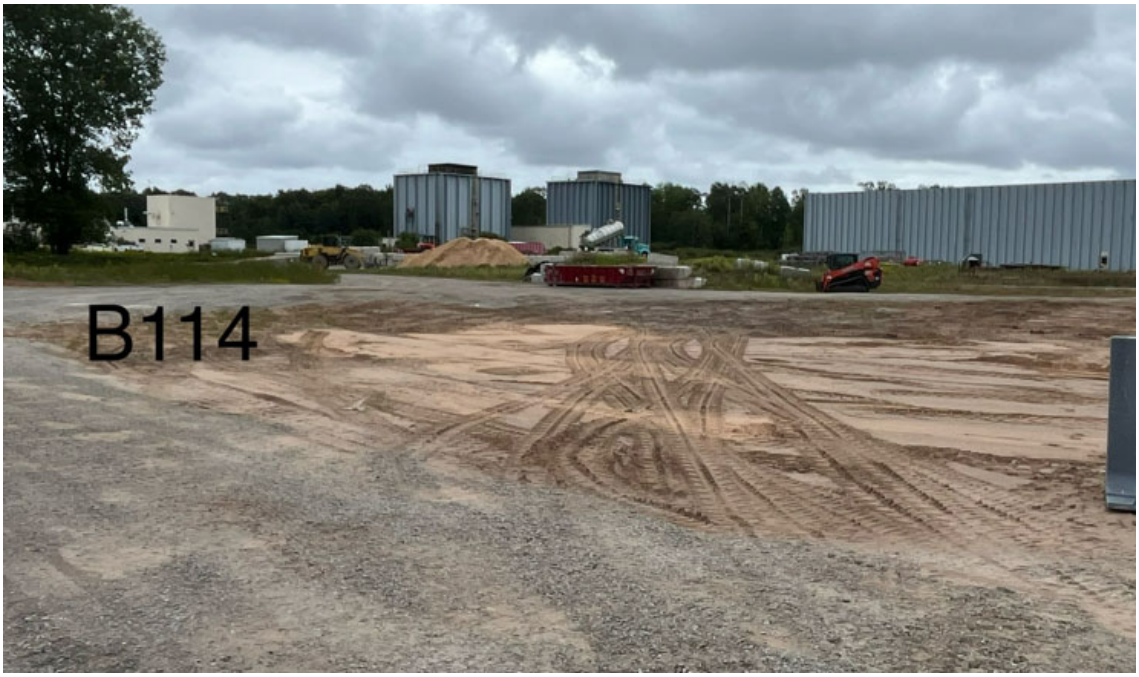
Sellwood, Alyssa A - DNR

From: Denice Nelson <denice.karen.nelson@jci.com>
Sent: Wednesday, September 4, 2024 3:42 PM
To: Sellwood, Alyssa A - DNR
Cc: Thistle, Jodie M - DNR
Subject: Re: Request to reuse soils on site: FTC construction related-soil (Bldg 114)

Alyssa - this email serves to document the soil management activities per condition 5 in WDNR's Approval to Manage Contaminated Soil under Wis. Admin. Code § NR 718.12 dated August 12, 2024.

- Approximately 10 CY of material generated during construction activities related to improvements to Building 114 was reused within the Northern Beneficial Reuse Area following WDNR's approval on August 16, 2024 (below).
- The soil was spread on August 28, 2024.
- A picture of the area following beneficial reuse of the soil is below.



Please let me know if you have any questions or require additional documentation for this activity.

Thanks
Denice

Denice Nelson
Senior Director, Remediation and Strategy
Johnson Controls

+1 651 280 7259 cell

From: Sellwood, Alyssa A - DNR <alyssa.sellwood@wisconsin.gov>
Sent: Friday, August 16, 2024 11:45 AM
To: Denice Nelson <denice.karen.nelson@jci.com>
Cc: Thistle, Jodie M - DNR <jodie.thistle@wisconsin.gov>
Subject: RE: Request to reuse soils on site: FTC construction related-soil (Bldg 114)

Denice - Thank you for providing the activity-specific soil management plan and characterization results for the soils generated during construction at Building 114 on the FTC property.

JCI/Tyco may proceed with implementing the soil management plan summarized below. Please respond to this email within 30 days of completing the work, per condition 5 in the DNR's August 12, 2024 Approval to Manage Contaminated Soil under Wis. Admin. Code § NR 718.12 for BRRTS #02-38-580694 and #03-38-001345.

Alyssa Sellwood, PE (WI)
Phone: 608-622-8606
Alyssa.Sellwood@wisconsin.gov

From: Denice Nelson <denice.karen.nelson@jci.com>
Sent: Thursday, August 15, 2024 10:56 AM
To: Sellwood, Alyssa A - DNR <alyssa.sellwood@wisconsin.gov>
Subject: Request to reuse soils on site: FTC construction related-soil (Bldg 114)

Alyssa,

Per your August 12, 2024 Approval to Manage Contaminated Soil under Wis. Admin. Code § NR 718.12, Tyco plans to reuse soils on site at the Tyco Fire Technology Center (FTC), 2700 Industrial Parkway South, Marinette, WI 54143. Specifics about the soil as required by the above-referenced approval are included below:

Activity generating soil:	Soils were generated and stockpiled during the excavation and construction activities related to improvements to Building 114 at the FTC
Quantity:	Approximately 10 Cubic Yards
Characterization results:	Two representative soil samples were collected, to meet the minimum NR 718 characterization requirements, from the stockpile on March 22, 2024. The samples were analyzed for volatile organic compounds (VOCs) and per- and polyfluoroalkyl substances (PFAS). All analytical results were below criteria established in the Onsite Soil Reuse Plan[1].
Proposed location where materials will be managed on-site:	Materials will be moved for beneficial reuse in the North Beneficial Soil Reuse Area.
Schedule:	Materials will be moved within approximately 2 weeks of approval by WDNR.

[1] VOCs were either not detected in the samples or were considered non-detect because of presences in the laboratory blank.

A PFAS detection summary table and laboratory results are attached for your review. Please confirm you approve of the beneficial reuse of these soils onsite or reach out with any questions.

Thanks,

Denice

Denice Nelson
Senior Director, Remediation and Strategy
Johnson Controls

+1 651 280 7259 cell
denice.karen.nelson@jci.com
www.johnsoncontrols.com
Twitter: @JohnsonControls • LinkedIn: Johnson-Controls

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Johnson Controls
5757 North Green Bay Avenue
Glendale, WI 53209
USA

Table 1
PFAS in Soil Detection Summary Building 114
On-Site Beneficial Reuse of Soils

Sample ID Sample Date	Unit	PFOS RCL[1]	PFOA RCL[1]	B14-1 03/22/2024	B14-2 03/22/2024
6:2 FTS	µg/Kg	-	-	**0.36**	**0.13 J**
Perfluorobutanoic acid (PFBA)	µg/Kg	-	-	**0.19**	**0.14 J**
Perfluoroheptanoic acid (PFHpA)	µg/Kg	-	-	**0.051 J**	<0.037
Perfluorohexanoic acid (PFHxA)	µg/Kg	-	-	**0.28 I**	**0.11 J**
Perfluorooctanesulfonic acid (PFOS)	µg/Kg	0.9	-	<0.040	<0.042
Perfluorooctanoic acid (PFOA)	µg/Kg	-	5.0	**0.071 J**	<0.052
Perfluoropentanoic acid (PFPeA)	µg/Kg	-	-	**0.69**	**0.46**

Notes:
1) Site specific PFAS RCL defined in March 5, 2024 Material Management Plan (Arcadis)

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Kirk Kapfhammer
Endpoint Solutions Corp
6871 S. Lover's Lane
Franklin, Wisconsin 53132

Generated 4/11/2024 7:50:37 PM

JOB DESCRIPTION

TYCO - Ind Pkwy

JOB NUMBER

500-248054-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Eurofins Chicago

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

Results relate only to the items tested and the sample(s) as received by the laboratory. The results, detection limits (LOD) and Quantitation Limits (LOQ) have been adjusted for sample dilutions and/or solids content.

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 Chicago Project Manager.

Compliance Statement

The LOD and LOQ reported are adjusted by the dilution factor when a dilution factor greater than 1 is needed. Additionally, where results are indicated as being reported on a dry weight basis, the LOD and LOQ are adjusted for moisture content as well.

Definitions of Limits
- LOD = Limit of Detection = MDL as defined by 40 CFR part 136 Appendix B
- LOQ = Limit of Quantitation = 3.33 x LOD as defined by Wisconsin
- RL = Report Limit = a concentration supported by a standard in the calibration curves

Authorization

Generated
4/11/2024 7:50:37 PM

Authorized for release by
Sandie Fredrick, Senior Project Manager
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

Table of Contents

Job Narrative
500-248054-1

Receipt
The samples were received on 3/26/2024 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.0º C.

GC/MS VOA
Method 5035: sample vial has < 8 grams of soil in 10 ml of methanol. B14-1 (500-248054-1) and B14-2 (500-248054-2)

Methods 624.1, 8260D: Methylene chloride was detected in the following items: B14-1 (500-248054-1) and B14-2 (500-248054-2). Methylene chloride is a known lab contaminant; therefore all low level detects for this compound could be suspected as lab contamination.

Method 8260D: The laboratory control sample (LCS) for preparation batch 500-760730 and 500-760730 and analytical batch 500-761210 recovered outside control limits for the following analytes: Trichlorofluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.B14-1 (500-248054-1) and B14-2 (500-248054-2)

Method 8260D: The laboratory control sample (LCS) for 760730 recovered outside control limits for many analytes This is a prepped 5035 LCS. All daily instrument LCSs were acceptable, and the data have been reported.B14-1 (500-248054-1) and B14-2 (500-248054-2)

Method 8260D: The blank for preparation batch 500-760730 and analytical batch 500-761210 contained Chloroform and Chloroethane above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.(LB3 500-760730/18-A)

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

LCMS
Method 537 (modified): The continuing calibration verification (CCV) associated with batch 320-752438 recovered above the upper control limit for 6:2 FTS and 4,8-Dioxa-3H-perfluorononanoic acid (ADONA). The samples associated with this CCV were non-detect for the affected analytes; therefore, the data have been reported. The associated samples are impacted: B14-1 (500-248054-1), B14-2 (500-248054-2) and (CCV 320-752438/13).

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was outside the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty. However, analyst judgment was used to positively identify the analyte: B14-1 (500-248054-1).

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

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

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

Detection Summary

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

Client Sample ID: B14-1 — Lab Sample ID: 500-248054-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.040	J B *+	0.18	0.033	mg/Kg	50	☼	8260D	Total/NA
Chloromethane	0.070	J B	0.45	0.029	mg/Kg	50	☼	8260D	Total/NA
1,2-Dichlorobenzene	0.048	J *+	0.090	0.030	mg/Kg	50	☼	8260D	Total/NA
Methylene Chloride	0.74	B *+	0.45	0.15	mg/Kg	50	☼	8260D	Total/NA
Xylenes, Total	0.027	J	0.045	0.020	mg/Kg	50	☼	8260D	Total/NA
Perfluorobutanoic acid (PFBA)	0.19		0.19	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.69		0.19	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.28	I	0.19	0.029	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.051	J	0.19	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.071	J	0.19	0.049	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS - RA	0.36		0.19	0.025	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B14-2 — Lab Sample ID: 500-248054-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.045	J B *+	0.20	0.038	mg/Kg	50	☼	8260D	Total/NA
Chloromethane	0.074	J B	0.51	0.033	mg/Kg	50	☼	8260D	Total/NA
Methylene Chloride	0.92	B *+	0.51	0.17	mg/Kg	50	☼	8260D	Total/NA
Perfluorobutanoic acid (PFBA)	0.14	J	0.20	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.46		0.20	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.11	J	0.20	0.030	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS - RA	0.13	J	0.20	0.027	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CHI
537 (modified)	Fluorinated Alkyl Substances	EPA	EET SAC
Moisture	Percent Moisture	EPA	EET CHI
5035	Closed System Purge and Trap	SW846	EET CHI
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	EET SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-248054-1	B14-1	Solid	03/22/24 17:30	03/26/24 10:20
500-248054-2	B14-2	Solid	03/22/24 17:40	03/26/24 10:20

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

Client Sample ID: B14-1
Date Collected: 03/22/24 17:30
Date Received: 03/26/24 10:20

Lab Sample ID: 500-248054-1
Matrix: Solid
Percent Solids: 99.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.013		0.023	0.013	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Bromobenzene	<0.032	*+	0.090	0.032	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Bromochloromethane	<0.039	*+	0.090	0.039	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Bromodichloromethane	<0.034	*+	0.090	0.034	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Bromoform	<0.044		0.090	0.044	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Bromomethane	<0.072		0.27	0.072	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Carbon tetrachloride	<0.035		0.090	0.035	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Chlorobenzene	<0.035		0.090	0.035	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Chloroethane	<0.046		0.45	0.046	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Chloroform	**0.040**	**J B *+**	0.18	0.033	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Chloromethane	**0.070**	**J B**	0.45	0.029	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
2-Chlorotoluene	<0.028		0.090	0.028	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
4-Chlorotoluene	<0.032		0.090	0.032	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
cis-1,2-Dichloroethene	<0.037		0.090	0.037	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
cis-1,3-Dichloropropene	<0.038		0.090	0.038	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Chlorodibromomethane	<0.044		0.090	0.044	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,2-Dibromo-3-Chloropropane	<0.18	*+	0.45	0.18	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,2-Dibromoethane (EDB)	<0.035		0.090	0.035	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Dibromomethane	<0.024	*+	0.090	0.024	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,2-Dichlorobenzene	**0.048**	**J *+**	0.090	0.030	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,3-Dichlorobenzene	<0.036		0.090	0.036	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,4-Dichlorobenzene	<0.033	*+	0.090	0.033	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Dichlorodifluoromethane	<0.061		0.27	0.061	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,1-Dichloroethane	<0.037		0.090	0.037	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,2-Dichloroethane	<0.035	*+	0.090	0.035	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,1-Dichloroethene	<0.035		0.090	0.035	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,2-Dichloropropane	<0.039		0.090	0.039	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,3-Dichloropropane	<0.033		0.090	0.033	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
2,2-Dichloropropane	<0.040		0.45	0.040	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,1-Dichloropropene	<0.027	*+	0.090	0.027	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Ethylbenzene	<0.017		0.023	0.017	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Hexachlorobutadiene	<0.040		0.090	0.040	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Isopropylbenzene	<0.035		0.090	0.035	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Isopropyl ether	<0.025		0.090	0.025	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Methylene Chloride	**0.74**	**B *+**	0.45	0.15	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Methyl tert-butyl ether	<0.036		0.090	0.036	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Naphthalene	<0.030		0.090	0.030	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
n-Butylbenzene	<0.035		0.090	0.035	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
N-Propylbenzene	<0.037		0.090	0.037	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
p-Isopropyltoluene	<0.033		0.090	0.033	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
sec-Butylbenzene	<0.036		0.090	0.036	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Styrene	<0.035		0.090	0.035	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
tert-Butylbenzene	<0.036		0.090	0.036	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,1,1,2-Tetrachloroethane	<0.042	*+	0.090	0.042	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,1,2,2-Tetrachloroethane	<0.036		0.090	0.036	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Tetrachloroethene	<0.033		0.090	0.033	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Toluene	<0.013		0.023	0.013	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
trans-1,2-Dichloroethene	<0.032		0.090	0.032	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
trans-1,3-Dichloropropene	<0.033		0.090	0.033	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50

Client Sample ID: B14-1
Date Collected: 03/22/24 17:30
Date Received: 03/26/24 10:20

Lab Sample ID: 500-248054-1
Matrix: Solid
Percent Solids: 99.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.041		0.090	0.041	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,2,4-Trichlorobenzene	<0.031		0.090	0.031	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,1,1-Trichloroethane	<0.034	*+	0.090	0.034	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,1,2-Trichloroethane	<0.032		0.090	0.032	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Trichloroethene	<0.015		0.045	0.015	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Trichlorofluoromethane	<0.039	*+	0.090	0.039	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,2,3-Trichloropropane	<0.037		0.18	0.037	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,2,4-Trimethylbenzene	<0.032		0.090	0.032	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
1,3,5-Trimethylbenzene	<0.034		0.090	0.034	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Vinyl chloride	<0.024		0.090	0.024	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50
Xylenes, Total	**0.027**	**J**	0.045	0.020	mg/Kg	☼	03/22/24 17:30	04/03/24 17:22	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*72 - 124*	*03/22/24 17:30*	*04/03/24 17:22*	*50*
Dibromofluoromethane (Surr)	*111*		*75 - 120*	*03/22/24 17:30*	*04/03/24 17:22*	*50*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 126*	*03/22/24 17:30*	*04/03/24 17:22*	*50*
Toluene-d8 (Surr)	*99*		*75 - 120*	*03/22/24 17:30*	*04/03/24 17:22*	*50*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.19**		0.19	0.043	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluoropentanoic acid (PFPeA)	**0.69**		0.19	0.038	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorohexanoic acid (PFHxA)	**0.28**	**I**	0.19	0.029	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluoroheptanoic acid (PFHpA)	**0.051**	**J**	0.19	0.035	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorooctanoic acid (PFOA)	**0.071**	**J**	0.19	0.049	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorononanoic acid (PFNA)	<0.020		0.19	0.020	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorodecanoic acid (PFDA)	<0.045		0.19	0.045	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluoroundecanoic acid (PFUnA)	<0.039		0.19	0.039	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorododecanoic acid (PFDoA)	<0.028		0.19	0.028	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorotridecanoic acid (PFTriA)	<0.019		0.19	0.019	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorotetradecanoic acid (PFTeA)	<0.034		0.19	0.034	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.035		0.19	0.035	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.061		0.19	0.061	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorobutanesulfonic acid (PFBS)	<0.035		0.19	0.035	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluoropentanesulfonic acid (PFPeS)	<0.034		0.19	0.034	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorohexanesulfonic acid (PFHxS)	<0.027		0.19	0.027	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.045		0.19	0.045	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorooctanesulfonic acid (PFOS)	<0.040		0.19	0.040	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorononanesulfonic acid (PFNS)	<0.027		0.19	0.027	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorodecanesulfonic acid (PFDS)	<0.048		0.19	0.048	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorododecanesulfonic acid (PFDoS)	<0.044		0.19	0.044	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
Perfluorooctanesulfonamide (FOSA)	<0.031		0.19	0.031	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
NEtFOSA	<0.044		0.19	0.044	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
NMeFOSA	<0.045		0.19	0.045	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
NMeFOSAA	<0.021		0.19	0.021	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
NEtFOSAA	<0.045		0.19	0.045	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1

Client Sample ID: B14-1
Date Collected: 03/22/24 17:30
Date Received: 03/26/24 10:20

Lab Sample ID: 500-248054-1
Matrix: Solid
Percent Solids: 99.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
NMeFOSE	<0.044		0.19	0.044	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
NEtFOSE	<0.026		0.19	0.026	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
4:2 FTS	<0.047		0.19	0.047	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
8:2 FTS	<0.032		0.19	0.032	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
10:2 FTS	<0.035		0.19	0.035	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.036		0.19	0.036	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
HFPO-DA (GenX)	<0.038		0.19	0.038	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
F-53B Major	<0.032		0.19	0.032	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1
F-53B Minor	<0.029		0.19	0.029	ug/Kg	☼	04/03/24 04:21	04/04/24 18:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*76*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C5 PFPeA	*93*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C2 PFHxA	*91*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C4 PFHpA	*92*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C4 PFOA	*96*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C5 PFNA	*90*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C2 PFDA	*90*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C2 PFUnA	*87*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C2 PFDoA	*78*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C2 PFTeDA	*72*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C2 PFHxDA	*72*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C3 PFBS	*83*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
18O2 PFHxS	*80*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C4 PFOS	*81*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C8 FOSA	*93*		*10 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
d3-NMeFOSAA	*88*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
d5-NEtFOSAA	*95*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
d-N-MeFOSA-M	*77*		*10 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
d-N-EtFOSA-M	*77*		*10 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
d7-N-MeFOSE-M	*65*		*10 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
d9-N-EtFOSE-M	*68*		*10 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
M2-4:2 FTS	*87*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
M2-8:2 FTS	*109*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C3 HFPO-DA	*79*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*
13C2 10:2 FTS	*100*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:27*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
6:2 FTS	**0.36**		0.19	0.025	ug/Kg	☼	04/03/24 04:21	04/08/24 10:05	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-6:2 FTS	*91*		*25 - 150*	*04/03/24 04:21*	*04/08/24 10:05*	*1*

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

Client Sample ID: B14-2
Date Collected: 03/22/24 17:40
Date Received: 03/26/24 10:20

Lab Sample ID: 500-248054-2
Matrix: Solid
Percent Solids: 98.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.015		0.026	0.015	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Bromobenzene	<0.036	*+	0.10	0.036	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Bromochloromethane	<0.044	*+	0.10	0.044	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Bromodichloromethane	<0.038	*+	0.10	0.038	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Bromoform	<0.050		0.10	0.050	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Bromomethane	<0.082		0.31	0.082	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Carbon tetrachloride	<0.039		0.10	0.039	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Chlorobenzene	<0.040		0.10	0.040	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Chloroethane	<0.052		0.51	0.052	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Chloroform	**0.045**	**J B *+**	0.20	0.038	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Chloromethane	**0.074**	**J B**	0.51	0.033	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
2-Chlorotoluene	<0.032		0.10	0.032	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
4-Chlorotoluene	<0.036		0.10	0.036	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
cis-1,2-Dichloroethene	<0.042		0.10	0.042	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
cis-1,3-Dichloropropene	<0.043		0.10	0.043	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Chlorodibromomethane	<0.050		0.10	0.050	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,2-Dibromo-3-Chloropropane	<0.20	*+	0.51	0.20	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,2-Dibromoethane (EDB)	<0.040		0.10	0.040	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Dibromomethane	<0.028	*+	0.10	0.028	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,2-Dichlorobenzene	<0.034	*+	0.10	0.034	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,3-Dichlorobenzene	<0.041		0.10	0.041	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,4-Dichlorobenzene	<0.037	*+	0.10	0.037	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Dichlorodifluoromethane	<0.069		0.31	0.069	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,1-Dichloroethane	<0.042		0.10	0.042	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,2-Dichloroethane	<0.040	*+	0.10	0.040	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,1-Dichloroethene	<0.040		0.10	0.040	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,2-Dichloropropane	<0.044		0.10	0.044	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,3-Dichloropropane	<0.037		0.10	0.037	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
2,2-Dichloropropane	<0.045		0.51	0.045	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,1-Dichloropropene	<0.031	*+	0.10	0.031	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Ethylbenzene	<0.019		0.026	0.019	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Hexachlorobutadiene	<0.046		0.10	0.046	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Isopropylbenzene	<0.039		0.10	0.039	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Isopropyl ether	<0.028		0.10	0.028	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Methylene Chloride	**0.92**	**B *+**	0.51	0.17	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Methyl tert-butyl ether	<0.040		0.10	0.040	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Naphthalene	<0.034		0.10	0.034	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
n-Butylbenzene	<0.040		0.10	0.040	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
N-Propylbenzene	<0.042		0.10	0.042	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
p-Isopropyltoluene	<0.037		0.10	0.037	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
sec-Butylbenzene	<0.041		0.10	0.041	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Styrene	<0.040		0.10	0.040	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
tert-Butylbenzene	<0.041		0.10	0.041	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,1,1,2-Tetrachloroethane	<0.047	*+	0.10	0.047	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,1,2,2-Tetrachloroethane	<0.041		0.10	0.041	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Tetrachloroethene	<0.038		0.10	0.038	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Toluene	<0.015		0.026	0.015	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
trans-1,2-Dichloroethene	<0.036		0.10	0.036	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
trans-1,3-Dichloropropene	<0.037		0.10	0.037	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50

Client Sample ID: B14-2
Date Collected: 03/22/24 17:40
Date Received: 03/26/24 10:20

Lab Sample ID: 500-248054-2
Matrix: Solid
Percent Solids: 98.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.047		0.10	0.047	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,2,4-Trichlorobenzene	<0.035		0.10	0.035	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,1,1-Trichloroethane	<0.039	*+	0.10	0.039	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,1,2-Trichloroethane	<0.036		0.10	0.036	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Trichloroethene	<0.017		0.051	0.017	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Trichlorofluoromethane	<0.044	*+	0.10	0.044	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,2,3-Trichloropropane	<0.042		0.20	0.042	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,2,4-Trimethylbenzene	<0.037		0.10	0.037	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
1,3,5-Trimethylbenzene	<0.039		0.10	0.039	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Vinyl chloride	<0.027		0.10	0.027	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50
Xylenes, Total	<0.023		0.051	0.023	mg/Kg	☼	03/22/24 17:40	04/03/24 17:46	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*72 - 124*	*03/22/24 17:40*	*04/03/24 17:46*	*50*
Dibromofluoromethane (Surr)	*112*		*75 - 120*	*03/22/24 17:40*	*04/03/24 17:46*	*50*
1,2-Dichloroethane-d4 (Surr)	*122*		*75 - 126*	*03/22/24 17:40*	*04/03/24 17:46*	*50*
Toluene-d8 (Surr)	*99*		*75 - 120*	*03/22/24 17:40*	*04/03/24 17:46*	*50*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.14**	**J**	0.20	0.045	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluoropentanoic acid (PFPeA)	**0.46**		0.20	0.040	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorohexanoic acid (PFHxA)	**0.11**	**J**	0.20	0.030	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluoroheptanoic acid (PFHpA)	<0.037		0.20	0.037	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorooctanoic acid (PFOA)	<0.052		0.20	0.052	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorodecanoic acid (PFDA)	<0.047		0.20	0.047	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluoroundecanoic acid (PFUnA)	<0.041		0.20	0.041	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorododecanoic acid (PFDoA)	<0.029		0.20	0.029	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorotridecanoic acid (PFTriA)	<0.021		0.20	0.021	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorotetradecanoic acid (PFTeA)	<0.036		0.20	0.036	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.037		0.20	0.037	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.065		0.20	0.065	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorobutanesulfonic acid (PFBS)	<0.037		0.20	0.037	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluoropentanesulfonic acid (PFPeS)	<0.036		0.20	0.036	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorohexanesulfonic acid (PFHxS)	<0.028		0.20	0.028	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.048		0.20	0.048	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorooctanesulfonic acid (PFOS)	<0.042		0.20	0.042	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorononanesulfonic acid (PFNS)	<0.028		0.20	0.028	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorodecanesulfonic acid (PFDS)	<0.051		0.20	0.051	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorododecanesulfonic acid (PFDoS)	<0.046		0.20	0.046	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
Perfluorooctanesulfonamide (FOSA)	<0.032		0.20	0.032	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
NEtFOSA	<0.046		0.20	0.046	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
NMeFOSA	<0.048		0.20	0.048	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
NEtFOSAA	<0.047		0.20	0.047	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

Client Sample ID: B14-2
Date Collected: 03/22/24 17:40
Date Received: 03/26/24 10:20

Lab Sample ID: 500-248054-2
Matrix: Solid
Percent Solids: 98.6

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
NMeFOSE	<0.046		0.20	0.046	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
4:2 FTS	<0.050		0.20	0.050	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
8:2 FTS	<0.034		0.20	0.034	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
10:2 FTS	<0.037		0.20	0.037	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.038		0.20	0.038	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
HFPO-DA (GenX)	<0.040		0.20	0.040	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
F-53B Major	<0.034		0.20	0.034	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1
F-53B Minor	<0.030		0.20	0.030	ug/Kg	☼	04/03/24 04:21	04/04/24 18:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*90*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C5 PFPeA	*91*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C2 PFHxA	*94*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C4 PFHpA	*93*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C4 PFOA	*98*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C5 PFNA	*88*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C2 PFDA	*88*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C2 PFUnA	*82*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C2 PFDoA	*81*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C2 PFTeDA	*74*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C2 PFHxDA	*74*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C3 PFBS	*85*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
18O2 PFHxS	*81*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C4 PFOS	*74*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C8 FOSA	*87*		*10 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
d3-NMeFOSAA	*85*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
d5-NEtFOSAA	*87*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
d-N-MeFOSA-M	*73*		*10 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
d-N-EtFOSA-M	*77*		*10 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
d7-N-MeFOSE-M	*69*		*10 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
d9-N-EtFOSE-M	*76*		*10 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
M2-4:2 FTS	*91*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
M2-8:2 FTS	*102*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C3 HFPO-DA	*84*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*
13C2 10:2 FTS	*100*		*25 - 150*	*04/03/24 04:21*	*04/04/24 18:58*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
6:2 FTS	**0.13**	**J**	0.20	0.027	ug/Kg	☼	04/03/24 04:21	04/08/24 10:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-6:2 FTS	*82*		*25 - 150*	*04/03/24 04:21*	*04/08/24 10:17*	*1*

Definitions/Glossary

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

LCMS

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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

QC Association Summary

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

GC/MS VOA

Prep Batch: 760730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-248054-1	B14-1	Total/NA	Solid	5035	
500-248054-2	B14-2	Total/NA	Solid	5035	
LB3 500-760730/18-A	Method Blank	Total/NA	Solid	5035	
LCS 500-760730/19-A	Lab Control Sample	Total/NA	Solid	5035	
500-248054-2 MS	B14-2	Total/NA	Solid	5035	
500-248054-2 MSD	B14-2	Total/NA	Solid	5035	

Analysis Batch: 761210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-248054-1	B14-1	Total/NA	Solid	8260D	760730
500-248054-2	B14-2	Total/NA	Solid	8260D	760730
LB3 500-760730/18-A	Method Blank	Total/NA	Solid	8260D	760730
MB 500-761210/6	Method Blank	Total/NA	Solid	8260D	
LCS 500-760730/19-A	Lab Control Sample	Total/NA	Solid	8260D	760730
LCS 500-761210/4	Lab Control Sample	Total/NA	Solid	8260D	
500-248054-2 MS	B14-2	Total/NA	Solid	8260D	760730
500-248054-2 MSD	B14-2	Total/NA	Solid	8260D	760730

LCMS

Prep Batch: 751969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-248054-1	B14-1	Total/NA	Solid	SHAKE	
500-248054-1 - RA	B14-1	Total/NA	Solid	SHAKE	
500-248054-2	B14-2	Total/NA	Solid	SHAKE	
500-248054-2 - RA	B14-2	Total/NA	Solid	SHAKE	
MB 320-751969/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-751969/3-A	Lab Control Sample	Total/NA	Solid	SHAKE	
LLCS 320-751969/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 752438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-248054-1	B14-1	Total/NA	Solid	537 (modified)	751969
500-248054-2	B14-2	Total/NA	Solid	537 (modified)	751969
MB 320-751969/1-A	Method Blank	Total/NA	Solid	537 (modified)	751969
LCS 320-751969/3-A	Lab Control Sample	Total/NA	Solid	537 (modified)	751969
LLCS 320-751969/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	751969

Analysis Batch: 753112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-248054-1 - RA	B14-1	Total/NA	Solid	537 (modified)	751969
500-248054-2 - RA	B14-2	Total/NA	Solid	537 (modified)	751969

General Chemistry

Analysis Batch: 760578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-248054-1	B14-1	Total/NA	Solid	Moisture	
500-248054-2	B14-2	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
500-248054-1	B14-1	94	111	119	99
500-248054-2	B14-2	95	112	122	99
500-248054-2 MS	B14-2	100	106	116	102
500-248054-2 MSD	B14-2	99	107	120	101
LB3 500-760730/18-A	Method Blank	91	107	113	101
LCS 500-760730/19-A	Lab Control Sample	99	107	118	101
LCS 500-761210/4	Lab Control Sample	92	106	114	99
MB 500-761210/6	Method Blank	93	109	119	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: LB3 500-760730/18-A
Matrix: Solid
Analysis Batch: 761210

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 760730

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0073		0.013	0.0073	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Bromobenzene	<0.018		0.050	0.018	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Bromochloromethane	<0.021		0.050	0.021	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Bromodichloromethane	<0.019		0.050	0.019	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Bromoform	<0.024		0.050	0.024	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Bromomethane	<0.040		0.15	0.040	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Carbon tetrachloride	<0.019		0.050	0.019	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Chlorobenzene	<0.019		0.050	0.019	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Chloroethane	<0.025		0.25	0.025	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Chloroform	0.0328	J	0.10	0.019	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Chloromethane	0.0634	J	0.25	0.016	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
2-Chlorotoluene	<0.016		0.050	0.016	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
4-Chlorotoluene	<0.018		0.050	0.018	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
cis-1,2-Dichloroethene	<0.020		0.050	0.020	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
cis-1,3-Dichloropropene	<0.021		0.050	0.021	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Chlorodibromomethane	<0.024		0.050	0.024	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,2-Dibromo-3-Chloropropane	<0.10		0.25	0.10	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,2-Dibromoethane (EDB)	<0.019		0.050	0.019	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Dibromomethane	<0.014		0.050	0.014	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,2-Dichlorobenzene	<0.017		0.050	0.017	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,3-Dichlorobenzene	<0.020		0.050	0.020	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,4-Dichlorobenzene	<0.018		0.050	0.018	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Dichlorodifluoromethane	<0.034		0.15	0.034	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,1-Dichloroethane	<0.021		0.050	0.021	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,2-Dichloroethane	<0.020		0.050	0.020	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,1-Dichloroethene	<0.020		0.050	0.020	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,2-Dichloropropane	<0.021		0.050	0.021	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,3-Dichloropropane	<0.018		0.050	0.018	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
2,2-Dichloropropane	<0.022		0.25	0.022	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,1-Dichloropropene	<0.015		0.050	0.015	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Ethylbenzene	<0.0092		0.013	0.0092	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Hexachlorobutadiene	<0.022		0.050	0.022	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Isopropylbenzene	<0.019		0.050	0.019	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Isopropyl ether	<0.014		0.050	0.014	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Methylene Chloride	0.185	J	0.25	0.082	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Methyl tert-butyl ether	<0.020		0.050	0.020	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Naphthalene	<0.017		0.050	0.017	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
n-Butylbenzene	<0.019		0.050	0.019	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
N-Propylbenzene	<0.021		0.050	0.021	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
p-Isopropyltoluene	<0.018		0.050	0.018	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
sec-Butylbenzene	<0.020		0.050	0.020	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Styrene	<0.019		0.050	0.019	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
tert-Butylbenzene	<0.020		0.050	0.020	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,1,1,2-Tetrachloroethane	<0.023		0.050	0.023	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,1,2,2-Tetrachloroethane	<0.020		0.050	0.020	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Tetrachloroethene	<0.019		0.050	0.019	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Toluene	<0.0074		0.013	0.0074	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
trans-1,2-Dichloroethene	<0.018		0.050	0.018	mg/Kg		03/30/24 20:00	04/03/24 10:53	50

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

Lab Sample ID: LB3 500-760730/18-A
Matrix: Solid
Analysis Batch: 761210

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 760730

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.018		0.050	0.018	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,2,3-Trichlorobenzene	<0.023		0.050	0.023	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,2,4-Trichlorobenzene	<0.017		0.050	0.017	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,1,1-Trichloroethane	<0.019		0.050	0.019	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,1,2-Trichloroethane	<0.018		0.050	0.018	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Trichloroethene	<0.0082		0.025	0.0082	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Trichlorofluoromethane	<0.021		0.050	0.021	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,2,3-Trichloropropane	<0.021		0.10	0.021	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,2,4-Trimethylbenzene	<0.018		0.050	0.018	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
1,3,5-Trimethylbenzene	<0.019		0.050	0.019	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Vinyl chloride	<0.013		0.050	0.013	mg/Kg		03/30/24 20:00	04/03/24 10:53	50
Xylenes, Total	<0.011		0.025	0.011	mg/Kg		03/30/24 20:00	04/03/24 10:53	50

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*72 - 124*	*03/30/24 20:00*	*04/03/24 10:53*	*50*
Dibromofluoromethane (Surr)	*107*		*75 - 120*	*03/30/24 20:00*	*04/03/24 10:53*	*50*
1,2-Dichloroethane-d4 (Surr)	*113*		*75 - 126*	*03/30/24 20:00*	*04/03/24 10:53*	*50*
Toluene-d8 (Surr)	*101*		*75 - 120*	*03/30/24 20:00*	*04/03/24 10:53*	*50*

Lab Sample ID: LCS 500-760730/19-A
Matrix: Solid
Analysis Batch: 761210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 760730

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	2.50	2.89		mg/Kg		116	70 - 120
Bromobenzene	2.50	3.13	*+	mg/Kg		125	70 - 122
Bromochloromethane	2.50	3.24	*+	mg/Kg		130	65 - 122
Bromodichloromethane	2.50	3.17	*+	mg/Kg		127	69 - 120
Bromoform	2.50	2.88		mg/Kg		115	56 - 132
Bromomethane	2.50	3.02		mg/Kg		121	40 - 152
Carbon tetrachloride	2.50	3.31		mg/Kg		133	59 - 133
Chlorobenzene	2.50	3.01		mg/Kg		120	70 - 120
Chloroethane	2.50	2.82		mg/Kg		113	48 - 136
Chloroform	2.50	3.19	*+	mg/Kg		127	70 - 120
Chloromethane	2.50	1.56		mg/Kg		62	56 - 152
2-Chlorotoluene	2.50	2.93		mg/Kg		117	70 - 125
4-Chlorotoluene	2.50	2.94		mg/Kg		118	68 - 124
cis-1,2-Dichloroethene	2.50	3.03		mg/Kg		121	70 - 125
cis-1,3-Dichloropropene	2.50	2.92		mg/Kg		117	64 - 127
Chlorodibromomethane	2.50	3.02		mg/Kg		121	68 - 125
1,2-Dibromo-3-Chloropropane	2.50	3.13	*+	mg/Kg		125	56 - 123
1,2-Dibromoethane (EDB)	2.50	3.08		mg/Kg		123	70 - 125
Dibromomethane	2.50	3.09	*+	mg/Kg		124	70 - 120
1,2-Dichlorobenzene	2.50	3.16	*+	mg/Kg		127	70 - 125
1,3-Dichlorobenzene	2.50	3.03		mg/Kg		121	70 - 125
1,4-Dichlorobenzene	2.50	3.04	*+	mg/Kg		122	70 - 120
Dichlorodifluoromethane	2.50	1.10		mg/Kg		44	40 - 159
1,1-Dichloroethane	2.50	2.91		mg/Kg		116	70 - 125

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

Lab Sample ID: LCS 500-760730/19-A
Matrix: Solid
Analysis Batch: 761210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 760730

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloroethane	2.50	3.38	*+	mg/Kg		135	68 - 127
1,1-Dichloroethene	2.50	2.97		mg/Kg		119	67 - 122
1,2-Dichloropropane	2.50	2.76		mg/Kg		110	67 - 130
1,3-Dichloropropane	2.50	3.09		mg/Kg		123	62 - 136
2,2-Dichloropropane	2.50	2.87		mg/Kg		115	58 - 139
1,1-Dichloropropene	2.50	3.11	*+	mg/Kg		124	70 - 121
Ethylbenzene	2.50	2.92		mg/Kg		117	70 - 123
Hexachlorobutadiene	2.50	3.27		mg/Kg		131	51 - 150
Isopropylbenzene	2.50	3.00		mg/Kg		120	70 - 126
Methylene Chloride	2.50	3.35	*+	mg/Kg		134	69 - 125
Methyl tert-butyl ether	2.50	2.75		mg/Kg		110	55 - 123
Naphthalene	2.50	2.93		mg/Kg		117	53 - 144
n-Butylbenzene	2.50	3.03		mg/Kg		121	68 - 125
N-Propylbenzene	2.50	3.01		mg/Kg		121	69 - 127
p-Isopropyltoluene	2.50	3.07		mg/Kg		123	70 - 125
sec-Butylbenzene	2.50	2.99		mg/Kg		120	70 - 123
Styrene	2.50	3.01		mg/Kg		120	70 - 120
tert-Butylbenzene	2.50	3.02		mg/Kg		121	70 - 121
1,1,1,2-Tetrachloroethane	2.50	3.17	*+	mg/Kg		127	70 - 125
1,1,2,2-Tetrachloroethane	2.50	2.69		mg/Kg		108	62 - 140
Tetrachloroethene	2.50	3.09		mg/Kg		124	70 - 128
Toluene	2.50	2.81		mg/Kg		113	70 - 125
trans-1,2-Dichloroethene	2.50	3.09		mg/Kg		124	70 - 125
trans-1,3-Dichloropropene	2.50	2.93		mg/Kg		117	62 - 128
1,2,3-Trichlorobenzene	2.50	3.06		mg/Kg		123	51 - 145
1,2,4-Trichlorobenzene	2.50	3.01		mg/Kg		120	57 - 137
1,1,1-Trichloroethane	2.50	3.22	*+	mg/Kg		129	70 - 125
1,1,2-Trichloroethane	2.50	2.88		mg/Kg		115	71 - 130
Trichloroethene	2.50	3.07		mg/Kg		123	70 - 125
Trichlorofluoromethane	2.50	3.40	*+	mg/Kg		136	55 - 128
1,2,3-Trichloropropane	2.50	2.94		mg/Kg		118	50 - 133
1,2,4-Trimethylbenzene	2.50	3.01		mg/Kg		120	70 - 123
1,3,5-Trimethylbenzene	2.50	3.02		mg/Kg		121	70 - 123
Vinyl chloride	2.50	1.92		mg/Kg		77	64 - 126
Xylenes, Total	5.00	5.76		mg/Kg		115	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*
Dibromofluoromethane (Surr)	*107*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 126*
Toluene-d8 (Surr)	*101*		*75 - 120*

Lab Sample ID: 500-248054-2 MS
Matrix: Solid
Analysis Batch: 761210

Client Sample ID: B14-2
Prep Type: Total/NA
Prep Batch: 760730

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.015		5.12	4.74		mg/Kg	☼	93	70 - 120

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

Lab Sample ID: 500-248054-2 MS
Matrix: Solid
Analysis Batch: 761210

Client Sample ID: B14-2
Prep Type: Total/NA
Prep Batch: 760730

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromobenzene	<0.036	*+	5.12	5.11		mg/Kg	☼	100	70 - 122
Bromochloromethane	<0.044	*+	5.12	5.24		mg/Kg	☼	102	65 - 122
Bromodichloromethane	<0.038	*+	5.12	5.06		mg/Kg	☼	99	69 - 120
Bromoform	<0.050		5.12	4.68		mg/Kg	☼	91	56 - 132
Bromomethane	<0.082		5.12	6.28		mg/Kg	☼	123	40 - 152
Carbon tetrachloride	<0.039		5.12	5.42		mg/Kg	☼	106	59 - 133
Chlorobenzene	<0.040		5.12	4.94		mg/Kg	☼	96	70 - 120
Chloroethane	<0.052		5.12	5.45		mg/Kg	☼	106	48 - 136
Chloroform	0.045	J B *+	5.12	5.14		mg/Kg	☼	100	70 - 120
Chloromethane	0.074	J B	5.12	3.96		mg/Kg	☼	76	56 - 152
2-Chlorotoluene	<0.032		5.12	4.75		mg/Kg	☼	93	70 - 125
4-Chlorotoluene	<0.036		5.12	4.87		mg/Kg	☼	95	68 - 124
cis-1,2-Dichloroethene	<0.042		5.12	4.85		mg/Kg	☼	95	70 - 125
cis-1,3-Dichloropropene	<0.043		5.12	4.83		mg/Kg	☼	94	64 - 127
Chlorodibromomethane	<0.050		5.12	5.02		mg/Kg	☼	98	68 - 125
1,2-Dibromo-3-Chloropropane	<0.20	*+	5.12	5.35		mg/Kg	☼	104	56 - 123
1,2-Dibromoethane (EDB)	<0.040		5.12	5.05		mg/Kg	☼	98	70 - 125
Dibromomethane	<0.028	*+	5.12	5.14		mg/Kg	☼	100	70 - 120
1,2-Dichlorobenzene	<0.034	*+	5.12	5.20		mg/Kg	☼	101	70 - 125
1,3-Dichlorobenzene	<0.041		5.12	5.00		mg/Kg	☼	98	70 - 125
1,4-Dichlorobenzene	<0.037	*+	5.12	5.00		mg/Kg	☼	98	70 - 120
Dichlorodifluoromethane	<0.069		5.12	3.92		mg/Kg	☼	77	40 - 159
1,1-Dichloroethane	<0.042		5.12	4.77		mg/Kg	☼	93	70 - 125
1,2-Dichloroethane	<0.040	*+	5.12	5.55		mg/Kg	☼	108	68 - 127
1,1-Dichloroethene	<0.040		5.12	5.29		mg/Kg	☼	103	67 - 122
1,2-Dichloropropane	<0.044		5.12	4.48		mg/Kg	☼	87	67 - 130
1,3-Dichloropropane	<0.037		5.12	5.00		mg/Kg	☼	98	62 - 136
2,2-Dichloropropane	<0.045		5.12	4.38		mg/Kg	☼	86	58 - 139
1,1-Dichloropropene	<0.031	*+	5.12	5.14		mg/Kg	☼	100	70 - 121
Ethylbenzene	<0.019		5.12	4.70		mg/Kg	☼	92	70 - 123
Hexachlorobutadiene	<0.046		5.12	5.47		mg/Kg	☼	107	51 - 150
Isopropylbenzene	<0.039		5.12	4.93		mg/Kg	☼	96	70 - 126
Methylene Chloride	0.92	B *+	5.12	5.78		mg/Kg	☼	95	69 - 125
Methyl tert-butyl ether	<0.040		5.12	4.41		mg/Kg	☼	86	55 - 123
Naphthalene	<0.034		5.12	4.98		mg/Kg	☼	97	53 - 144
n-Butylbenzene	<0.040		5.12	4.92		mg/Kg	☼	96	68 - 125
N-Propylbenzene	<0.042		5.12	4.91		mg/Kg	☼	96	69 - 127
p-Isopropyltoluene	<0.037		5.12	4.99		mg/Kg	☼	97	70 - 125
sec-Butylbenzene	<0.041		5.12	4.90		mg/Kg	☼	96	70 - 123
Styrene	<0.040		5.12	4.85		mg/Kg	☼	95	70 - 120
tert-Butylbenzene	<0.041		5.12	5.00		mg/Kg	☼	98	70 - 121
1,1,1,2-Tetrachloroethane	<0.047	*+	5.12	5.23		mg/Kg	☼	102	70 - 125
1,1,2,2-Tetrachloroethane	<0.041		5.12	4.53		mg/Kg	☼	88	62 - 140
Tetrachloroethene	<0.038		5.12	5.05		mg/Kg	☼	99	70 - 128
Toluene	<0.015		5.12	4.70		mg/Kg	☼	92	70 - 125
trans-1,2-Dichloroethene	<0.036		5.12	5.05		mg/Kg	☼	98	70 - 125
trans-1,3-Dichloropropene	<0.037		5.12	4.81		mg/Kg	☼	94	62 - 128
1,2,3-Trichlorobenzene	<0.047		5.12	5.31		mg/Kg	☼	104	51 - 145
1,2,4-Trichlorobenzene	<0.035		5.12	4.94		mg/Kg	☼	96	57 - 137

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

Lab Sample ID: 500-248054-2 MS
Matrix: Solid
Analysis Batch: 761210

Client Sample ID: B14-2
Prep Type: Total/NA
Prep Batch: 760730

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	<0.039	*+	5.12	5.35		mg/Kg	☼	104	70 - 125
1,1,2-Trichloroethane	<0.036		5.12	4.78		mg/Kg	☼	93	71 - 130
Trichloroethene	<0.017		5.12	5.09		mg/Kg	☼	99	70 - 125
Trichlorofluoromethane	<0.044	*+	5.12	5.87		mg/Kg	☼	115	55 - 128
1,2,3-Trichloropropane	<0.042		5.12	4.73		mg/Kg	☼	92	50 - 133
1,2,4-Trimethylbenzene	<0.037		5.12	4.87		mg/Kg	☼	95	70 - 123
1,3,5-Trimethylbenzene	<0.039		5.12	4.88		mg/Kg	☼	95	70 - 123
Vinyl chloride	<0.027		5.12	4.61		mg/Kg	☼	90	64 - 126
Xylenes, Total	<0.023		10.2	9.42		mg/Kg	☼	92	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*
Dibromofluoromethane (Surr)	*106*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*116*		*75 - 126*
Toluene-d8 (Surr)	*102*		*75 - 120*

Lab Sample ID: 500-248054-2 MSD
Matrix: Solid
Analysis Batch: 761210

Client Sample ID: B14-2
Prep Type: Total/NA
Prep Batch: 760730

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.015		5.12	4.97		mg/Kg	☼	97	70 - 120	5	30
Bromobenzene	<0.036	*+	5.12	5.10		mg/Kg	☼	100	70 - 122	0	30
Bromochloromethane	<0.044	*+	5.12	5.48		mg/Kg	☼	107	65 - 122	4	30
Bromodichloromethane	<0.038	*+	5.12	5.27		mg/Kg	☼	103	69 - 120	4	30
Bromoform	<0.050		5.12	4.87		mg/Kg	☼	95	56 - 132	4	30
Bromomethane	<0.082		5.12	6.51		mg/Kg	☼	127	40 - 152	4	30
Carbon tetrachloride	<0.039		5.12	5.48		mg/Kg	☼	107	59 - 133	1	30
Chlorobenzene	<0.040		5.12	5.03		mg/Kg	☼	98	70 - 120	2	30
Chloroethane	<0.052		5.12	5.73		mg/Kg	☼	112	48 - 136	5	30
Chloroform	0.045	J B *+	5.12	5.36		mg/Kg	☼	104	70 - 120	4	30
Chloromethane	0.074	J B	5.12	4.17		mg/Kg	☼	80	56 - 152	5	30
2-Chlorotoluene	<0.032		5.12	4.90		mg/Kg	☼	96	70 - 125	3	30
4-Chlorotoluene	<0.036		5.12	4.94		mg/Kg	☼	96	68 - 124	2	30
cis-1,2-Dichloroethene	<0.042		5.12	4.98		mg/Kg	☼	97	70 - 125	3	30
cis-1,3-Dichloropropene	<0.043		5.12	4.83		mg/Kg	☼	94	64 - 127	0	30
Chlorodibromomethane	<0.050		5.12	5.00		mg/Kg	☼	98	68 - 125	0	30
1,2-Dibromo-3-Chloropropane	<0.20	*+	5.12	5.22		mg/Kg	☼	102	56 - 123	2	30
1,2-Dibromoethane (EDB)	<0.040		5.12	5.17		mg/Kg	☼	101	70 - 125	2	30
Dibromomethane	<0.028	*+	5.12	5.22		mg/Kg	☼	102	70 - 120	2	30
1,2-Dichlorobenzene	<0.034	*+	5.12	5.27		mg/Kg	☼	103	70 - 125	1	30
1,3-Dichlorobenzene	<0.041		5.12	5.06		mg/Kg	☼	99	70 - 125	1	30
1,4-Dichlorobenzene	<0.037	*+	5.12	5.16		mg/Kg	☼	101	70 - 120	3	30
Dichlorodifluoromethane	<0.069		5.12	4.16		mg/Kg	☼	81	40 - 159	6	30
1,1-Dichloroethane	<0.042		5.12	4.96		mg/Kg	☼	97	70 - 125	4	30
1,2-Dichloroethane	<0.040	*+	5.12	5.83		mg/Kg	☼	114	68 - 127	5	30
1,1-Dichloroethene	<0.040		5.12	5.32		mg/Kg	☼	104	67 - 122	1	30
1,2-Dichloropropane	<0.044		5.12	4.58		mg/Kg	☼	89	67 - 130	2	30

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

Lab Sample ID: 500-248054-2 MSD
Matrix: Solid
Analysis Batch: 761210

Client Sample ID: B14-2
Prep Type: Total/NA
Prep Batch: 760730

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3-Dichloropropane	<0.037		5.12	5.11		mg/Kg	☼	100	62 - 136	2	30
2,2-Dichloropropane	<0.045		5.12	4.52		mg/Kg	☼	88	58 - 139	3	30
1,1-Dichloropropene	<0.031	*+	5.12	5.30		mg/Kg	☼	103	70 - 121	3	30
Ethylbenzene	<0.019		5.12	4.79		mg/Kg	☼	94	70 - 123	2	30
Hexachlorobutadiene	<0.046		5.12	5.55		mg/Kg	☼	108	51 - 150	1	30
Isopropylbenzene	<0.039		5.12	4.98		mg/Kg	☼	97	70 - 126	1	30
Methylene Chloride	0.92	B *+	5.12	6.05		mg/Kg	☼	100	69 - 125	4	30
Methyl tert-butyl ether	<0.040		5.12	4.57		mg/Kg	☼	89	55 - 123	4	30
Naphthalene	<0.034		5.12	4.99		mg/Kg	☼	97	53 - 144	0	30
n-Butylbenzene	<0.040		5.12	5.04		mg/Kg	☼	98	68 - 125	2	30
N-Propylbenzene	<0.042		5.12	5.02		mg/Kg	☼	98	69 - 127	2	30
p-Isopropyltoluene	<0.037		5.12	5.15		mg/Kg	☼	100	70 - 125	3	30
sec-Butylbenzene	<0.041		5.12	4.97		mg/Kg	☼	97	70 - 123	1	30
Styrene	<0.040		5.12	5.03		mg/Kg	☼	98	70 - 120	4	30
tert-Butylbenzene	<0.041		5.12	4.99		mg/Kg	☼	97	70 - 121	0	30
1,1,1,2-Tetrachloroethane	<0.047	*+	5.12	5.18		mg/Kg	☼	101	70 - 125	1	30
1,1,2,2-Tetrachloroethane	<0.041		5.12	4.61		mg/Kg	☼	90	62 - 140	2	30
Tetrachloroethene	<0.038		5.12	5.14		mg/Kg	☼	100	70 - 128	2	30
Toluene	<0.015		5.12	4.62		mg/Kg	☼	90	70 - 125	2	30
trans-1,2-Dichloroethene	<0.036		5.12	5.28		mg/Kg	☼	103	70 - 125	5	30
trans-1,3-Dichloropropene	<0.037		5.12	4.81		mg/Kg	☼	94	62 - 128	0	30
1,2,3-Trichlorobenzene	<0.047		5.12	5.50		mg/Kg	☼	107	51 - 145	4	30
1,2,4-Trichlorobenzene	<0.035		5.12	5.16		mg/Kg	☼	101	57 - 137	4	30
1,1,1-Trichloroethane	<0.039	*+	5.12	5.46		mg/Kg	☼	107	70 - 125	2	30
1,1,2-Trichloroethane	<0.036		5.12	4.70		mg/Kg	☼	92	71 - 130	2	30
Trichloroethene	<0.017		5.12	5.17		mg/Kg	☼	101	70 - 125	1	30
Trichlorofluoromethane	<0.044	*+	5.12	6.01		mg/Kg	☼	117	55 - 128	2	30
1,2,3-Trichloropropane	<0.042		5.12	4.62		mg/Kg	☼	90	50 - 133	2	30
1,2,4-Trimethylbenzene	<0.037		5.12	4.97		mg/Kg	☼	97	70 - 123	2	30
1,3,5-Trimethylbenzene	<0.039		5.12	4.97		mg/Kg	☼	97	70 - 123	2	30
Vinyl chloride	<0.027		5.12	4.59		mg/Kg	☼	90	64 - 126	1	30
Xylenes, Total	<0.023		10.2	9.50		mg/Kg	☼	93	70 - 125	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*
Dibromofluoromethane (Surr)	*107*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 126*
Toluene-d8 (Surr)	*101*		*75 - 120*

Lab Sample ID: MB 500-761210/6
Matrix: Solid
Analysis Batch: 761210

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00015		0.00025	0.00015	mg/Kg			04/03/24 10:28	1
Bromobenzene	<0.00036		0.0010	0.00036	mg/Kg			04/03/24 10:28	1
Bromochloromethane	<0.00043		0.0010	0.00043	mg/Kg			04/03/24 10:28	1
Bromodichloromethane	<0.00037		0.0010	0.00037	mg/Kg			04/03/24 10:28	1

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

Lab Sample ID: MB 500-761210/6
Matrix: Solid
Analysis Batch: 761210

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	<0.00048		0.0010	0.00048	mg/Kg			04/03/24 10:28	1
Bromomethane	<0.00080		0.0030	0.00080	mg/Kg			04/03/24 10:28	1
Carbon tetrachloride	<0.00038		0.0010	0.00038	mg/Kg			04/03/24 10:28	1
Chlorobenzene	<0.00039		0.0010	0.00039	mg/Kg			04/03/24 10:28	1
Chloroethane	<0.00050		0.0050	0.00050	mg/Kg			04/03/24 10:28	1
Chloroform	0.000567	J	0.0020	0.00037	mg/Kg			04/03/24 10:28	1
Chloromethane	0.00128	J	0.0050	0.00032	mg/Kg			04/03/24 10:28	1
2-Chlorotoluene	<0.00031		0.0010	0.00031	mg/Kg			04/03/24 10:28	1
4-Chlorotoluene	<0.00035		0.0010	0.00035	mg/Kg			04/03/24 10:28	1
cis-1,2-Dichloroethene	<0.00041		0.0010	0.00041	mg/Kg			04/03/24 10:28	1
cis-1,3-Dichloropropene	<0.00042		0.0010	0.00042	mg/Kg			04/03/24 10:28	1
Chlorodibromomethane	<0.00049		0.0010	0.00049	mg/Kg			04/03/24 10:28	1
1,2-Dibromo-3-Chloropropane	<0.0020		0.0050	0.0020	mg/Kg			04/03/24 10:28	1
1,2-Dibromoethane (EDB)	<0.00039		0.0010	0.00039	mg/Kg			04/03/24 10:28	1
Dibromomethane	<0.00027		0.0010	0.00027	mg/Kg			04/03/24 10:28	1
1,2-Dichlorobenzene	<0.00033		0.0010	0.00033	mg/Kg			04/03/24 10:28	1
1,3-Dichlorobenzene	<0.00040		0.0010	0.00040	mg/Kg			04/03/24 10:28	1
1,4-Dichlorobenzene	<0.00036		0.0010	0.00036	mg/Kg			04/03/24 10:28	1
Dichlorodifluoromethane	<0.00067		0.0030	0.00067	mg/Kg			04/03/24 10:28	1
1,1-Dichloroethane	<0.00041		0.0010	0.00041	mg/Kg			04/03/24 10:28	1
1,2-Dichloroethane	<0.00039		0.0010	0.00039	mg/Kg			04/03/24 10:28	1
1,1-Dichloroethene	<0.00039		0.0010	0.00039	mg/Kg			04/03/24 10:28	1
1,2-Dichloropropane	<0.00043		0.0010	0.00043	mg/Kg			04/03/24 10:28	1
1,3-Dichloropropane	<0.00036		0.0010	0.00036	mg/Kg			04/03/24 10:28	1
2,2-Dichloropropane	<0.00044		0.0050	0.00044	mg/Kg			04/03/24 10:28	1
1,1-Dichloropropene	<0.00030		0.0010	0.00030	mg/Kg			04/03/24 10:28	1
Ethylbenzene	<0.00018		0.00025	0.00018	mg/Kg			04/03/24 10:28	1
Hexachlorobutadiene	<0.00045		0.0010	0.00045	mg/Kg			04/03/24 10:28	1
Isopropylbenzene	<0.00038		0.0010	0.00038	mg/Kg			04/03/24 10:28	1
Isopropyl ether	<0.00028		0.0010	0.00028	mg/Kg			04/03/24 10:28	1
Methylene Chloride	0.00320	J	0.0050	0.0016	mg/Kg			04/03/24 10:28	1
Methyl tert-butyl ether	<0.00039		0.0010	0.00039	mg/Kg			04/03/24 10:28	1
Naphthalene	<0.00033		0.0010	0.00033	mg/Kg			04/03/24 10:28	1
n-Butylbenzene	<0.00039		0.0010	0.00039	mg/Kg			04/03/24 10:28	1
N-Propylbenzene	<0.00041		0.0010	0.00041	mg/Kg			04/03/24 10:28	1
p-Isopropyltoluene	<0.00036		0.0010	0.00036	mg/Kg			04/03/24 10:28	1
sec-Butylbenzene	<0.00040		0.0010	0.00040	mg/Kg			04/03/24 10:28	1
Styrene	<0.00039		0.0010	0.00039	mg/Kg			04/03/24 10:28	1
tert-Butylbenzene	<0.00040		0.0010	0.00040	mg/Kg			04/03/24 10:28	1
1,1,1,2-Tetrachloroethane	<0.00046		0.0010	0.00046	mg/Kg			04/03/24 10:28	1
1,1,2,2-Tetrachloroethane	<0.00040		0.0010	0.00040	mg/Kg			04/03/24 10:28	1
Tetrachloroethene	<0.00037		0.0010	0.00037	mg/Kg			04/03/24 10:28	1
Toluene	<0.00015		0.00025	0.00015	mg/Kg			04/03/24 10:28	1
trans-1,2-Dichloroethene	<0.00035		0.0010	0.00035	mg/Kg			04/03/24 10:28	1
trans-1,3-Dichloropropene	<0.00036		0.0010	0.00036	mg/Kg			04/03/24 10:28	1
1,2,3-Trichlorobenzene	<0.00046		0.0010	0.00046	mg/Kg			04/03/24 10:28	1
1,2,4-Trichlorobenzene	<0.00034		0.0010	0.00034	mg/Kg			04/03/24 10:28	1
1,1,1-Trichloroethane	<0.00038		0.0010	0.00038	mg/Kg			04/03/24 10:28	1
1,1,2-Trichloroethane	<0.00035		0.0010	0.00035	mg/Kg			04/03/24 10:28	1

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

Lab Sample ID: MB 500-761210/6
Matrix: Solid
Analysis Batch: 761210

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<0.00016		0.00050	0.00016	mg/Kg			04/03/24 10:28	1
Trichlorofluoromethane	<0.00043		0.0010	0.00043	mg/Kg			04/03/24 10:28	1
1,2,3-Trichloropropane	<0.00041		0.0020	0.00041	mg/Kg			04/03/24 10:28	1
1,2,4-Trimethylbenzene	<0.00036		0.0010	0.00036	mg/Kg			04/03/24 10:28	1
1,3,5-Trimethylbenzene	<0.00038		0.0010	0.00038	mg/Kg			04/03/24 10:28	1
Vinyl chloride	<0.00026		0.0010	0.00026	mg/Kg			04/03/24 10:28	1
Xylenes, Total	<0.00022		0.00050	0.00022	mg/Kg			04/03/24 10:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*72 - 124*		*04/03/24 10:28*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 120*		*04/03/24 10:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 126*		*04/03/24 10:28*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*04/03/24 10:28*	*1*

Lab Sample ID: LCS 500-761210/4
Matrix: Solid
Analysis Batch: 761210

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.0450		mg/Kg		90	70 - 120
Bromobenzene	0.0500	0.0476		mg/Kg		95	70 - 122
Bromochloromethane	0.0500	0.0508		mg/Kg		102	65 - 122
Bromodichloromethane	0.0500	0.0473		mg/Kg		95	69 - 120
Bromoform	0.0500	0.0463		mg/Kg		93	56 - 132
Bromomethane	0.0500	0.0702		mg/Kg		140	40 - 152
Carbon tetrachloride	0.0500	0.0567		mg/Kg		113	59 - 133
Chlorobenzene	0.0500	0.0481		mg/Kg		96	70 - 120
Chloroethane	0.0500	0.0540		mg/Kg		108	48 - 136
Chloroform	0.0500	0.0489		mg/Kg		98	70 - 120
Chloromethane	0.0500	0.0360		mg/Kg		72	56 - 152
2-Chlorotoluene	0.0500	0.0433		mg/Kg		87	70 - 125
4-Chlorotoluene	0.0500	0.0441		mg/Kg		88	68 - 124
cis-1,2-Dichloroethene	0.0500	0.0459		mg/Kg		92	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0430		mg/Kg		86	64 - 127
Chlorodibromomethane	0.0500	0.0485		mg/Kg		97	68 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.0425		mg/Kg		85	56 - 123
1,2-Dibromoethane (EDB)	0.0500	0.0463		mg/Kg		93	70 - 125
Dibromomethane	0.0500	0.0466		mg/Kg		93	70 - 120
1,2-Dichlorobenzene	0.0500	0.0488		mg/Kg		98	70 - 125
1,3-Dichlorobenzene	0.0500	0.0482		mg/Kg		96	70 - 125
1,4-Dichlorobenzene	0.0500	0.0486		mg/Kg		97	70 - 120
Dichlorodifluoromethane	0.0500	0.0415		mg/Kg		83	40 - 159
1,1-Dichloroethane	0.0500	0.0436		mg/Kg		87	70 - 125
1,2-Dichloroethane	0.0500	0.0508		mg/Kg		102	68 - 127
1,1-Dichloroethene	0.0500	0.0497		mg/Kg		99	67 - 122
1,2-Dichloropropane	0.0500	0.0389		mg/Kg		78	67 - 130
1,3-Dichloropropane	0.0500	0.0443		mg/Kg		89	62 - 136
2,2-Dichloropropane	0.0500	0.0520		mg/Kg		104	58 - 139

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

Lab Sample ID: LCS 500-761210/4
Matrix: Solid
Analysis Batch: 761210

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloropropene	0.0500	0.0491		mg/Kg		98	70 - 121
Ethylbenzene	0.0500	0.0461		mg/Kg		92	70 - 123
Hexachlorobutadiene	0.0500	0.0564		mg/Kg		113	51 - 150
Isopropylbenzene	0.0500	0.0452		mg/Kg		90	70 - 126
Methylene Chloride	0.0500	0.0461		mg/Kg		92	69 - 125
Methyl tert-butyl ether	0.0500	0.0394		mg/Kg		79	55 - 123
Naphthalene	0.0500	0.0437		mg/Kg		87	53 - 144
n-Butylbenzene	0.0500	0.0481		mg/Kg		96	68 - 125
N-Propylbenzene	0.0500	0.0450		mg/Kg		90	69 - 127
p-Isopropyltoluene	0.0500	0.0487		mg/Kg		97	70 - 125
sec-Butylbenzene	0.0500	0.0463		mg/Kg		93	70 - 123
Styrene	0.0500	0.0475		mg/Kg		95	70 - 120
tert-Butylbenzene	0.0500	0.0473		mg/Kg		95	70 - 121
1,1,1,2-Tetrachloroethane	0.0500	0.0511		mg/Kg		102	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0379		mg/Kg		76	62 - 140
Tetrachloroethene	0.0500	0.0530		mg/Kg		106	70 - 128
Toluene	0.0500	0.0429		mg/Kg		86	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0490		mg/Kg		98	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0434		mg/Kg		87	62 - 128
1,2,3-Trichlorobenzene	0.0500	0.0515		mg/Kg		103	51 - 145
1,2,4-Trichlorobenzene	0.0500	0.0502		mg/Kg		100	57 - 137
1,1,1-Trichloroethane	0.0500	0.0539		mg/Kg		108	70 - 125
1,1,2-Trichloroethane	0.0500	0.0431		mg/Kg		86	71 - 130
Trichloroethene	0.0500	0.0512		mg/Kg		102	70 - 125
Trichlorofluoromethane	0.0500	0.0644	*+	mg/Kg		129	55 - 128
1,2,3-Trichloropropane	0.0500	0.0408		mg/Kg		82	50 - 133
1,2,4-Trimethylbenzene	0.0500	0.0454		mg/Kg		91	70 - 123
1,3,5-Trimethylbenzene	0.0500	0.0462		mg/Kg		92	70 - 123
Vinyl chloride	0.0500	0.0421		mg/Kg		84	64 - 126
Xylenes, Total	0.100	0.0902		mg/Kg		90	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*72 - 124*
Dibromofluoromethane (Surr)	*106*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*
Toluene-d8 (Surr)	*99*		*75 - 120*

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-751969/1-A
Matrix: Solid
Analysis Batch: 752438

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 751969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.046		0.20	0.046	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluoropentanoic acid (PFPeA)	<0.041		0.20	0.041	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluorohexanoic acid (PFHxA)	<0.031		0.20	0.031	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluoroheptanoic acid (PFHpA)	<0.038		0.20	0.038	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluorooctanoic acid (PFOA)	<0.053		0.20	0.053	ug/Kg		04/03/24 04:21	04/04/24 16:56	1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-751969/1-A
Matrix: Solid
Analysis Batch: 752438

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 751969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluorodecanoic acid (PFDA)	<0.048		0.20	0.048	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluoroundecanoic acid (PFUnA)	<0.042		0.20	0.042	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluorododecanoic acid (PFDoA)	<0.030		0.20	0.030	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluorotridecanoic acid (PFTriA)	<0.021		0.20	0.021	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluorotetradecanoic acid (PFTeA)	<0.037		0.20	0.037	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.038		0.20	0.038	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.066		0.20	0.066	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluorobutanesulfonic acid (PFBS)	<0.038		0.20	0.038	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluoropentanesulfonic acid (PFPeS)	<0.037		0.20	0.037	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluorohexanesulfonic acid (PFHxS)	<0.029		0.20	0.029	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.049		0.20	0.049	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluorooctanesulfonic acid (PFOS)	<0.043		0.20	0.043	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluorononanesulfonic acid (PFNS)	<0.029		0.20	0.029	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluorodecanesulfonic acid (PFDS)	<0.052		0.20	0.052	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluorododecanesulfonic acid (PFDoS)	<0.047		0.20	0.047	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
Perfluorooctanesulfonamide (FOSA)	<0.033		0.20	0.033	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
NEtFOSA	<0.047		0.20	0.047	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
NMeFOSA	<0.049		0.20	0.049	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
NEtFOSAA	<0.048		0.20	0.048	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
NMeFOSE	<0.047		0.20	0.047	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
4:2 FTS	<0.051		0.20	0.051	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
6:2 FTS	<0.027		0.20	0.027	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
8:2 FTS	<0.035		0.20	0.035	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
10:2 FTS	<0.038		0.20	0.038	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.039		0.20	0.039	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
HFPO-DA (GenX)	<0.041		0.20	0.041	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
F-53B Major	<0.035		0.20	0.035	ug/Kg		04/03/24 04:21	04/04/24 16:56	1
F-53B Minor	<0.031		0.20	0.031	ug/Kg		04/03/24 04:21	04/04/24 16:56	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*92*		*25 - 150*	*04/03/24 04:21*	*04/04/24 16:56*	*1*
13C5 PFPeA	*93*		*25 - 150*	*04/03/24 04:21*	*04/04/24 16:56*	*1*
13C2 PFHxA	*94*		*25 - 150*	*04/03/24 04:21*	*04/04/24 16:56*	*1*
13C4 PFHpA	*94*		*25 - 150*	*04/03/24 04:21*	*04/04/24 16:56*	*1*
13C4 PFOA	*98*		*25 - 150*	*04/03/24 04:21*	*04/04/24 16:56*	*1*
13C5 PFNA	*92*		*25 - 150*	*04/03/24 04:21*	*04/04/24 16:56*	*1*
13C2 PFDA	*91*		*25 - 150*	*04/03/24 04:21*	*04/04/24 16:56*	*1*
13C2 PFUnA	*86*		*25 - 150*	*04/03/24 04:21*	*04/04/24 16:56*	*1*
13C2 PFDoA	*79*		*25 - 150*	*04/03/24 04:21*	*04/04/24 16:56*	*1*
13C2 PFTeDA	*78*		*25 - 150*	*04/03/24 04:21*	*04/04/24 16:56*	*1*
13C2 PFHxDA	*75*		*25 - 150*	*04/03/24 04:21*	*04/04/24 16:56*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-751969/1-A
Matrix: Solid
Analysis Batch: 752438

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 751969

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	91		25 - 150	04/03/24 04:21	04/04/24 16:56	1
18O2 PFHxS	86		25 - 150	04/03/24 04:21	04/04/24 16:56	1
13C4 PFOS	83		25 - 150	04/03/24 04:21	04/04/24 16:56	1
13C8 FOSA	89		10 - 150	04/03/24 04:21	04/04/24 16:56	1
d3-NMeFOSAA	92		25 - 150	04/03/24 04:21	04/04/24 16:56	1
d5-NEtFOSAA	93		25 - 150	04/03/24 04:21	04/04/24 16:56	1
d-N-MeFOSA-M	69		10 - 150	04/03/24 04:21	04/04/24 16:56	1
d-N-EtFOSA-M	72		10 - 150	04/03/24 04:21	04/04/24 16:56	1
d7-N-MeFOSE-M	71		10 - 150	04/03/24 04:21	04/04/24 16:56	1
d9-N-EtFOSE-M	77		10 - 150	04/03/24 04:21	04/04/24 16:56	1
M2-4:2 FTS	94		25 - 150	04/03/24 04:21	04/04/24 16:56	1
M2-6:2 FTS	106		25 - 150	04/03/24 04:21	04/04/24 16:56	1
M2-8:2 FTS	111		25 - 150	04/03/24 04:21	04/04/24 16:56	1
13C3 HFPO-DA	82		25 - 150	04/03/24 04:21	04/04/24 16:56	1
13C2 10:2 FTS	95		25 - 150	04/03/24 04:21	04/04/24 16:56	1

Lab Sample ID: LCS 320-751969/3-A
Matrix: Solid
Analysis Batch: 752438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 751969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	2.22		ug/Kg		111	60 - 135
Perfluoropentanoic acid (PFPeA)	2.00	2.18		ug/Kg		109	60 - 135
Perfluorohexanoic acid (PFHxA)	2.00	2.36		ug/Kg		118	60 - 135
Perfluoroheptanoic acid (PFHpA)	2.00	2.29		ug/Kg		115	60 - 135
Perfluorooctanoic acid (PFOA)	2.00	2.19		ug/Kg		109	60 - 135
Perfluorononanoic acid (PFNA)	2.00	2.33		ug/Kg		117	60 - 135
Perfluorodecanoic acid (PFDA)	2.00	2.19		ug/Kg		109	60 - 135
Perfluoroundecanoic acid (PFUnA)	2.00	2.42		ug/Kg		121	60 - 135
Perfluorododecanoic acid (PFDoA)	2.00	2.11		ug/Kg		106	60 - 135
Perfluorotridecanoic acid (PFTriA)	2.00	2.10		ug/Kg		105	60 - 135
Perfluorotetradecanoic acid (PFTeA)	2.00	2.09		ug/Kg		105	60 - 135
Perfluoro-n-hexadecanoic acid (PFHxDA)	2.00	2.08		ug/Kg		104	60 - 135
Perfluoro-n-octadecanoic acid (PFODA)	2.00	2.13		ug/Kg		106	60 - 135
Perfluorobutanesulfonic acid (PFBS)	1.78	2.04		ug/Kg		115	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	1.88	2.06		ug/Kg		110	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.98		ug/Kg		108	60 - 135
Perfluoroheptanesulfonic acid (PFHpS)	1.91	2.36		ug/Kg		124	60 - 135
Perfluorooctanesulfonic acid (PFOS)	1.86	2.18		ug/Kg		117	60 - 135
Perfluorononanesulfonic acid (PFNS)	1.92	2.23		ug/Kg		116	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-751969/3-A
Matrix: Solid
Analysis Batch: 752438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 751969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorodecanesulfonic acid (PFDS)	1.93	2.04		ug/Kg		106	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	1.94	1.97		ug/Kg		102	60 - 135
Perfluorooctanesulfonamide (FOSA)	2.00	2.12		ug/Kg		106	60 - 135
NEtFOSA	2.00	2.20		ug/Kg		110	60 - 135
NMeFOSA	2.00	2.23		ug/Kg		111	60 - 135
NMeFOSAA	2.00	2.33		ug/Kg		117	60 - 135
NEtFOSAA	2.00	2.31		ug/Kg		116	60 - 135
NMeFOSE	2.00	2.18		ug/Kg		109	60 - 135
NEtFOSE	2.00	2.14		ug/Kg		107	60 - 135
4:2 FTS	1.88	2.14		ug/Kg		114	60 - 135
6:2 FTS	1.90	2.21		ug/Kg		116	60 - 135
8:2 FTS	1.92	2.13		ug/Kg		111	60 - 135
10:2 FTS	1.93	2.12		ug/Kg		110	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.89	2.46		ug/Kg		130	60 - 135
HFPO-DA (GenX)	2.00	2.36		ug/Kg		118	60 - 135
F-53B Major	1.87	2.30		ug/Kg		123	60 - 135
F-53B Minor	1.89	2.09		ug/Kg		111	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*92*		*25 - 150*
13C5 PFPeA	*91*		*25 - 150*
13C2 PFHxA	*90*		*25 - 150*
13C4 PFHpA	*91*		*25 - 150*
13C4 PFOA	*95*		*25 - 150*
13C5 PFNA	*89*		*25 - 150*
13C2 PFDA	*94*		*25 - 150*
13C2 PFUnA	*80*		*25 - 150*
13C2 PFDoA	*87*		*25 - 150*
13C2 PFTeDA	*79*		*25 - 150*
13C2 PFHxDA	*77*		*25 - 150*
13C3 PFBS	*90*		*25 - 150*
18O2 PFHxS	*87*		*25 - 150*
13C4 PFOS	*82*		*25 - 150*
13C8 FOSA	*86*		*10 - 150*
d3-NMeFOSAA	*88*		*25 - 150*
d5-NEtFOSAA	*89*		*25 - 150*
d-N-MeFOSA-M	*66*		*10 - 150*
d-N-EtFOSA-M	*66*		*10 - 150*
d7-N-MeFOSE-M	*68*		*10 - 150*
d9-N-EtFOSE-M	*70*		*10 - 150*
M2-4:2 FTS	*101*		*25 - 150*
M2-6:2 FTS	*122*		*25 - 150*
M2-8:2 FTS	*116*		*25 - 150*
13C3 HFPO-DA	*79*		*25 - 150*
13C2 10:2 FTS	*101*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LLCS 320-751969/2-A
Matrix: Solid
Analysis Batch: 752438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 751969

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	0.400	0.466		ug/Kg		116	50 - 150
Perfluoropentanoic acid (PFPeA)	0.400	0.471		ug/Kg		118	50 - 150
Perfluorohexanoic acid (PFHxA)	0.400	0.478		ug/Kg		120	50 - 150
Perfluoroheptanoic acid (PFHpA)	0.400	0.489		ug/Kg		122	50 - 150
Perfluorooctanoic acid (PFOA)	0.400	0.491		ug/Kg		123	50 - 150
Perfluorononanoic acid (PFNA)	0.400	0.494		ug/Kg		123	50 - 150
Perfluorodecanoic acid (PFDA)	0.400	0.494		ug/Kg		124	50 - 150
Perfluoroundecanoic acid (PFUnA)	0.400	0.534		ug/Kg		133	50 - 150
Perfluorododecanoic acid (PFDoA)	0.400	0.485		ug/Kg		121	50 - 150
Perfluorotridecanoic acid (PFTriA)	0.400	0.408		ug/Kg		102	50 - 150
Perfluorotetradecanoic acid (PFTeA)	0.400	0.399		ug/Kg		100	50 - 150
Perfluoro-n-hexadecanoic acid (PFHxDA)	0.400	0.455		ug/Kg		114	50 - 150
Perfluoro-n-octadecanoic acid (PFODA)	0.400	0.412		ug/Kg		103	50 - 150
Perfluorobutanesulfonic acid (PFBS)	0.355	0.436		ug/Kg		123	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	0.376	0.434		ug/Kg		115	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	0.365	0.411		ug/Kg		113	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	0.382	0.452		ug/Kg		118	50 - 150
Perfluorooctanesulfonic acid (PFOS)	0.372	0.446		ug/Kg		120	50 - 150
Perfluorononanesulfonic acid (PFNS)	0.385	0.442		ug/Kg		115	50 - 150
Perfluorodecanesulfonic acid (PFDS)	0.386	0.397		ug/Kg		103	50 - 150
Perfluorododecanesulfonic acid (PFDoS)	0.388	0.375		ug/Kg		97	50 - 150
Perfluorooctanesulfonamide (FOSA)	0.400	0.430		ug/Kg		107	50 - 150
NEtFOSA	0.400	0.445		ug/Kg		111	50 - 150
NMeFOSA	0.400	0.432		ug/Kg		108	50 - 150
NMeFOSAA	0.400	0.426		ug/Kg		107	50 - 150
NEtFOSAA	0.400	0.458		ug/Kg		114	50 - 150
NMeFOSE	0.400	0.449		ug/Kg		112	50 - 150
NEtFOSE	0.400	0.409		ug/Kg		102	50 - 150
4:2 FTS	0.375	0.449		ug/Kg		120	50 - 150
6:2 FTS	0.381	0.446		ug/Kg		117	50 - 150
8:2 FTS	0.384	0.404		ug/Kg		105	50 - 150
10:2 FTS	0.386	0.418		ug/Kg		108	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.378	0.495		ug/Kg		131	50 - 150
HFPO-DA (GenX)	0.400	0.438		ug/Kg		110	50 - 150
F-53B Major	0.374	0.448		ug/Kg		120	50 - 150
F-53B Minor	0.378	0.425		ug/Kg		113	50 - 150

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	LLCS %Recovery	LLCS Qualifier	Limits
13C4 PFBA	88		25 - 150
13C5 PFPeA	88		25 - 150
13C2 PFHxA	93		25 - 150
13C4 PFHpA	90		25 - 150
13C4 PFOA	96		25 - 150
13C5 PFNA	88		25 - 150
13C2 PFDA	88		25 - 150
13C2 PFUnA	82		25 - 150
13C2 PFDoA	86		25 - 150
13C2 PFTeDA	74		25 - 150
13C2 PFHxDA	72		25 - 150
13C3 PFBS	86		25 - 150
18O2 PFHxS	82		25 - 150
13C4 PFOS	81		25 - 150
13C8 FOSA	86		10 - 150
d3-NMeFOSAA	91		25 - 150
d5-NEtFOSAA	95		25 - 150
d-N-MeFOSA-M	65		10 - 150
d-N-EtFOSA-M	69		10 - 150
d7-N-MeFOSE-M	70		10 - 150
d9-N-EtFOSE-M	74		10 - 150
M2-4:2 FTS	95		25 - 150
M2-6:2 FTS	116		25 - 150
M2-8:2 FTS	113		25 - 150
13C3 HFPO-DA	79		25 - 150
13C2 10:2 FTS	101		25 - 150

Lab Chronicle

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

Client Sample ID: B14-1
Date Collected: 03/22/24 17:30
Date Received: 03/26/24 10:20

Lab Sample ID: 500-248054-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	760578	ER	EET CHI	03/29/24 08:23

Client Sample ID: B14-1
Date Collected: 03/22/24 17:30
Date Received: 03/26/24 10:20

Lab Sample ID: 500-248054-1
Matrix: Solid
Percent Solids: 99.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			760730	WRE	EET CHI	03/22/24 17:30
Total/NA	Analysis	8260D		50	761210	W1T	EET CHI	04/03/24 17:22
Total/NA	Prep	SHAKE			751969	SJ	EET SAC	04/03/24 04:21
Total/NA	Analysis	537 (modified)		1	752438	K1S	EET SAC	04/04/24 18:27
Total/NA	Prep	SHAKE	RA		751969	SJ	EET SAC	04/03/24 04:21
Total/NA	Analysis	537 (modified)	RA	1	753112	C1P	EET SAC	04/08/24 10:05

Client Sample ID: B14-2
Date Collected: 03/22/24 17:40
Date Received: 03/26/24 10:20

Lab Sample ID: 500-248054-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	760578	ER	EET CHI	03/29/24 08:23

Client Sample ID: B14-2
Date Collected: 03/22/24 17:40
Date Received: 03/26/24 10:20

Lab Sample ID: 500-248054-2
Matrix: Solid
Percent Solids: 98.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			760730	WRE	EET CHI	03/22/24 17:40
Total/NA	Analysis	8260D		50	761210	W1T	EET CHI	04/03/24 17:46
Total/NA	Prep	SHAKE			751969	SJ	EET SAC	04/03/24 04:21
Total/NA	Analysis	537 (modified)		1	752438	K1S	EET SAC	04/04/24 18:58
Total/NA	Prep	SHAKE	RA		751969	SJ	EET SAC	04/03/24 04:21
Total/NA	Analysis	537 (modified)	RA	1	753112	C1P	EET SAC	04/08/24 10:17

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-24

Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-24

Address Eurofins

Chain of Custody Record

640094 eurofins | Environment Testing America

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: Kirk Kupchanko	Site Contact: Kirk K	Date: 3/20/24	COC No
Company Name: Endpoint	Tel/Email: KirK@endpointcorporation.com	Lab Contact: Sandra F	Carrier	1 of 1 COCs
Address: 6871 S Lovers Lane	Analysis Turnaround Time			Sampler: KLK
City/State/Zip: Franklin, WI 53132	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only.
Phone: 414 427 1200	TAT if different from Below			Walk-in Client
Fax: 414 427 1259	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day Standard			Lab Sampling
Project Name: Tyco - Ind Pkwy				Job / SDG No: 500-248054
Site				
P O #: 415 - IDW				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260 - VOC	PFAS-Standard List	500-248054 COC	Sample Specific Notes
1 B14-1	3/22/24	1730	C	S	3			X	X		
2 B14-2	3/22/24	1740	C	S	3			X	X		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

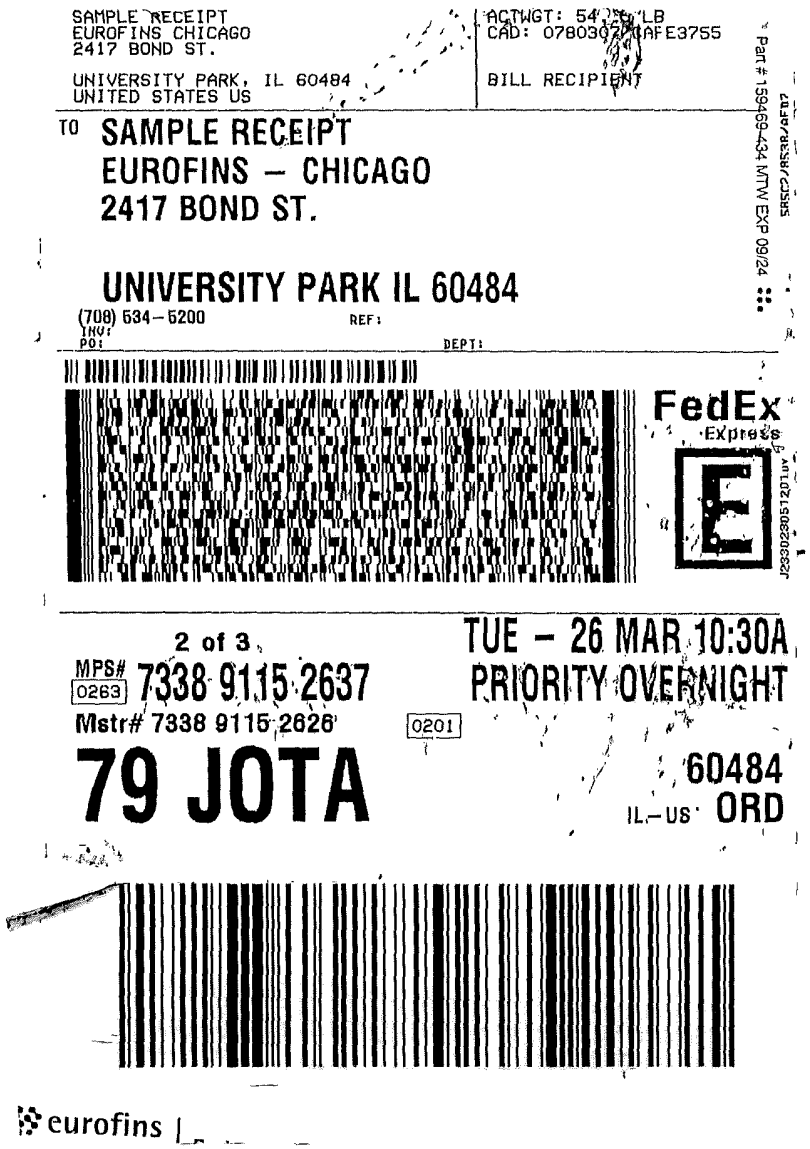
☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd 1.5 Corr'd 2.0 | Therm ID No

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
	Endpoint	3/25	[illegible]	Eurofins	3.25.24 11.3[illegible]
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
	Eurofins 3/25/24	1700			
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time
				BETA	3/26/24 1020

500-248054 Waybi



Login Sample Receipt Checklist

Client: Endpoint Solutions Corp

Job Number: 500-248054-1

Login Number: 248054
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins Chicago

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0
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.	True	
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	

Login Sample Receipt Checklist

Client: Endpoint Solutions Corp

Job Number: 500-248054-1

Login Number: 248054
List Number: 2
Creator: Simmons, Jason C

List Source: Eurofins Sacramento
List Creation: 03/28/24 06:05 PM

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	2370726
Sample custody seals, if present, are intact.	N/A	
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	1.1c
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?	N/A	Received project as a subcontract.
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Isotope Dilution Summary

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA	PFPeA	PFHxA	C4PFHA	PFOA	PFNA	PFDA	PFUnA
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
500-248054-1	B14-1	76	93	91	92	96	90	90	87
500-248054-1 - RA	B14-1								
500-248054-2	B14-2	90	91	94	93	98	88	88	82
500-248054-2 - RA	B14-2								
LCS 320-751969/3-A	Lab Control Sample	92	91	90	91	95	89	94	80
LLCS 320-751969/2-A	Lab Control Sample	88	88	93	90	96	88	88	82
MB 320-751969/1-A	Method Blank	92	93	94	94	98	92	91	86

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFDoA	PFTDA	PFHxDA	C3PFBS	PFHxS	PFOS	PFOSA	d3NMFOS
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(10-150)	(25-150)
500-248054-1	B14-1	78	72	72	83	80	81	93	88
500-248054-1 - RA	B14-1								
500-248054-2	B14-2	81	74	74	85	81	74	87	85
500-248054-2 - RA	B14-2								
LCS 320-751969/3-A	Lab Control Sample	87	79	77	90	87	82	86	88
LLCS 320-751969/2-A	Lab Control Sample	86	74	72	86	82	81	86	91
MB 320-751969/1-A	Method Blank	79	78	75	91	86	83	89	92

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		d5NEFOS	dMeFOSA	dEtFOSA	NMFM	NEFM	M242FTS	M262FTS	M282FTS
Lab Sample ID	Client Sample ID	(25-150)	(10-150)	(10-150)	(10-150)	(10-150)	(25-150)	(25-150)	(25-150)
500-248054-1	B14-1	95	77	77	65	68	87		109
500-248054-1 - RA	B14-1							91	
500-248054-2	B14-2	87	73	77	69	76	91		102
500-248054-2 - RA	B14-2							82	
LCS 320-751969/3-A	Lab Control Sample	89	66	66	68	70	101	122	116
LLCS 320-751969/2-A	Lab Control Sample	95	65	69	70	74	95	116	113
MB 320-751969/1-A	Method Blank	93	69	72	71	77	94	106	111

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		HFPODA	M102FTS						
Lab Sample ID	Client Sample ID	(25-150)	(25-150)						
500-248054-1	B14-1	79	100						
500-248054-1 - RA	B14-1								
500-248054-2	B14-2	84	100						
500-248054-2 - RA	B14-2								
LCS 320-751969/3-A	Lab Control Sample	79	101						
LLCS 320-751969/2-A	Lab Control Sample	79	101						
MB 320-751969/1-A	Method Blank	82	95						

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA

Isotope Dilution Summary

Client: Endpoint Solutions Corp
Project/Site: TYCO - Ind Pkwy

Job ID: 500-248054-1

PFHxDA = 13C2 PFHxDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
M102FTS = 13C2 10:2 FTS