v			04/12/23 10:15	1
m-Xylene & p-Xylene	0.029	U	0.080	0.029	ppb v/v			04/12/23 10:15	1
o-Xylene	0.015	U	0.080	0.015	ppb v/v			04/12/23 10:15	1
Styrene	0.024	U	0.080	0.024	ppb v/v			04/12/23 10:15	1
Tetrachloroethene	0.012	U	0.080	0.012	ppb v/v			04/12/23 10:15	1
Toluene	0.023	U	0.12	0.023	ppb v/v			04/12/23 10:15	1
trans-1,3-Dichloropropene	0.020	U	0.080	0.020	ppb v/v			04/12/23 10:15	1
Trichloroethene	0.013	U	0.040	0.013	ppb v/v			04/12/23 10:15	1
Trichlorofluoromethane	0.011	U	0.080	0.011	ppb v/v			04/12/23 10:15	1
Vinyl chloride	0.026	U	0.040	0.026	ppb v/v			04/12/23 10:15	1
1,4-Dioxane	0.030	U	0.20	0.030	ppb v/v			04/12/23 10:15	1
2-Butanone (MEK)	0.073	U	0.40	0.073	ppb v/v			04/12/23 10:15	1
4-Methyl-2-pentanone (MIBK)	0.054	U	0.20	0.054	ppb v/v			04/12/23 10:15	1
Acetone	0.57	U	2.0	0.57	ppb v/v			04/12/23 10:15	1
Bromodichloromethane	0.018	U	0.080	0.018	ppb v/v			04/12/23 10:15	1
Bromoform	0.027	U	0.080	0.027	ppb v/v			04/12/23 10:15	1
Carbon disulfide	0.0387	I	0.20	0.035	ppb v/v			04/12/23 10:15	1
Cyclohexane	0.037	U	0.20	0.037	ppb v/v			04/12/23 10:15	1
Dibromochloromethane	0.014	U	0.080	0.014	ppb v/v			04/12/23 10:15	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-72172/7
Matrix: Air
Analysis Batch: 72172

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexane	0.025	U	0.20	0.025	ppb v/v			04/12/23 10:15	1
Isopropyl alcohol	0.098	U	0.80	0.098	ppb v/v			04/12/23 10:15	1
Isopropylbenzene	0.017	U	0.16	0.017	ppb v/v			04/12/23 10:15	1
Methyl tert-butyl ether	0.052	U	0.40	0.052	ppb v/v			04/12/23 10:15	1
Naphthalene	0.039	U	0.20	0.039	ppb v/v			04/12/23 10:15	1
Tetrahydrofuran	0.022	U	0.40	0.022	ppb v/v			04/12/23 10:15	1
trans-1,2-Dichloroethene	0.013	U	0.080	0.013	ppb v/v			04/12/23 10:15	1
Vinyl acetate	0.028	U	0.40	0.028	ppb v/v			04/12/23 10:15	1
Vinyl bromide	0.020	U	0.080	0.020	ppb v/v			04/12/23 10:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*04/12/23 10:15*	*1*

Lab Sample ID: LCS 140-72172/1002
Matrix: Air
Analysis Batch: 72172

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	1.60	1.62		ppb v/v		101	70 - 130
1,1,2,2-Tetrachloroethane	1.60	1.74		ppb v/v		109	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	1.60	1.71		ppb v/v		107	70 - 130
1,1,2-Trichloroethane	1.60	1.75		ppb v/v		109	70 - 130
1,1-Dichloroethane	1.60	1.69		ppb v/v		106	70 - 130
1,1-Dichloroethene	1.60	1.73		ppb v/v		108	70 - 130
1,2,4-Trichlorobenzene	1.60	1.55		ppb v/v		97	60 - 140
1,2,4-Trimethylbenzene	1.60	1.77		ppb v/v		110	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.60	1.66		ppb v/v		104	60 - 140
1,2-Dichlorobenzene	1.60	1.67		ppb v/v		104	70 - 130
1,2-Dichloroethane	1.60	1.64		ppb v/v		102	70 - 130
1,2-Dichloropropane	1.60	1.65		ppb v/v		103	70 - 130
1,3,5-Trimethylbenzene	1.60	1.98		ppb v/v		124	70 - 130
1,3-Dichlorobenzene	1.60	1.71		ppb v/v		107	70 - 130
1,4-Dichlorobenzene	1.60	1.67		ppb v/v		104	70 - 130
Benzene	1.60	1.72		ppb v/v		107	70 - 130
Benzyl chloride	1.60	1.75		ppb v/v		109	70 - 130
Bromomethane	1.60	1.64		ppb v/v		102	70 - 130
Carbon tetrachloride	1.60	1.78		ppb v/v		111	70 - 130
Chlorobenzene	1.60	1.70		ppb v/v		106	70 - 130
Chloroethane	1.60	1.63		ppb v/v		102	70 - 130
Chloroform	1.60	1.65		ppb v/v		103	70 - 130
Chloromethane	1.60	1.54		ppb v/v		96	60 - 140
cis-1,2-Dichloroethene	1.60	1.73		ppb v/v		108	70 - 130
cis-1,3-Dichloropropene	1.60	1.77		ppb v/v		111	70 - 130
Dichlorodifluoromethane	1.60	1.64		ppb v/v		103	60 - 140
Ethylbenzene	1.60	1.71		ppb v/v		107	70 - 130
Ethylene Dibromide	1.60	1.78		ppb v/v		111	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-72172/1002
Matrix: Air
Analysis Batch: 72172

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorobutadiene	1.60	1.33		ppb v/v		83	60 - 140
Methylene Chloride	1.60	1.63		ppb v/v		102	70 - 130
m-Xylene & p-Xylene	3.20	3.54		ppb v/v		111	70 - 130
o-Xylene	1.60	1.74		ppb v/v		109	70 - 130
Styrene	1.60	1.87		ppb v/v		117	70 - 130
Tetrachloroethene	1.60	1.69		ppb v/v		106	70 - 130
Toluene	1.60	1.82		ppb v/v		114	70 - 130
trans-1,3-Dichloropropene	1.60	1.83		ppb v/v		114	70 - 130
Trichloroethene	1.60	1.67		ppb v/v		104	70 - 130
Trichlorofluoromethane	1.60	1.63		ppb v/v		102	60 - 140
Vinyl chloride	1.60	1.67		ppb v/v		104	70 - 130
1,4-Dioxane	1.60	1.61		ppb v/v		101	60 - 140
2-Butanone (MEK)	1.60	1.73		ppb v/v		108	60 - 140
4-Methyl-2-pentanone (MIBK)	1.60	1.71		ppb v/v		107	60 - 140
Acetone	1.60	1.73	I	ppb v/v		108	60 - 140
Bromodichloromethane	1.60	1.72		ppb v/v		108	70 - 130
Bromoform	1.60	1.82		ppb v/v		114	60 - 140
Carbon disulfide	1.60	1.78		ppb v/v		111	70 - 130
Cyclohexane	1.60	1.66		ppb v/v		104	70 - 130
Dibromochloromethane	1.60	1.88		ppb v/v		117	70 - 130
Hexane	1.60	1.68		ppb v/v		105	70 - 130
Isopropyl alcohol	1.60	2.06		ppb v/v		129	60 - 140
Isopropylbenzene	1.60	1.82		ppb v/v		114	70 - 130
Methyl tert-butyl ether	1.60	1.74		ppb v/v		109	60 - 140
Naphthalene	1.60	1.56		ppb v/v		98	60 - 140
Tetrahydrofuran	1.60	1.73		ppb v/v		108	60 - 140
trans-1,2-Dichloroethene	1.60	1.71		ppb v/v		107	70 - 130
Vinyl acetate	1.60	1.31		ppb v/v		82	60 - 140
Vinyl bromide	1.60	1.74		ppb v/v		108	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*60 - 140*

Lab Sample ID: MB 140-72219/5
Matrix: Air
Analysis Batch: 72219

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.029	U	0.080	0.029	ppb v/v			04/14/23 10:25	1
1,1,2,2-Tetrachloroethane	0.014	U	0.080	0.014	ppb v/v			04/14/23 10:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.010	U	0.080	0.010	ppb v/v			04/14/23 10:25	1
1,1,2-Trichloroethane	0.015	U	0.080	0.015	ppb v/v			04/14/23 10:25	1
1,1-Dichloroethane	0.011	U	0.080	0.011	ppb v/v			04/14/23 10:25	1
1,1-Dichloroethene	0.013	U	0.080	0.013	ppb v/v			04/14/23 10:25	1
1,2,4-Trichlorobenzene	0.035	U	0.40	0.035	ppb v/v			04/14/23 10:25	1
1,2,4-Trimethylbenzene	0.020	U	0.080	0.020	ppb v/v			04/14/23 10:25	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.012	U	0.080	0.012	ppb v/v			04/14/23 10:25	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-72219/5
Matrix: Air
Analysis Batch: 72219

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	0.031	U	0.080	0.031	ppb v/v			04/14/23 10:25	1
1,2-Dichloroethane	0.010	U	0.080	0.010	ppb v/v			04/14/23 10:25	1
1,2-Dichloropropane	0.010	U	0.080	0.010	ppb v/v			04/14/23 10:25	1
1,3,5-Trimethylbenzene	0.065	U	0.16	0.065	ppb v/v			04/14/23 10:25	1
1,3-Dichlorobenzene	0.016	U	0.080	0.016	ppb v/v			04/14/23 10:25	1
1,4-Dichlorobenzene	0.016	U	0.080	0.016	ppb v/v			04/14/23 10:25	1
Benzene	0.013	U	0.080	0.013	ppb v/v			04/14/23 10:25	1
Benzyl chloride	0.038	U	0.16	0.038	ppb v/v			04/14/23 10:25	1
Bromomethane	0.022	U	0.080	0.022	ppb v/v			04/14/23 10:25	1
Carbon tetrachloride	0.013	U	0.080	0.013	ppb v/v			04/14/23 10:25	1
Chlorobenzene	0.022	U	0.080	0.022	ppb v/v			04/14/23 10:25	1
Chloroethane	0.032	U	0.080	0.032	ppb v/v			04/14/23 10:25	1
Chloroform	0.014	U	0.080	0.014	ppb v/v			04/14/23 10:25	1
Chloromethane	0.066	U	0.20	0.066	ppb v/v			04/14/23 10:25	1
cis-1,2-Dichloroethene	0.010	U	0.080	0.010	ppb v/v			04/14/23 10:25	1
cis-1,3-Dichloropropene	0.019	U	0.080	0.019	ppb v/v			04/14/23 10:25	1
Dichlorodifluoromethane	0.014	U	0.080	0.014	ppb v/v			04/14/23 10:25	1
Ethylbenzene	0.013	U	0.080	0.013	ppb v/v			04/14/23 10:25	1
Ethylene Dibromide	0.012	U	0.080	0.012	ppb v/v			04/14/23 10:25	1
Hexachlorobutadiene	0.032	U	0.40	0.032	ppb v/v			04/14/23 10:25	1
Methylene Chloride	0.14	U	0.40	0.14	ppb v/v			04/14/23 10:25	1
m-Xylene & p-Xylene	0.029	U	0.080	0.029	ppb v/v			04/14/23 10:25	1
o-Xylene	0.015	U	0.080	0.015	ppb v/v			04/14/23 10:25	1
Styrene	0.024	U	0.080	0.024	ppb v/v			04/14/23 10:25	1
Tetrachloroethene	0.012	U	0.080	0.012	ppb v/v			04/14/23 10:25	1
Toluene	0.023	U	0.12	0.023	ppb v/v			04/14/23 10:25	1
trans-1,3-Dichloropropene	0.020	U	0.080	0.020	ppb v/v			04/14/23 10:25	1
Trichloroethene	0.013	U	0.040	0.013	ppb v/v			04/14/23 10:25	1
Trichlorofluoromethane	0.011	U	0.080	0.011	ppb v/v			04/14/23 10:25	1
Vinyl chloride	0.026	U	0.040	0.026	ppb v/v			04/14/23 10:25	1
1,4-Dioxane	0.030	U	0.20	0.030	ppb v/v			04/14/23 10:25	1
2-Butanone (MEK)	0.073	U	0.40	0.073	ppb v/v			04/14/23 10:25	1
4-Methyl-2-pentanone (MIBK)	0.054	U	0.20	0.054	ppb v/v			04/14/23 10:25	1
Acetone	0.57	U	2.0	0.57	ppb v/v			04/14/23 10:25	1
Bromodichloromethane	0.018	U	0.080	0.018	ppb v/v			04/14/23 10:25	1
Bromoform	0.027	U	0.080	0.027	ppb v/v			04/14/23 10:25	1
Carbon disulfide	0.035	U	0.20	0.035	ppb v/v			04/14/23 10:25	1
Cyclohexane	0.037	U	0.20	0.037	ppb v/v			04/14/23 10:25	1
Dibromochloromethane	0.014	U	0.080	0.014	ppb v/v			04/14/23 10:25	1
Hexane	0.025	U	0.20	0.025	ppb v/v			04/14/23 10:25	1
Isopropyl alcohol	0.098	U	0.80	0.098	ppb v/v			04/14/23 10:25	1
Isopropylbenzene	0.017	U	0.16	0.017	ppb v/v			04/14/23 10:25	1
Methyl tert-butyl ether	0.052	U	0.40	0.052	ppb v/v			04/14/23 10:25	1
Naphthalene	0.039	U	0.20	0.039	ppb v/v			04/14/23 10:25	1
Tetrahydrofuran	0.022	U	0.40	0.022	ppb v/v			04/14/23 10:25	1
trans-1,2-Dichloroethene	0.013	U	0.080	0.013	ppb v/v			04/14/23 10:25	1
Vinyl acetate	0.028	U	0.40	0.028	ppb v/v			04/14/23 10:25	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-72219/5
Matrix: Air
Analysis Batch: 72219

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl bromide	0.020	U	0.080	0.020	ppb v/v			04/14/23 10:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*		*04/14/23 10:25*	*1*

Lab Sample ID: LCS 140-72219/1002
Matrix: Air
Analysis Batch: 72219

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	2.00	2.14		ppb v/v		107	70 - 130
1,1,2,2-Tetrachloroethane	2.00	2.50		ppb v/v		125	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	2.23		ppb v/v		112	70 - 130
1,1,2-Trichloroethane	2.00	2.39		ppb v/v		120	70 - 130
1,1-Dichloroethane	2.00	2.15		ppb v/v		107	70 - 130
1,1-Dichloroethene	2.00	2.13		ppb v/v		106	70 - 130
1,2,4-Trichlorobenzene	2.00	2.03		ppb v/v		102	60 - 140
1,2,4-Trimethylbenzene	2.00	2.46		ppb v/v		123	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.00	2.13		ppb v/v		107	60 - 140
1,2-Dichlorobenzene	2.00	2.37		ppb v/v		118	70 - 130
1,2-Dichloroethane	2.00	2.14		ppb v/v		107	70 - 130
1,2-Dichloropropane	2.00	2.01		ppb v/v		100	70 - 130
1,3,5-Trimethylbenzene	2.00	2.85	J	ppb v/v		143	70 - 130
1,3-Dichlorobenzene	2.00	2.44		ppb v/v		122	70 - 130
1,4-Dichlorobenzene	2.00	2.40		ppb v/v		120	70 - 130
Benzene	2.00	2.22		ppb v/v		111	70 - 130
Benzyl chloride	2.00	2.58		ppb v/v		129	70 - 130
Bromomethane	2.00	2.07		ppb v/v		104	70 - 130
Carbon tetrachloride	2.00	2.50		ppb v/v		125	70 - 130
Chlorobenzene	2.00	2.42		ppb v/v		121	70 - 130
Chloroethane	2.00	2.18		ppb v/v		109	70 - 130
Chloroform	2.00	2.13		ppb v/v		107	70 - 130
Chloromethane	2.00	2.02		ppb v/v		101	60 - 140
cis-1,2-Dichloroethene	2.00	2.06		ppb v/v		103	70 - 130
cis-1,3-Dichloropropene	2.00	2.28		ppb v/v		114	70 - 130
Dichlorodifluoromethane	2.00	2.30		ppb v/v		115	60 - 140
Ethylbenzene	2.00	2.23		ppb v/v		111	70 - 130
Ethylene Dibromide	2.00	2.42		ppb v/v		121	70 - 130
Hexachlorobutadiene	2.00	1.74		ppb v/v		87	60 - 140
Methylene Chloride	2.00	2.04		ppb v/v		102	70 - 130
m-Xylene & p-Xylene	4.00	4.97		ppb v/v		124	70 - 130
o-Xylene	2.00	2.35		ppb v/v		118	70 - 130
Styrene	2.00	2.61	J	ppb v/v		131	70 - 130
Tetrachloroethene	2.00	2.22		ppb v/v		111	70 - 130
Toluene	2.00	2.24		ppb v/v		112	70 - 130
trans-1,3-Dichloropropene	2.00	2.24		ppb v/v		112	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-72219/1002
Matrix: Air
Analysis Batch: 72219

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Trichloroethene	2.00	2.10		ppb v/v		105	70 - 130
Trichlorofluoromethane	2.00	2.13		ppb v/v		107	60 - 140
Vinyl chloride	2.00	2.19		ppb v/v		110	70 - 130
1,4-Dioxane	2.00	1.97		ppb v/v		99	60 - 140
2-Butanone (MEK)	2.00	2.03		ppb v/v		102	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	2.11		ppb v/v		106	60 - 140
Acetone	2.00	1.57	I	ppb v/v		79	60 - 140
Bromodichloromethane	2.00	2.09		ppb v/v		105	70 - 130
Bromoform	2.00	2.31		ppb v/v		116	60 - 140
Carbon disulfide	2.00	2.18		ppb v/v		109	70 - 130
Cyclohexane	2.00	1.93		ppb v/v		97	70 - 130
Dibromochloromethane	2.00	2.44		ppb v/v		122	70 - 130
Hexane	2.00	2.08		ppb v/v		104	70 - 130
Isopropyl alcohol	2.00	2.54		ppb v/v		127	60 - 140
Isopropylbenzene	2.00	2.46		ppb v/v		123	70 - 130
Methyl tert-butyl ether	2.00	1.97		ppb v/v		99	60 - 140
Naphthalene	2.00	2.52		ppb v/v		126	60 - 140
Tetrahydrofuran	2.00	1.96		ppb v/v		98	60 - 140
trans-1,2-Dichloroethene	2.00	2.11		ppb v/v		106	70 - 130
Vinyl acetate	2.00	1.51		ppb v/v		75	60 - 140
Vinyl bromide	2.00	2.38		ppb v/v		119	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*60 - 140*

QC Association Summary

Client: Kimley-Horn & Associates Inc.
Project/Site: Jefferson Pilot

Job ID: 670-17451-1

Air - GC/MS VOA

Analysis Batch: 72172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-17451-2	VEW-2	Total/NA	Air	TO 15 LL	
MB 140-72172/7	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-72172/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 72219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-17451-1	VEW-1	Total/NA	Air	TO 15 LL	
MB 140-72219/5	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-72219/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Lab Chronicle

Client: Kimley-Horn & Associates Inc.
Project/Site: Jefferson Pilot

Job ID: 670-17451-1

Client Sample ID: VEW-1

Lab Sample ID: 670-17451-1

Date Collected: 03/29/23 12:15

Matrix: Air

Date Received: 04/04/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO 15 LL		41.13	72219	S1K	EET KNX	04/14/23 19:51

Client Sample ID: VEW-2

Lab Sample ID: 670-17451-2

Date Collected: 03/29/23 12:37

Matrix: Air

Date Received: 04/04/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO 15 LL		39.1	72172	HMT	EET KNX	04/12/23 19:15

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: Kimley-Horn & Associates Inc. Job ID: 670-17451-1
Project/Site: Jefferson Pilot

Laboratory: Eurofins Knoxville

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
North Carolina (WW/SW)	State	64	12-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO 15 LL		Air	1,1,1-Trichloroethane
TO 15 LL		Air	1,1,2,2-Tetrachloroethane
TO 15 LL		Air	1,1,2-Trichloro-1,2,2-trifluoroethane
TO 15 LL		Air	1,1,2-Trichloroethane
TO 15 LL		Air	1,1-Dichloroethane
TO 15 LL		Air	1,1-Dichloroethene
TO 15 LL		Air	1,2,4-Trichlorobenzene
TO 15 LL		Air	1,2,4-Trimethylbenzene
TO 15 LL		Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane
TO 15 LL		Air	1,2-Dichlorobenzene
TO 15 LL		Air	1,2-Dichloroethane
TO 15 LL		Air	1,2-Dichloropropane
TO 15 LL		Air	1,3,5-Trimethylbenzene
TO 15 LL		Air	1,3-Dichlorobenzene
TO 15 LL		Air	1,4-Dichlorobenzene
TO 15 LL		Air	1,4-Dioxane
TO 15 LL		Air	2-Butanone (MEK)
TO 15 LL		Air	4-Methyl-2-pentanone (MIBK)
TO 15 LL		Air	Acetone
TO 15 LL		Air	Benzene
TO 15 LL		Air	Benzyl chloride
TO 15 LL		Air	Bromodichloromethane
TO 15 LL		Air	Bromoform
TO 15 LL		Air	Bromomethane
TO 15 LL		Air	Carbon disulfide
TO 15 LL		Air	Carbon tetrachloride
TO 15 LL		Air	Chlorobenzene
TO 15 LL		Air	Chloroethane
TO 15 LL		Air	Chloroform
TO 15 LL		Air	Chloromethane
TO 15 LL		Air	cis-1,2-Dichloroethene
TO 15 LL		Air	cis-1,3-Dichloropropene
TO 15 LL		Air	Cyclohexane
TO 15 LL		Air	Dibromochloromethane
TO 15 LL		Air	Dichlorodifluoromethane
TO 15 LL		Air	Ethylbenzene
TO 15 LL		Air	Ethylene Dibromide
TO 15 LL		Air	Hexachlorobutadiene
TO 15 LL		Air	Hexane
TO 15 LL		Air	Isopropyl alcohol
TO 15 LL		Air	Isopropylbenzene
TO 15 LL		Air	Methyl tert-butyl ether
TO 15 LL		Air	Methylene Chloride
TO 15 LL		Air	m-Xylene & p-Xylene
TO 15 LL		Air	Naphthalene

Laboratory: Eurofins Knoxville (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO 15 LL		Air	o-Xylene
TO 15 LL		Air	Styrene
TO 15 LL		Air	Tetrachloroethene
TO 15 LL		Air	Tetrahydrofuran
TO 15 LL		Air	Toluene
TO 15 LL		Air	trans-1,2-Dichloroethene
TO 15 LL		Air	trans-1,3-Dichloropropene
TO 15 LL		Air	Trichloroethene
TO 15 LL		Air	Trichlorofluoromethane
TO 15 LL		Air	Vinyl acetate
TO 15 LL		Air	Vinyl bromide
TO 15 LL		Air	Vinyl chloride

Method Summary

Client: Kimley-Horn & Associates Inc.
Project/Site: Jefferson Pilot

Job ID: 670-17451-1

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	EET KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Kimley-Horn & Associates Inc.
Project/Site: Jefferson Pilot

Job ID: 670-17451-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
670-17451-1	VEW-1	Air	03/29/23 12:15	04/04/23 09:45	Air Canister (6-Liter) #10575
670-17451-2	VEW-2	Air	03/29/23 12:37	04/04/23 09:45	Air Canister (6-Liter) #11028

Canister Samples Chain of Custody Record

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Client Contact Information

Company Name: Kimley Horn and Assoc.
Address: 12740 Gran Bay Parkway
City/State/Zip: Jacksonville, FL, 32258
Phone:
FAX:
Project Name: Jefferson Pilot
Site/Location: Greensboro, NC
P O #

Client Project Manager: Matt Fitzpatrick
Phone:
Email: Matt.Fitzpatrick@Kimley-Horn.com
Site Contact:
Tel/Fax

Analysis Turnaround Time
Standard (Specific):
Rush (Specifiy):

Samples Collected By: Austin Breitenstein

COC No:
____ of ____ COCs
TALS Project #:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:
(See below for Add'l Items)

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
VE1N-1	3/29	1205	3/29	1215	28.4	5			✓	✓	✓	✓	✓	✓						✓			
VE1W-2	3/29	1227	3/29	1237	28.8	5			✓	✓	✓	✓	✓	✓									

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

No Custody Seal
Received Ambient
DH 4/4/23
1 Cooler FedEx 5921 9895 6195 PD
2 Cans / 2 Guages

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	Date / Time:	Samples Received by:	
Samples Relinquished by: Austin Breitenstein	Date / Time: 3/30	Received by: Barbara DiLalla	17:55 3-30-23
Relinquished by:	Date / Time:	Received by: Deana Hutchison ETA KNX	4/4/23 09:45
Lab Use Only: Shipper Name:	Opened by:	Condition:	17.2/17.2

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:**

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓			☐ Containers, Broken
2. Were ambient air containers received intact?			✓	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?			✓	☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			✓	☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt
5. Were all of the sample containers received intact?	✓			☐ Containers, Broken
6. Were samples received in appropriate containers?	✓			☐ Containers, Improper; Client Contacted; Proceed/Cancel
7. Do sample container labels match COC? (IDs, Dates, Times)	DH 4/4/23 ✓	✓		☐ COC & Samples Do Not Match ☑ COC Incorrect/Incomplete ☐ COC Not Received
8. Were all of the samples listed on the COC received?	✓			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received
9. Is the date/time of sample collection noted?	✓			☐ COC; No Date/Time; Client Contacted
10. Was the sampler identified on the COC?	✓			☐ Sampler Not Listed on COC
11. Is the client and project name/# identified?	✓			☐ COC Incorrect/Incomplete
12. Are tests/parameters listed for each sample?	✓			☐ COC No tests on COC
13. Is the matrix of the samples noted?	✓			☐ COC Incorrect/Incomplete
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ COC Incorrect/Incomplete
15. Were samples received within holding time?	✓			☐ Holding Time - Receipt
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ pH Adjusted, pH Included (See box 16A) ☐ Incorrect Preservative
17. Were VOA samples received without headspace?			✓	☐ Headspace (VOA only)
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			✓	☐ Residual Chlorine
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

7, COC does not list Canister id's
VEW1: canister asset id is 10575
VEW2: canister asset id is 11028

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 67002405 PM Instructions: _____

Sample Receiving Associate: Deana Hutchison Date: 4/4/23

QA026R32.doc, 062719

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Matt Fitzpatrick	**Samples Collected By:** Austin Breitenstein
Company Name: Kimley Horn and Assoc.	Phone:	
Address: 12740 Gran Bay Parkway	Email: Matt.Fitzpatrick@kimley-horn.com	
City/State/Zip: Jacksonville, FL, 32258	Site Contact:	
Phone:	Tel/Fax	
FAX:	**Analysis Turnaround Time**	
Project Name: Jefferson Pilot	Standard (Specific):	
Site/Location: Greensboro, NC	Rush (Specifiy):	
P O #		

COC No: _____ of _____ COCs

TALS Project #:

For Lab Use Only:
Walk-in Client:
Lab Sampling:

Job / SDG No.:

(See below for Add'l Items)

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	*Sample Type*	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
VEW-1	3/29	1205	3/29	1215	28.4	5			✓	✓	✓	✓	✓	✓						V			
VEW-2	3/29	1227	3/29	1237	28.8	5			✓	✓	✓	✓	✓	✓									

670-17451 Chain of Custody

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

No Custody Seal
Received Ambient
DH 4/4/23
1 Cooler FedEx 5921 9895 6195 P8
2 Cans / 2 Guages

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	Date / Time:	Samples Received by:
Samples Relinquished by: Austin Breitenstein	Date / Time: 3/30	Received by: Barbara DiLoda 17:55 3-30-23
Relinquished by:	Date / Time:	Received by: Deana Hicks ETA KNX 4/4/23 09:45
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:** 17.2/17.2

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

4/17/2023

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓			☐ Containers, Broken
2. Were ambient air containers received intact?			✓	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?			✓	☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			✓	☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt
5. Were all of the sample containers received intact?	✓			☐ Containers, Broken
6. Were samples received in appropriate containers?	✓			☐ Containers, Improper; Client Contacted; Proceed/Cancel
7. Do sample container labels match COC? (IDs, Dates, Times)	DH 4/4/23 ✓	✓		☐ COC & Samples Do Not Match ☑ COC Incorrect/Incomplete ☐ COC Not Received
8. Were all of the samples listed on the COC received?	✓			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received
9. Is the date/time of sample collection noted?	✓			☐ COC; No Date/Time; Client Contacted
10. Was the sampler identified on the COC?	✓			☐ Sampler Not Listed on COC
11. Is the client and project name/# identified?	✓			☐ COC Incorrect/Incomplete
12. Are tests/parameters listed for each sample?	✓			☐ COC No tests on COC
13. Is the matrix of the samples noted?	✓			☐ COC Incorrect/Incomplete
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ COC Incorrect/Incomplete
15. Were samples received within holding time?	✓			☐ Holding Time - Receipt
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ pH Adjusted, pH Included (See box 16A) ☐ Incorrect Preservative
17. Were VOA samples received without headspace?			✓	☐ Headspace (VOA only)
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			✓	☐ Residual Chlorine
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

7, COC does not list Canister id's
VEW1: canister asset id is 10575
VEW2: canister asset id is 11028

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 67002405 PM Instructions: _____

Sample Receiving Associate: Deana Hutchison Date: 4/4/23

QA026R32.doc, 062719

Eurofins Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date/Time: 4/7/23 935

Analyst	Sample ID	Pressure @ Receipt (-in Hg or +psig)/initial pressurisation (if applicable)	Asset #	Cleaning Job	Cert Type	Size (L)	Comments
DDF	670-17451-a-1	-6.5	10575	140-30875-a-5	B	6	
DDF	670-17451-a-2	-5.4	11028	140-30875-a-8	B	6	

Login Sample Receipt Checklist

Client: Kimley-Horn & Associates Inc.

Job Number: 670-17451-1

Login Number: 17451

List Source: Eurofins Orlando

List Number: 1

Creator: Rea, Todd

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Summa Canister Dilution Worksheet

Client: Kimley-Horn & Associates Inc.
Project/Site: Jefferson Pilot

Job No.: 670-17451-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Pressure Gauge ID	Date	Analyst Initals
670-17451-1	6	-6.5	0.78	4.70	31.7	3.16	18.94		4.03	4.03	G5	04/10/23 12:33	DDF
670-17451-1	6	0	1.00	6.00	31.9	3.17	19.02		3.17	12.78		04/10/23 13:31	DDF
670-17451-1	6	0	1.00	6.00	32.6	3.22	19.31		3.22	41.13		04/10/23 14:21	DDF
670-17451-2	6	-5.4	0.82	4.92	30.7	3.09	18.53		3.77	3.77	G5	04/10/23 12:33	DDF
670-17451-2	6	0	1.00	6.00	32.9	3.24	19.43		3.24	12.20		04/10/23 13:31	DDF
670-17451-2	6	0	1.00	6.00	32.4	3.20	19.22		3.20	39.10		04/10/23 14:22	DDF

Formulae:

Preadjusted Volume (L) = ((Preadjusted Pressure ("Hg) + 29.92 "Hg) * Vol L) / 29.92 "Hg

Adjusted Volume (L) = ((Adjusted Pressure (psig) + 14.7 psig)* Vol L) / 14.7 psig

Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

Where:

29.92 "Hg = Standard atmospheric pressure in inches of Mercury (“Hg)

14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Knoxville | Job No.: 140-30875-1

SDG No.:

Client Sample ID: 12008 | Lab Sample ID: 140-30875-1

Matrix: Air | Lab File ID: C10L30875.D

Analysis Method: TO 15 LL | Date Collected: 03/09/2023 16:20

Sample wt/vol: 500(mL) | Date Analyzed: 03/11/2023 03:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

Purge Volume: | Heated Purge: (Y/N) pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 71092 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.040	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.16	
106-93-4	1,2-Dibromoethane	ND		0.080	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	ND		0.16	
106-99-0	1,3-Butadine	ND		0.16	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
90-12-0	1-Methylnaphthalene	ND		1.0	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-93-3	2-Butanone	ND		0.32	
95-49-8	2-Chlorotoluene	ND		0.16	
591-78-6	2-Hexanone	ND		0.20	
78-78-4	2-Methylbutane	ND		0.20	
91-57-6	2-Methylnaphthalene	ND		1.0	
107-83-5	2-Methylpentane	ND		0.080	
107-05-1	3-Chloroprene	ND		0.080	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Knoxville | Job No.: 140-30875-1

SDG No.:

Client Sample ID: 12008 | Lab Sample ID: 140-30875-1

Matrix: Air | Lab File ID: C10L30875.D

Analysis Method: TO 15 LL | Date Collected: 03/09/2023 16:20

Sample wt/vol: 500(mL) | Date Analyzed: 03/11/2023 03:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

Purge Volume: | Heated Purge: (Y/N) pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 71092 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
622-96-8	4-Ethyltoluene	ND		0.16	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	
67-64-1	Acetone	ND		2.0	
75-05-8	Acetonitrile	ND		0.40	
107-02-8	Acrolein	ND		0.40	
107-13-1	Acrylonitrile	ND		0.80	
98-83-9	Alpha Methyl Styrene	ND		0.16	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
75-27-4	Bromodichloromethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
74-83-9	Bromomethane	ND		0.080	
106-97-8	Butane	ND		0.16	
75-15-0	Carbon disulfide	ND		0.20	
56-23-5	Carbon tetrachloride	ND		0.032	
108-90-7	Chlorobenzene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
67-66-3	Chloroform	ND		0.080	
74-87-3	Chloromethane	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
98-82-8	Cumene	ND		0.16	
110-82-7	Cyclohexane	ND		0.20	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
75-71-8	Dichlorodifluoromethane	ND		0.080	
64-17-5	Ethanol	ND		2.0	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
100-41-4	Ethylbenzene	ND		0.080	
87-68-3	Hexachlorobutadiene	ND		0.080	
110-54-3	Hexane	ND		0.20	
496-11-7	Indane	ND		0.080	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Knoxville | Job No.: 140-30875-1

SDG No.:

Client Sample ID: 12008 | Lab Sample ID: 140-30875-1

Matrix: Air | Lab File ID: C10L30875.D

Analysis Method: TO 15 LL | Date Collected: 03/09/2023 16:20

Sample wt/vol: 500(mL) | Date Analyzed: 03/11/2023 03:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

Purge Volume: | Heated Purge: (Y/N) pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 71092 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
95-13-6	Indene	ND		0.16	
67-63-0	Isopropyl alcohol	ND		0.80	
80-62-6	Methyl methacrylate	ND		0.20	
1634-04-4	Methyl tert-butyl ether	ND		0.16	
108-87-2	Methylcyclohexane	ND		0.080	
75-09-2	Methylene Chloride	ND		0.40	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
91-20-3	Naphthalene	ND		0.20	
104-51-8	n-Butylbenzene	ND		0.16	
124-18-5	n-Decane	ND		0.40	
112-40-3	n-Dodecane	ND		0.40	
142-82-5	n-Heptane	ND		0.20	
111-84-2	n-Nonane	ND		0.20	
111-65-9	n-Octane	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
95-47-6	o-Xylene	ND		0.080	
99-87-6	p-Cymene	ND		0.080	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		1.0	
135-98-8	sec-Butylbenzene	ND		0.16	
100-42-5	Styrene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
98-06-6	tert-Butylbenzene	ND		0.20	
127-18-4	Tetrachloroethene	ND		0.040	
109-99-9	Tetrahydrofuran	ND		0.40	
110-02-1	Thiophene	ND		0.080	
108-88-3	Toluene	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
79-01-6	Trichloroethene	ND		0.036	
75-69-4	Trichlorofluoromethane	ND		0.080	
1120-21-4	Undecane	ND		0.40	
108-05-4	Vinyl acetate	ND		0.40	
593-60-2	Vinyl bromide	ND		0.080	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Knoxville Job No.: 140-30875-1

SDG No.:

Client Sample ID: 12008 Lab Sample ID: 140-30875-1

Matrix: Air Lab File ID: C10L30875.D

Analysis Method: TO 15 LL Date Collected: 03/09/2023 16:20

Sample wt/vol: 500(mL) Date Analyzed: 03/11/2023 03:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 71092 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
75-01-4	Vinyl chloride	ND		0.040	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins Knoxville | Job No.: 140-30875-1

SDG No.:

Client Sample ID: 12008 | Lab Sample ID: 140-30875-1

Matrix: Air | Lab File ID: C10L30875.D

Analysis Method: TO 15 LL | Date Collected: 03/09/2023 16:20

Sample wt/vol: 500(mL) | Date Analyzed: 03/11/2023 03:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-5 ID: 0.32(mm)

Purge Volume: | Heated Purge: (Y/N) pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 71092 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
488-23-3	1,2,3,4-Tetramethylbenzene TIC		ND		
527-53-7	1,2,3,5-Tetramethylbenzene TIC		ND		
934-80-5	1,2-Dimethyl-4-Ethylbenzene TIC		ND		
872-55-9	2-Ethylthiophene TIC		ND		
554-14-3	2-Methylthiophene TIC		ND		
616-44-4	3-Methylthiophene TIC		ND		
95-15-8	Benzo(b)thiophene TIC		ND		

Eurofins Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20230309-27296.b\C10L30875.D				
Lims ID:	140-30875-A-1				
Client ID:	12008				
Sample Type:	Client				
Inject. Date:	11-Mar-2023 03:19:30	ALS Bottle#:	17	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0027296-025				
Misc. Info.:	12008				
Operator ID:		Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20230309-27296.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	13-Mar-2023 11:34:05	Calib Date:	09-Jan-2023 23:18:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20230109-26581.b\ICRA09LVL7.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1636				
First Level Reviewer: khachitpongpanits		Date:	13-Mar-2023 11:34:05		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.722	8.738	-0.016	97	81512	3.76	
* 2 1,4-Difluorobenzene	114	10.960	10.970	-0.010	95	469519	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.905	15.921	-0.016	88	435457	3.92	
$ 4 4-Bromofluorobenzene (Surr)	95	17.587	17.598	-0.011	90	278124	2.98	

QC Flag Legend

Processing Flags

Reagents:

40MXISSUR_00003 Amount Added: 40.00 Units: mL Run Reagent

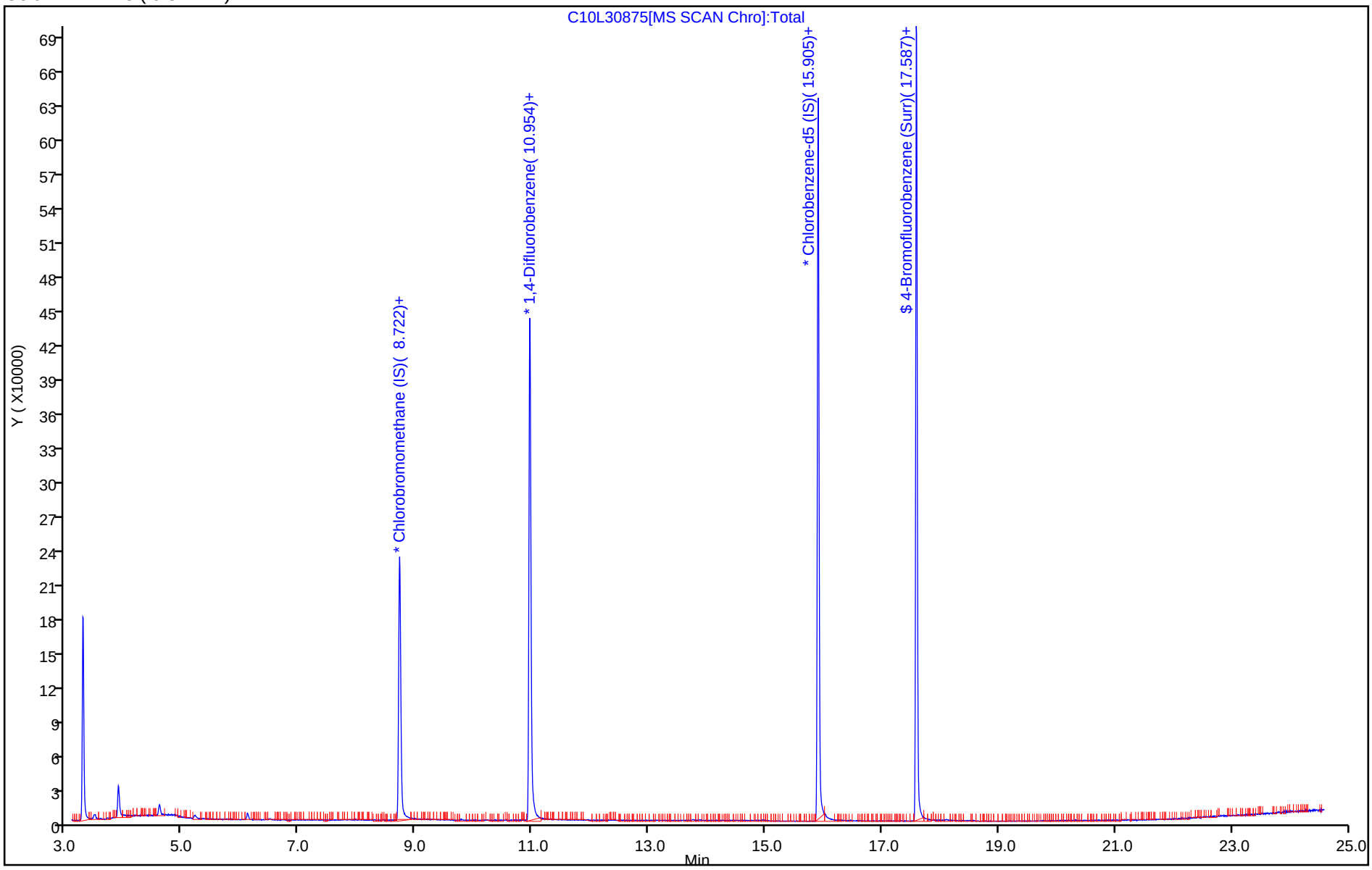
Report Date: 13-Mar-2023 11:34:06 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20230309-27296.b\C10L30875.D

Injection Date:	11-Mar-2023 03:19:30	Instrument ID:	MR	Operator ID:	
Lims ID:	140-30875-A-1	Lab Sample ID:	140-30875-1	Worklist Smp#:	25
Client ID:	12008				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



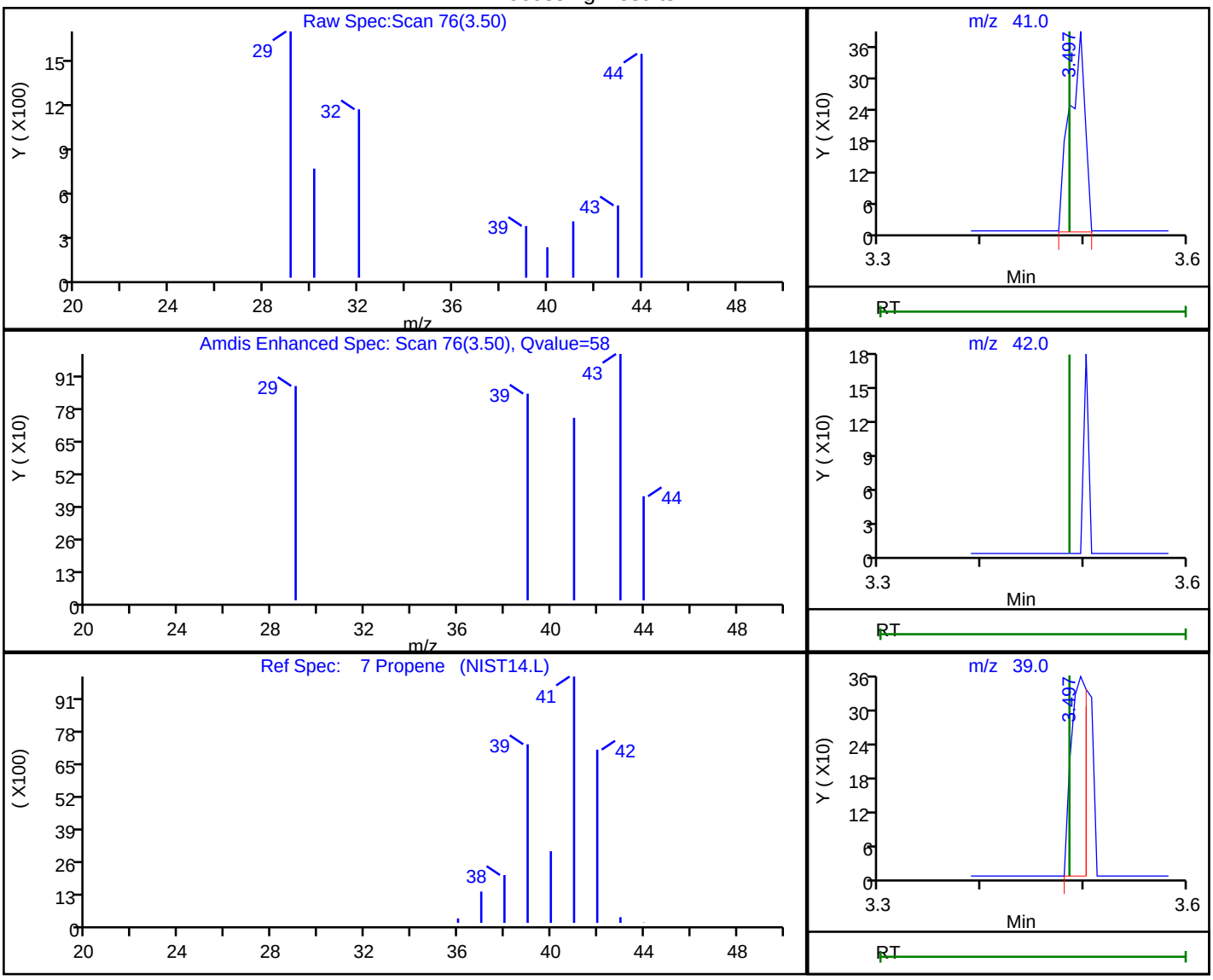
User Disabled Compound Report

Eurofins Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20230309-27296.b\C10L30875.D				
Injection Date:	11-Mar-2023 03:19:30	Instrument ID:	MR		
Lims ID:	140-30875-A-1	Lab Sample ID:	140-30875-1		
Client ID:	12008				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

7 Propene, CAS: 115-07-1

Processing Results



RT	Mass	Response	Amount
3.50	41.00	399	0.014436
3.49	42.00	0	
3.50	39.00	392	

Reviewer: khachitpongpanits, 13-Mar-2023 11:33:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID