URS

October 27, 2022

Town of Cheektowaga
Engineering Department
275 Alexander Avenue
Cheektowaga, NY 14211

Attn: Mr. Patrick T. Bowen, P.E.
Town Engineer

Re: Effluent Sample Report – June 2022
Pfohl Brothers Landfill, Town of Cheektowaga, New York

Dear Mr. Bowen:

URS Corporation is pleased to present results of the June 2022 effluent sampling event at the Pfohl Brothers Landfill. This is the first discharge monitoring event conducted in accordance Town's permit with the Buffalo Sewer Authority (No. 22-07-CH016) dated effective July 1, 2022 through June 30, 2025. Although the new permit was not effective at the time of sampling, since the previous permit expired March 31, 2022, all activities were conducted in accordance with the new permit. There are additional parameters (USEPA Test Methods 608, 624, 625 & Total Mercury) listed in the permit for the initial reporting period (i.e., June 30, 2022).

Analytical results of the metals, total mercury, total suspended solids, and pH for this event were compared to the discharge limitations in the Town's permit. No USEPA Test Method 608, 624, or 625 compounds were detected at a concentration of 0.01 milligrams per liter or more, therefore none are reported.

The laboratory results showed no exceedances of the daily discharge limitations stated in the permit.

Attached please find the analytical data summary table, field notes taken during the sampling event, a sample location figure, and the laboratory report.

Please do not hesitate to call me should you have any questions regarding this submittal.

Sincerely,

URS Corporation

Robert J. Murphy

Robert J. Murphy, P.G.
Project Manager

Attachments
cc File 11172700.00002 (C-1)

URS Corporation
1 John James Audubon Parkway, Suite 210
Amherst, NY 14228
Tel: 716.856.5636
Fax: 716.856.2545

JUNE 2022

EFFLUENT MONITORING REPORT

FOR

PFOHL BROTHERS LANDFILL

PREPARED BY

URS CORPORATION
1 JOHN JAMES AUDUBON PARKWAY, SUITE 210
AMHERST, NEW YORK 14228

PREPARED FOR

TOWN OF CHEEKTOWAGA
ENGINEERING DEPARTMENT
275 ALEXANDER AVENUE
CHEEKTOWAGA, NEW YORK 14211

OCTOBER 2022

EFFLUENT MONITORING REPORT
JUNE 2022

This effluent monitoring report presents analytical results from the June 2022 sampling event. There were no violations, exemptions or modifications to report. The report contains the following:

- Summary of analytical detections
- Sample technicians' field notes
- Sample location figure
- Laboratory report

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possibility of fine and imprisonment for knowing violations."

A BSA-approved signatory must sign this statement. An approved signatory is a corporate executive of the company or an individual designated responsible in writing by a corporate executive to the BSA.

TABLE 1

PFOHL BROTHERS LANDFILL - EFFLUENT MONITORING
ANALYTICAL RESULTS, TOTAL FLOW, AND MASS LOADINGS
JUNE 2022

Sample ID	EFF-062322			
Matrix	Effluent Water			
Date Sampled	6/23/2022			
Parameter*	**Result**	**Mass Loading**	**Discharge Limitation**	**Violations**
	(mg/L)	**(lbs/day)**	**(lbs/day)**	**(Yes/No)**
Total Barium	0.26	0.03	23.4	No
Total Cadmuim	<(1) 0.0005	< 0.00006	0.23	No
Total Chromium	< 0.0010	< 0.0001	1.17	No
Total Copper	0.0033 J	0.0004	3.74	No
Total Lead	0.0043 J	0.0005	1.17	No
Total Nickel	0.0017 J	0.0002	3.27	No
Total Zinc	0.018	0.002	5.84	No
Total Suspended Solids	48.0	NA(2)	250 (3)	No
pH (4)	7.57	NA	5.0 - 12.0	No
Total Mercury	< 0.000043	< 0.000005	0.001	No
Total Flow (5)	14,439		187,898	No

Notes:

(1) < = Compound not detected, method detection limit shown
(2) NA = Not Applicable
(3) Discharge Limitation in units of mg/L
(4) pH measurement and Discharge Limitation in Standard Units
(5) Total Flow reported in gallons, sample was collected over a 24 hour period

* USEPA Test Methods 608, 624, 625 and Total Mercury performed once per permit duration. Total Mercury shown because it has a discharge limit established in the permit. No USEPA Test Method 608, 624, or 625 compounds were detected at a concentration of 0.01 mg/L or more, therefore none are reported.

J Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

B Compound was found in the blank and sample.

Calculation: $$\left(\frac{x\ mg}{L}\right)\left(\frac{y\ gal}{day}\right)\left(\frac{1\ lb}{453{,}600\ mg}\right)\left(\frac{3.785\,L}{gal}\right) = \frac{x \times y}{119{,}841}\ \frac{lb}{day}$$

mg = milligrams
gal = gallons
L = Liters
lb(s) = pound(s)

ATTACHMENT 2

SAMPLE TECHNICIANS' FIELD NOTES

SAMPLING FIELD SHEET

Client Name: Pfohl Brothers Landfill

Address: Aero Drive, Cheektowaga, NY

Contact: Patrick T. Bowen, P.E. Phone: 716-897-7288

Installation:

Sample Point: SP-001

Sample Location: Meter Chamber - ball valve on 6" HDPE forcemain

Date: 6/22/22 Crew: R. Murphy, T. Urban

Weather: 76 °F, partly cloudy

Sampling Device: NA

Time of Installation: 8:00 Type of Sample: Composite and Grabs (every 4 hours for VOCs/SVOCs/PCBs/Pest)

Sample Interval: NA Sample Volume: NA

Comments and Observations: No wells running at the time of sample set-up.
PLC display volumes: WW-01 (592,848 gals), WW-02 (-5 gals), WW-03 (60,247 gals),
WW-04 (1,515,940 gals), WW-05 (3,255,854 gals), WW-06 (4,430,954 gals) & MH-25 (9,884,867 gals).

Date: 6/23/22 Crew: R. Murphy, T. Urban

Weather: 67 °F, clear

Time of Collection: 8:00

Field Measurements:

8:00/RJM
(time/initial)

pH Calibration: Buffer 7- 7 Buffer 4- 4 Buffer 10- 10

pH Measurement: 7.57 Oakton pH Tester30, s/n T311487089

Temperature: 17.9 °C

Identification: EFF-062322 for TSS and Metals, Individual Grabs for Lab Composite (EFF-062222-1, EFF-062222-2,EFF-062322-3, and EFF-062322-4)

Physical Observations: Light orange/red tint

Laboratory: Eurofins Buffalo, Amherst, NY

Comments: Well WW-06 running at the time of sample collection.
PLC display volumes: WW-01 (592,848 gals), WW-02 (-5 gals), WW-03 (60,247 gals),
WW-04 (1,515,940 gals), WW-05 (3,267,274 gals), WW-06 (4,434,038 gals) & MH-25 (9,899,306 gals).

Reviewed By: Robert J Murphy Date: 6/23/22
(Supervisor)

ATTACHMENT 3

SAMPLE LOCATION FIGURE

AG17823-11172700-102502-CYT

URS

PFOHL BROTHERS LANDFILL
EFFLUENT SAMPLE POINT

FIGURE 1

ATTACHMENT 4

LABORATORY REPORT

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-199287-1
Client Project/Site: Pfohl Brothers Landfill

For:
AECOM
One John James Audubon Parkway
Suite 210
Amherst, New York 14228

Attn: Rob Murphy

Authorized for release by:
7/1/2022 1:00:18 PM
Rebecca Jones, Project Management Assistant I
(716)504-9884
Rebecca.Jones@et.eurofinsus.com

Designee for

John Schove, Project Manager II
(716)504-9838
John.Schove@et.eurofinsus.com

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Surrogate Summary 10
QC Sample Results 12
QC Association Summary 23
Lab Chronicle 25
Certification Summary 26
Method Summary 27
Sample Summary 28
Chain of Custody 29
Receipt Checklists 30

Definitions/Glossary

Client: AECOM
Job ID: 480-199287-1
Project/Site: Pfohl Brothers Landfill

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
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.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
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

Case Narrative

Client: AECOM
Job ID: 480-199287-1
Project/Site: Pfohl Brothers Landfill

Job ID: 480-199287-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-199287-1

Comments
No additional comments.

Receipt
The samples were received on 6/23/2022 9:05 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 9.9º C and 10.2º C.

Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria: EFF-062222-1 (480-199287-1), EFF-062222-2 (480-199287-2), EFF-062222-3 (480-199287-3), EFF-062222-4 (480-199287-4) and EFF-062322 (480-199287-5). The sample(s) is considered acceptable since it was collected and submitted to the laboratory on the same day and there is evidence that the chilling process has begun.

GC/MS VOA
Method 624.1: The following Volatile sample was composited by the laboratory on 6/23 as requested by the client: EFF-062322 (480-199287-5). Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and/or laboratory standard operating procedures.

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

GC/MS Semi VOA
Method 625.1: 2,4,6-Tribromophenol The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-631860 and analytical batch 480-631941 recovered outside control limits for the following analytes: Di-n-octyl phthalate.

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

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described 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
Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-631649.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 480-631439.

Method 625: The following sample was composited by the laboratory on 06-24-22 as requested on the chain-of-custody: EFF-062322 (480-199287-5).

Method 3510C: The following sample was composited by the laboratory on 06/28/22 as requested on the chain-of-custody: EFF-062322 (480-199287-5).

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

Detection Summary

Client: AECOM
Project/Site: Pfohl Brothers Landfill

Job ID: 480-199287-1

Client Sample ID: EFF-062322

Lab Sample ID: 480-199287-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	2.1	J	10	0.30	ug/L	1		625.1	Total/NA
N-Nitrosodiphenylamine	0.44	J	5.0	0.21	ug/L	1		625.1	Total/NA
4,4'-DDT	0.015	J B	0.048	0.010	ug/L	1		608.3	Total/NA
Barium	0.26		0.0020	0.00070	mg/L	1		200.7 Rev 4.4	Total/NA
Copper	0.0033	J	0.010	0.0016	mg/L	1		200.7 Rev 4.4	Total/NA
Lead	0.0043	J	0.010	0.0030	mg/L	1		200.7 Rev 4.4	Total/NA
Nickel	0.0017	J	0.010	0.0013	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.018		0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA
Total Suspended Solids	48.0		4.0	4.0	mg/L	1		SM 2540D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: EFF-062322
Date Collected: 06/23/22 08:00
Date Received: 06/23/22 09:05

Lab Sample ID: 480-199287-5
Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			06/23/22 21:22	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			06/23/22 21:22	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			06/23/22 21:22	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			06/23/22 21:22	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			06/23/22 21:22	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			06/23/22 21:22	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			06/23/22 21:22	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			06/23/22 21:22	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			06/23/22 21:22	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			06/23/22 21:22	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			06/23/22 21:22	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			06/23/22 21:22	1
Acrolein	ND		100	17	ug/L			06/23/22 21:22	1
Acrylonitrile	ND		50	1.9	ug/L			06/23/22 21:22	1
Benzene	ND		5.0	0.60	ug/L			06/23/22 21:22	1
Bromodichloromethane	ND		5.0	0.54	ug/L			06/23/22 21:22	1
Bromoform	ND		5.0	0.47	ug/L			06/23/22 21:22	1
Bromomethane	ND		5.0	1.2	ug/L			06/23/22 21:22	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			06/23/22 21:22	1
Chlorobenzene	ND		5.0	0.48	ug/L			06/23/22 21:22	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			06/23/22 21:22	1
Chloroethane	ND		5.0	0.87	ug/L			06/23/22 21:22	1
Chloroform	ND		5.0	0.54	ug/L			06/23/22 21:22	1
Chloromethane	ND		5.0	0.64	ug/L			06/23/22 21:22	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			06/23/22 21:22	1
Ethylbenzene	ND		5.0	0.46	ug/L			06/23/22 21:22	1
Methylene Chloride	ND		5.0	0.81	ug/L			06/23/22 21:22	1
Tetrachloroethene	ND		5.0	0.34	ug/L			06/23/22 21:22	1
Toluene	ND		5.0	0.45	ug/L			06/23/22 21:22	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			06/23/22 21:22	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			06/23/22 21:22	1
Trichloroethene	ND		5.0	0.60	ug/L			06/23/22 21:22	1
Vinyl chloride	ND		5.0	0.75	ug/L			06/23/22 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*68 - 130*		*06/23/22 21:22*	*1*
4-Bromofluorobenzene (Surr)	*97*		*76 - 123*		*06/23/22 21:22*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*06/23/22 21:22*	*1*
Toluene-d8 (Surr)	*102*		*77 - 120*		*06/23/22 21:22*	*1*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.21	ug/L		06/28/22 15:11	06/29/22 16:12	1
1,2-Dichlorobenzene	ND		10	0.26	ug/L		06/28/22 15:11	06/29/22 16:12	1
1,2-Diphenylhydrazine	ND		10	0.20	ug/L		06/28/22 15:11	06/29/22 16:12	1
1,3-Dichlorobenzene	ND		10	0.17	ug/L		06/28/22 15:11	06/29/22 16:12	1
1,4-Dichlorobenzene	ND		10	0.21	ug/L		06/28/22 15:11	06/29/22 16:12	1
2,4,6-Trichlorophenol	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 16:12	1
2,4-Dichlorophenol	ND		5.0	0.19	ug/L		06/28/22 15:11	06/29/22 16:12	1
2,4-Dimethylphenol	ND		5.0	0.35	ug/L		06/28/22 15:11	06/29/22 16:12	1

Client Sample ID: EFF-062322
Date Collected: 06/23/22 08:00
Date Received: 06/23/22 09:05

Lab Sample ID: 480-199287-5
Matrix: Water

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		10	1.3	ug/L		06/28/22 15:11	06/29/22 16:12	1
2,4-Dinitrotoluene	ND		10	0.40	ug/L		06/28/22 15:11	06/29/22 16:12	1
2,6-Dinitrotoluene	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 16:12	1
2-Chloronaphthalene	ND		5.0	0.23	ug/L		06/28/22 15:11	06/29/22 16:12	1
2-Chlorophenol	ND		5.0	0.17	ug/L		06/28/22 15:11	06/29/22 16:12	1
2-Nitrophenol	ND		5.0	0.18	ug/L		06/28/22 15:11	06/29/22 16:12	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		06/28/22 15:11	06/29/22 16:12	1
4,6-Dinitro-2-methylphenol	ND		10	0.45	ug/L		06/28/22 15:11	06/29/22 16:12	1
4-Bromophenyl phenyl ether	ND		5.0	0.35	ug/L		06/28/22 15:11	06/29/22 16:12	1
4-Chloro-3-methylphenol	ND		5.0	0.28	ug/L		06/28/22 15:11	06/29/22 16:12	1
4-Chlorophenyl phenyl ether	ND		5.0	0.33	ug/L		06/28/22 15:11	06/29/22 16:12	1
4-Nitrophenol	ND		15	0.49	ug/L		06/28/22 15:11	06/29/22 16:12	1
Acenaphthene	ND		5.0	0.20	ug/L		06/28/22 15:11	06/29/22 16:12	1
Acenaphthylene	ND		5.0	0.22	ug/L		06/28/22 15:11	06/29/22 16:12	1
Anthracene	ND		5.0	0.35	ug/L		06/28/22 15:11	06/29/22 16:12	1
Benzidine	ND		80	14	ug/L		06/28/22 15:11	06/29/22 16:12	1
Benzo[a]anthracene	ND		5.0	0.28	ug/L		06/28/22 15:11	06/29/22 16:12	1
Benzo[a]pyrene	ND		5.0	0.33	ug/L		06/28/22 15:11	06/29/22 16:12	1
Benzo[b]fluoranthene	ND		5.0	0.30	ug/L		06/28/22 15:11	06/29/22 16:12	1
Benzo[g,h,i]perylene	ND		5.0	0.38	ug/L		06/28/22 15:11	06/29/22 16:12	1
Benzo[k]fluoranthene	ND		5.0	0.33	ug/L		06/28/22 15:11	06/29/22 16:12	1
bis (2-chloroisopropyl) ether	ND		5.0	0.21	ug/L		06/28/22 15:11	06/29/22 16:12	1
Bis(2-chloroethoxy)methane	ND		5.0	0.19	ug/L		06/28/22 15:11	06/29/22 16:12	1
Bis(2-chloroethyl)ether	ND		5.0	0.23	ug/L		06/28/22 15:11	06/29/22 16:12	1
Bis(2-ethylhexyl) phthalate	**2.1**	**J**	10	0.30	ug/L		06/28/22 15:11	06/29/22 16:12	1
Butyl benzyl phthalate	ND		5.0	0.28	ug/L		06/28/22 15:11	06/29/22 16:12	1
Chrysene	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 16:12	1
Dibenz(a,h)anthracene	ND		5.0	0.38	ug/L		06/28/22 15:11	06/29/22 16:12	1
Diethyl phthalate	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 16:12	1
Dimethyl phthalate	ND		5.0	0.23	ug/L		06/28/22 15:11	06/29/22 16:12	1
Di-n-butyl phthalate	ND		5.0	0.40	ug/L		06/28/22 15:11	06/29/22 16:12	1
Di-n-octyl phthalate	ND	*1	5.0	0.30	ug/L		06/28/22 15:11	06/29/22 16:12	1
Fluoranthene	ND		5.0	0.40	ug/L		06/28/22 15:11	06/29/22 16:12	1
Fluorene	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 16:12	1
Hexachlorobenzene	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 16:12	1
Hexachlorobutadiene	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 16:12	1
Hexachlorocyclopentadiene	ND		10	0.53	ug/L		06/28/22 15:11	06/29/22 16:12	1
Hexachloroethane	ND		5.0	0.15	ug/L		06/28/22 15:11	06/29/22 16:12	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.38	ug/L		06/28/22 15:11	06/29/22 16:12	1
Isophorone	ND		5.0	0.19	ug/L		06/28/22 15:11	06/29/22 16:12	1
Naphthalene	ND		5.0	0.22	ug/L		06/28/22 15:11	06/29/22 16:12	1
Nitrobenzene	ND		5.0	0.20	ug/L		06/28/22 15:11	06/29/22 16:12	1
N-Nitrosodimethylamine	ND		10	0.14	ug/L		06/28/22 15:11	06/29/22 16:12	1
N-Nitrosodi-n-propylamine	ND		5.0	0.22	ug/L		06/28/22 15:11	06/29/22 16:12	1
N-Nitrosodiphenylamine	**0.44**	**J**	5.0	0.21	ug/L		06/28/22 15:11	06/29/22 16:12	1
Pentachlorophenol	ND		10	0.79	ug/L		06/28/22 15:11	06/29/22 16:12	1
Phenanthrene	ND		5.0	0.30	ug/L		06/28/22 15:11	06/29/22 16:12	1
Phenol	ND		5.0	0.088	ug/L		06/28/22 15:11	06/29/22 16:12	1
Pyrene	ND		5.0	0.35	ug/L		06/28/22 15:11	06/29/22 16:12	1

Client: AECOM
Project/Site: Pfohl Brothers Landfill

Job ID: 480-199287-1

Client Sample ID: EFF-062322
Date Collected: 06/23/22 08:00
Date Received: 06/23/22 09:05

Lab Sample ID: 480-199287-5
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	*97*		*52 - 151*	*06/28/22 15:11*	*06/29/22 16:12*	*1*
2-Fluorobiphenyl	*93*		*44 - 120*	*06/28/22 15:11*	*06/29/22 16:12*	*1*
2-Fluorophenol	*51*		*17 - 120*	*06/28/22 15:11*	*06/29/22 16:12*	*1*
Nitrobenzene-d5	*86*		*15 - 314*	*06/28/22 15:11*	*06/29/22 16:12*	*1*
Phenol-d5	*38*		*8 - 424*	*06/28/22 15:11*	*06/29/22 16:12*	*1*
p-Terphenyl-d14	*91*		*22 - 125*	*06/28/22 15:11*	*06/29/22 16:12*	*1*

Method: 608.3 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.048	0.0088	ug/L		06/27/22 09:20	06/28/22 09:56	1
4,4'-DDE	ND		0.048	0.011	ug/L		06/27/22 09:20	06/28/22 09:56	1
4,4'-DDT	**0.015**	**J B**	0.048	0.010	ug/L		06/27/22 09:20	06/28/22 09:56	1
Aldrin	ND		0.048	0.0077	ug/L		06/27/22 09:20	06/28/22 09:56	1
alpha-BHC	ND		0.048	0.0073	ug/L		06/27/22 09:20	06/28/22 09:56	1
beta-BHC	ND		0.048	0.024	ug/L		06/27/22 09:20	06/28/22 09:56	1
Chlordane (technical)	ND		0.48	0.28	ug/L		06/27/22 09:20	06/28/22 09:56	1
delta-BHC	ND		0.048	0.0095	ug/L		06/27/22 09:20	06/28/22 09:56	1
Dieldrin	ND		0.048	0.0093	ug/L		06/27/22 09:20	06/28/22 09:56	1
Endosulfan I	ND		0.048	0.010	ug/L		06/27/22 09:20	06/28/22 09:56	1
Endosulfan II	ND		0.048	0.011	ug/L		06/27/22 09:20	06/28/22 09:56	1
Endosulfan sulfate	ND		0.048	0.015	ug/L		06/27/22 09:20	06/28/22 09:56	1
Endrin	ND		0.048	0.013	ug/L		06/27/22 09:20	06/28/22 09:56	1
Endrin aldehyde	ND		0.048	0.016	ug/L		06/27/22 09:20	06/28/22 09:56	1
gamma-BHC (Lindane)	ND		0.048	0.0076	ug/L		06/27/22 09:20	06/28/22 09:56	1
Heptachlor	ND		0.048	0.0081	ug/L		06/27/22 09:20	06/28/22 09:56	1
Heptachlor epoxide	ND		0.048	0.0070	ug/L		06/27/22 09:20	06/28/22 09:56	1
Toxaphene	ND		0.48	0.11	ug/L		06/27/22 09:20	06/28/22 09:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*35*		*23 - 120*	*06/27/22 09:20*	*06/28/22 09:56*	*1*
Tetrachloro-m-xylene	*79*		*44 - 120*	*06/27/22 09:20*	*06/28/22 09:56*	*1*

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.057	0.036	ug/L		06/24/22 08:27	06/26/22 20:41	1
PCB-1221	ND		0.057	0.036	ug/L		06/24/22 08:27	06/26/22 20:41	1
PCB-1232	ND		0.057	0.036	ug/L		06/24/22 08:27	06/26/22 20:41	1
PCB-1242	ND		0.057	0.036	ug/L		06/24/22 08:27	06/26/22 20:41	1
PCB-1248	ND		0.057	0.036	ug/L		06/24/22 08:27	06/26/22 20:41	1
PCB-1254	ND		0.057	0.030	ug/L		06/24/22 08:27	06/26/22 20:41	1
PCB-1260	ND		0.057	0.030	ug/L		06/24/22 08:27	06/26/22 20:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*48*		*36 - 121*	*06/24/22 08:27*	*06/26/22 20:41*	*1*
Tetrachloro-m-xylene	*60*		*42 - 135*	*06/24/22 08:27*	*06/26/22 20:41*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.26**		0.0020	0.00070	mg/L		06/27/22 09:13	06/28/22 00:11	1
Cadmium	ND		0.0020	0.00050	mg/L		06/27/22 09:13	06/28/22 00:11	1
Chromium	ND		0.0040	0.0010	mg/L		06/27/22 09:13	06/28/22 00:11	1

Client: AECOM
Job ID: 480-199287-1
Project/Site: Pfohl Brothers Landfill

Client Sample ID: EFF-062322
Lab Sample ID: 480-199287-5
Date Collected: 06/23/22 08:00
Matrix: Water
Date Received: 06/23/22 09:05

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.0033	J	0.010	0.0016	mg/L		06/27/22 09:13	06/28/22 00:11	1
Lead	0.0043	J	0.010	0.0030	mg/L		06/27/22 09:13	06/28/22 00:11	1
Nickel	0.0017	J	0.010	0.0013	mg/L		06/27/22 09:13	06/28/22 00:11	1
Zinc	0.018		0.010	0.0015	mg/L		06/27/22 09:13	06/29/22 16:05	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		06/28/22 11:27	06/28/22 14:30	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	48.0		4.0	4.0	mg/L			06/29/22 09:26	1

Surrogate Summary

Client: AECOM
Project/Site: Pfohl Brothers Landfill

Job ID: 480-199287-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(75-123)	(77-120)
480-199287-5	EFF-062322	97	97	96	102
LCS 480-631336/6	Lab Control Sample	99	95	95	103
MB 480-631336/8	Method Blank	96	97	97	103

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(8-424)	(22-125)
480-199287-5	EFF-062322	97	93	51	86	38	91
LCS 480-631860/2-A	Lab Control Sample	105	92	53	91	39	108
LCSD 480-631860/3-A	Lab Control Sample Dup	102	84	50	81	36	101
MB 480-631860/1-A	Method Blank	95	94	53	91	37	106

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHd14 = p-Terphenyl-d14

Method: 608.3 - Organochlorine Pesticides in Water

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1	TCX1
Lab Sample ID	Client Sample ID	(23-120)	(44-120)
480-199287-5	EFF-062322	35	79
LCS 480-631649/2-A	Lab Control Sample	42 p	67
LCSD 480-631649/3-A	Lab Control Sample Dup	41 p	63
MB 480-631649/1-A	Method Blank	31 p	60

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX2
Lab Sample ID	Client Sample ID	(36-121)	(42-135)
480-199287-5	EFF-062322	48	60
LCS 480-631439/2-A	Lab Control Sample	49	70

Surrogate Summary

Client: AECOM
Job ID: 480-199287-1
Project/Site: Pfohl Brothers Landfill

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)									
		DCBP2	TCX2								
Lab Sample ID	Client Sample ID	(36-121)	(42-135)								
LCSD 480-631439/3-A	Lab Control Sample Dup	50	63								
MB 480-631439/1-A	Method Blank	43	68								

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-631336/8
Matrix: Water
Analysis Batch: 631336

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	ND		5.0	0.39	ug/L			06/23/22 16:36	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			06/23/22 16:36	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			06/23/22 16:36	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			06/23/22 16:36	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			06/23/22 16:36	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			06/23/22 16:36	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			06/23/22 16:36	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			06/23/22 16:36	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			06/23/22 16:36	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			06/23/22 16:36	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			06/23/22 16:36	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			06/23/22 16:36	1
Acrolein	ND		100	17	ug/L			06/23/22 16:36	1
Acrylonitrile	ND		50	1.9	ug/L			06/23/22 16:36	1
Benzene	ND		5.0	0.60	ug/L			06/23/22 16:36	1
Bromodichloromethane	ND		5.0	0.54	ug/L			06/23/22 16:36	1
Bromoform	ND		5.0	0.47	ug/L			06/23/22 16:36	1
Bromomethane	ND		5.0	1.2	ug/L			06/23/22 16:36	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			06/23/22 16:36	1
Chlorobenzene	ND		5.0	0.48	ug/L			06/23/22 16:36	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			06/23/22 16:36	1
Chloroethane	ND		5.0	0.87	ug/L			06/23/22 16:36	1
Chloroform	ND		5.0	0.54	ug/L			06/23/22 16:36	1
Chloromethane	ND		5.0	0.64	ug/L			06/23/22 16:36	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			06/23/22 16:36	1
Ethylbenzene	ND		5.0	0.46	ug/L			06/23/22 16:36	1
Methylene Chloride	ND		5.0	0.81	ug/L			06/23/22 16:36	1
Tetrachloroethene	ND		5.0	0.34	ug/L			06/23/22 16:36	1
Toluene	ND		5.0	0.45	ug/L			06/23/22 16:36	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			06/23/22 16:36	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			06/23/22 16:36	1
Trichloroethene	ND		5.0	0.60	ug/L			06/23/22 16:36	1
Vinyl chloride	ND		5.0	0.75	ug/L			06/23/22 16:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*68 - 130*		*06/23/22 16:36*	*1*
4-Bromofluorobenzene (Surr)	*97*		*76 - 123*		*06/23/22 16:36*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*06/23/22 16:36*	*1*
Toluene-d8 (Surr)	*103*		*77 - 120*		*06/23/22 16:36*	*1*

Lab Sample ID: LCS 480-631336/6
Matrix: Water
Analysis Batch: 631336

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	20.0	19.0		ug/L		95	52 - 162
1,1,2,2-Tetrachloroethane	20.0	22.9		ug/L		114	46 - 157
1,1,2-Trichloroethane	20.0	21.8		ug/L		109	52 - 150

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-631336/6
Matrix: Water
Analysis Batch: 631336

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	20.0	20.5		ug/L		103	59 - 155
1,1-Dichloroethene	20.0	19.7		ug/L		99	1 - 234
1,2-Dichlorobenzene	20.0	20.9		ug/L		105	18 - 190
1,2-Dichloroethane	20.0	19.5		ug/L		98	49 - 155
1,2-Dichloropropane	20.0	21.1		ug/L		105	1 - 210
1,3-Dichlorobenzene	20.0	20.5		ug/L		102	59 - 156
1,4-Dichlorobenzene	20.0	20.5		ug/L		103	18 - 190
2-Chloroethyl vinyl ether	20.0	21.4	J	ug/L		107	1 - 305
Benzene	20.0	20.1		ug/L		101	37 - 151
Bromodichloromethane	20.0	20.2		ug/L		101	35 - 155
Bromoform	20.0	20.3		ug/L		102	45 - 169
Bromomethane	20.0	18.9		ug/L		94	1 - 242
Carbon tetrachloride	20.0	19.5		ug/L		98	70 - 140
Chlorobenzene	20.0	20.4		ug/L		102	37 - 160
Chlorodibromomethane	20.0	20.7		ug/L		103	53 - 149
Chloroethane	20.0	19.8		ug/L		99	14 - 230
Chloroform	20.0	19.4		ug/L		97	51 - 138
Chloromethane	20.0	20.0		ug/L		100	1 - 273
cis-1,3-Dichloropropene	20.0	21.1		ug/L		105	1 - 227
Ethylbenzene	20.0	20.2		ug/L		101	37 - 162
Methylene Chloride	20.0	20.0		ug/L		100	1 - 221
Tetrachloroethene	20.0	19.5		ug/L		97	64 - 148
Toluene	20.0	21.0		ug/L		105	47 - 150
trans-1,2-Dichloroethene	20.0	20.0		ug/L		100	54 - 156
trans-1,3-Dichloropropene	20.0	21.6		ug/L		108	17 - 183
Trichloroethene	20.0	19.8		ug/L		99	71 - 157
Vinyl chloride	20.0	19.6		ug/L		98	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*68 - 130*
4-Bromofluorobenzene (Surr)	*95*		*76 - 123*
Dibromofluoromethane (Surr)	*95*		*75 - 123*
Toluene-d8 (Surr)	*103*		*77 - 120*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-631860/1-A
Matrix: Water
Analysis Batch: 631941

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631860

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.21	ug/L		06/28/22 15:11	06/29/22 11:43	1
1,2-Dichlorobenzene	ND		10	0.26	ug/L		06/28/22 15:11	06/29/22 11:43	1
1,2-Diphenylhydrazine	ND		10	0.20	ug/L		06/28/22 15:11	06/29/22 11:43	1
1,3-Dichlorobenzene	ND		10	0.17	ug/L		06/28/22 15:11	06/29/22 11:43	1
1,4-Dichlorobenzene	ND		10	0.21	ug/L		06/28/22 15:11	06/29/22 11:43	1
2,4,6-Trichlorophenol	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 11:43	1
2,4-Dichlorophenol	ND		5.0	0.19	ug/L		06/28/22 15:11	06/29/22 11:43	1
2,4-Dimethylphenol	ND		5.0	0.35	ug/L		06/28/22 15:11	06/29/22 11:43	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-631860/1-A
Matrix: Water
Analysis Batch: 631941

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631860

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		10	1.3	ug/L		06/28/22 15:11	06/29/22 11:43	1
2,4-Dinitrotoluene	ND		10	0.40	ug/L		06/28/22 15:11	06/29/22 11:43	1
2,6-Dinitrotoluene	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 11:43	1
2-Chloronaphthalene	ND		5.0	0.23	ug/L		06/28/22 15:11	06/29/22 11:43	1
2-Chlorophenol	ND		5.0	0.17	ug/L		06/28/22 15:11	06/29/22 11:43	1
2-Nitrophenol	ND		5.0	0.18	ug/L		06/28/22 15:11	06/29/22 11:43	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		06/28/22 15:11	06/29/22 11:43	1
4,6-Dinitro-2-methylphenol	ND		10	0.45	ug/L		06/28/22 15:11	06/29/22 11:43	1
4-Bromophenyl phenyl ether	ND		5.0	0.35	ug/L		06/28/22 15:11	06/29/22 11:43	1
4-Chloro-3-methylphenol	ND		5.0	0.28	ug/L		06/28/22 15:11	06/29/22 11:43	1
4-Chlorophenyl phenyl ether	ND		5.0	0.33	ug/L		06/28/22 15:11	06/29/22 11:43	1
4-Nitrophenol	ND		15	0.49	ug/L		06/28/22 15:11	06/29/22 11:43	1
Acenaphthene	ND		5.0	0.20	ug/L		06/28/22 15:11	06/29/22 11:43	1
Acenaphthylene	ND		5.0	0.22	ug/L		06/28/22 15:11	06/29/22 11:43	1
Anthracene	ND		5.0	0.35	ug/L		06/28/22 15:11	06/29/22 11:43	1
Benzidine	ND		80	14	ug/L		06/28/22 15:11	06/29/22 11:43	1
Benzo[a]anthracene	ND		5.0	0.28	ug/L		06/28/22 15:11	06/29/22 11:43	1
Benzo[a]pyrene	ND		5.0	0.33	ug/L		06/28/22 15:11	06/29/22 11:43	1
Benzo[b]fluoranthene	ND		5.0	0.30	ug/L		06/28/22 15:11	06/29/22 11:43	1
Benzo[g,h,i]perylene	ND		5.0	0.38	ug/L		06/28/22 15:11	06/29/22 11:43	1
Benzo[k]fluoranthene	ND		5.0	0.33	ug/L		06/28/22 15:11	06/29/22 11:43	1
bis (2-chloroisopropyl) ether	ND		5.0	0.21	ug/L		06/28/22 15:11	06/29/22 11:43	1
Bis(2-chloroethoxy)methane	ND		5.0	0.19	ug/L		06/28/22 15:11	06/29/22 11:43	1
Bis(2-chloroethyl)ether	ND		5.0	0.23	ug/L		06/28/22 15:11	06/29/22 11:43	1
Bis(2-ethylhexyl) phthalate	ND		10	0.30	ug/L		06/28/22 15:11	06/29/22 11:43	1
Butyl benzyl phthalate	ND		5.0	0.28	ug/L		06/28/22 15:11	06/29/22 11:43	1
Chrysene	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 11:43	1
Dibenz(a,h)anthracene	ND		5.0	0.38	ug/L		06/28/22 15:11	06/29/22 11:43	1
Diethyl phthalate	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 11:43	1
Dimethyl phthalate	ND		5.0	0.23	ug/L		06/28/22 15:11	06/29/22 11:43	1
Di-n-butyl phthalate	ND		5.0	0.40	ug/L		06/28/22 15:11	06/29/22 11:43	1
Di-n-octyl phthalate	ND		5.0	0.30	ug/L		06/28/22 15:11	06/29/22 11:43	1
Fluoranthene	ND		5.0	0.40	ug/L		06/28/22 15:11	06/29/22 11:43	1
Fluorene	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 11:43	1
Hexachlorobenzene	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 11:43	1
Hexachlorobutadiene	ND		5.0	0.25	ug/L		06/28/22 15:11	06/29/22 11:43	1
Hexachlorocyclopentadiene	ND		10	0.53	ug/L		06/28/22 15:11	06/29/22 11:43	1
Hexachloroethane	ND		5.0	0.15	ug/L		06/28/22 15:11	06/29/22 11:43	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.38	ug/L		06/28/22 15:11	06/29/22 11:43	1
Isophorone	ND		5.0	0.19	ug/L		06/28/22 15:11	06/29/22 11:43	1
Naphthalene	ND		5.0	0.22	ug/L		06/28/22 15:11	06/29/22 11:43	1
Nitrobenzene	ND		5.0	0.20	ug/L		06/28/22 15:11	06/29/22 11:43	1
N-Nitrosodimethylamine	ND		10	0.14	ug/L		06/28/22 15:11	06/29/22 11:43	1
N-Nitrosodi-n-propylamine	ND		5.0	0.22	ug/L		06/28/22 15:11	06/29/22 11:43	1
N-Nitrosodiphenylamine	ND		5.0	0.21	ug/L		06/28/22 15:11	06/29/22 11:43	1
Pentachlorophenol	ND		10	0.79	ug/L		06/28/22 15:11	06/29/22 11:43	1
Phenanthrene	ND		5.0	0.30	ug/L		06/28/22 15:11	06/29/22 11:43	1
Phenol	ND		5.0	0.088	ug/L		06/28/22 15:11	06/29/22 11:43	1
Pyrene	ND		5.0	0.35	ug/L		06/28/22 15:11	06/29/22 11:43	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	95		52 - 151	06/28/22 15:11	06/29/22 11:43	1
2-Fluorobiphenyl	94		44 - 120	06/28/22 15:11	06/29/22 11:43	1
2-Fluorophenol	53		17 - 120	06/28/22 15:11	06/29/22 11:43	1
Nitrobenzene-d5	91		15 - 314	06/28/22 15:11	06/29/22 11:43	1
Phenol-d5	37		8 - 424	06/28/22 15:11	06/29/22 11:43	1
p-Terphenyl-d14	106		22 - 125	06/28/22 15:11	06/29/22 11:43	1

Lab Sample ID: LCS 480-631860/2-A
Matrix: Water
Analysis Batch: 631941

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631860

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	50.0	44.2		ug/L		88	44 - 142
1,2-Dichlorobenzene	50.0	38.7		ug/L		77	32 - 129
1,3-Dichlorobenzene	50.0	36.4		ug/L		73	1 - 172
1,4-Dichlorobenzene	50.0	37.2		ug/L		74	20 - 124
2,4,6-Trichlorophenol	50.0	49.9		ug/L		100	37 - 144
2,4-Dichlorophenol	50.0	48.9		ug/L		98	39 - 135
2,4-Dimethylphenol	50.0	49.1		ug/L		98	32 - 120
2,4-Dinitrophenol	100	109		ug/L		109	1 - 191
2,4-Dinitrotoluene	50.0	51.1		ug/L		102	39 - 139
2,6-Dinitrotoluene	50.0	50.8		ug/L		102	50 - 158
2-Chloronaphthalene	50.0	47.3		ug/L		95	60 - 120
2-Chlorophenol	50.0	42.7		ug/L		85	23 - 134
2-Nitrophenol	50.0	47.4		ug/L		95	29 - 182
3,3'-Dichlorobenzidine	100	104		ug/L		104	1 - 262
4,6-Dinitro-2-methylphenol	100	111		ug/L		111	1 - 181
4-Bromophenyl phenyl ether	50.0	52.4		ug/L		105	53 - 127
4-Chloro-3-methylphenol	50.0	50.5		ug/L		101	22 - 147
4-Chlorophenyl phenyl ether	50.0	51.1		ug/L		102	25 - 158
4-Nitrophenol	100	54.8		ug/L		55	1 - 132
Acenaphthene	50.0	47.0		ug/L		94	47 - 145
Acenaphthylene	50.0	47.9		ug/L		96	33 - 145
Anthracene	50.0	51.9		ug/L		104	27 - 133
Benzo[a]anthracene	50.0	54.9		ug/L		110	33 - 143
Benzo[a]pyrene	50.0	53.4		ug/L		107	17 - 163
Benzo[b]fluoranthene	50.0	53.9		ug/L		108	24 - 159
Benzo[g,h,i]perylene	50.0	52.9		ug/L		106	1 - 219
Benzo[k]fluoranthene	50.0	52.1		ug/L		104	11 - 162
bis (2-chloroisopropyl) ether	50.0	43.3		ug/L		87	36 - 166
Bis(2-chloroethoxy)methane	50.0	46.4		ug/L		93	33 - 184
Bis(2-chloroethyl)ether	50.0	44.7		ug/L		89	12 - 158
Bis(2-ethylhexyl) phthalate	50.0	55.7		ug/L		111	8 - 158
Butyl benzyl phthalate	50.0	56.1		ug/L		112	1 - 152
Chrysene	50.0	54.1		ug/L		108	17 - 168
Dibenz(a,h)anthracene	50.0	54.1		ug/L		108	1 - 227
Diethyl phthalate	50.0	53.1		ug/L		106	1 - 120
Dimethyl phthalate	50.0	51.2		ug/L		102	1 - 120
Di-n-butyl phthalate	50.0	54.6		ug/L		109	1 - 120
Di-n-octyl phthalate	50.0	57.9		ug/L		116	4 - 146
Fluoranthene	50.0	52.3		ug/L		105	26 - 137

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-631860/2-A
Matrix: Water
Analysis Batch: 631941

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631860

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluorene	50.0	49.7		ug/L		99	59 - 121
Hexachlorobenzene	50.0	52.6		ug/L		105	1 - 152
Hexachlorocyclopentadiene	50.0	41.4		ug/L		83	5 - 120
Hexachloroethane	50.0	37.3		ug/L		75	40 - 120
Indeno[1,2,3-cd]pyrene	50.0	52.9		ug/L		106	1 - 171
Isophorone	50.0	50.1		ug/L		100	21 - 196
Naphthalene	50.0	44.1		ug/L		88	21 - 133
Nitrobenzene	50.0	46.7		ug/L		93	35 - 180
N-Nitrosodi-n-propylamine	50.0	47.5		ug/L		95	1 - 230
N-Nitrosodiphenylamine	50.0	51.9		ug/L		104	54 - 125
Pentachlorophenol	100	107		ug/L		107	14 - 176
Phenanthrene	50.0	51.0		ug/L		102	54 - 120
Phenol	50.0	22.8		ug/L		46	5 - 120
Pyrene	50.0	55.5		ug/L		111	52 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*105*		*52 - 151*
2-Fluorobiphenyl	*92*		*44 - 120*
2-Fluorophenol	*53*		*17 - 120*
Nitrobenzene-d5	*91*		*15 - 314*
Phenol-d5	*39*		*8 - 424*
p-Terphenyl-d14	*108*		*22 - 125*

Lab Sample ID: LCSD 480-631860/3-A
Matrix: Water
Analysis Batch: 631941

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 631860

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	39.6		ug/L		79	44 - 142	11	34
1,2-Dichlorobenzene	50.0	36.1		ug/L		72	32 - 129	7	38
1,3-Dichlorobenzene	50.0	34.5		ug/L		69	1 - 172	5	37
1,4-Dichlorobenzene	50.0	35.1		ug/L		70	20 - 124	6	40
2,4,6-Trichlorophenol	50.0	46.8		ug/L		94	37 - 144	6	20
2,4-Dichlorophenol	50.0	42.2		ug/L		84	39 - 135	15	23
2,4-Dimethylphenol	50.0	43.8		ug/L		88	32 - 120	11	18
2,4-Dinitrophenol	100	104		ug/L		104	1 - 191	5	29
2,4-Dinitrotoluene	50.0	49.1		ug/L		98	39 - 139	4	20
2,6-Dinitrotoluene	50.0	47.2		ug/L		94	50 - 158	7	17
2-Chloronaphthalene	50.0	44.1		ug/L		88	60 - 120	7	30
2-Chlorophenol	50.0	40.1		ug/L		80	23 - 134	6	26
2-Nitrophenol	50.0	43.5		ug/L		87	29 - 182	9	28
3,3'-Dichlorobenzidine	100	96.3		ug/L		96	1 - 262	8	31
4,6-Dinitro-2-methylphenol	100	105		ug/L		105	1 - 181	5	30
4-Bromophenyl phenyl ether	50.0	48.6		ug/L		97	53 - 127	8	16
4-Chloro-3-methylphenol	50.0	45.0		ug/L		90	22 - 147	12	16
4-Chlorophenyl phenyl ether	50.0	45.8		ug/L		92	25 - 158	11	15
4-Nitrophenol	100	48.8		ug/L		49	1 - 132	12	24
Acenaphthene	50.0	43.9		ug/L		88	47 - 145	7	25

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-631860/3-A
Matrix: Water
Analysis Batch: 631941

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 631860

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthylene			50.0	43.9		ug/L		88	33 - 145	9	22
Anthracene			50.0	48.6		ug/L		97	27 - 133	7	15
Benzo[a]anthracene			50.0	47.9		ug/L		96	33 - 143	14	15
Benzo[a]pyrene			50.0	49.0		ug/L		98	17 - 163	9	15
Benzo[b]fluoranthene			50.0	47.9		ug/L		96	24 - 159	12	17
Benzo[g,h,i]perylene			50.0	48.3		ug/L		97	1 - 219	9	19
Benzo[k]fluoranthene			50.0	47.2		ug/L		94	11 - 162	10	19
bis (2-chloroisopropyl) ether			50.0	40.3		ug/L		81	36 - 166	7	36
Bis(2-chloroethoxy)methane			50.0	42.1		ug/L		84	33 - 184	10	23
Bis(2-chloroethyl)ether			50.0	42.1		ug/L		84	12 - 158	6	33
Bis(2-ethylhexyl) phthalate			50.0	48.6		ug/L		97	8 - 158	14	15
Butyl benzyl phthalate			50.0	48.1		ug/L		96	1 - 152	15	15
Chrysene			50.0	46.9		ug/L		94	17 - 168	14	15
Dibenz(a,h)anthracene			50.0	48.9		ug/L		98	1 - 227	10	18
Diethyl phthalate			50.0	48.2		ug/L		96	1 - 120	10	15
Dimethyl phthalate			50.0	46.6		ug/L		93	1 - 120	9	15
Di-n-butyl phthalate			50.0	50.7		ug/L		101	1 - 120	7	15
Di-n-octyl phthalate			50.0	48.4	*1	ug/L		97	4 - 146	18	15
Fluoranthene			50.0	48.1		ug/L		96	26 - 137	8	15
Fluorene			50.0	45.1		ug/L		90	59 - 121	10	18
Hexachlorobenzene			50.0	47.7		ug/L		95	1 - 152	10	15
Hexachlorocyclopentadiene			50.0	41.2		ug/L		82	5 - 120	1	50
Hexachloroethane			50.0	33.7		ug/L		67	40 - 120	10	43
Indeno[1,2,3-cd]pyrene			50.0	49.0		ug/L		98	1 - 171	8	17
Isophorone			50.0	44.3		ug/L		89	21 - 196	12	21
Naphthalene			50.0	39.4		ug/L		79	21 - 133	11	31
Nitrobenzene			50.0	42.2		ug/L		84	35 - 180	10	27
N-Nitrosodi-n-propylamine			50.0	43.4		ug/L		87	1 - 230	9	23
N-Nitrosodiphenylamine			50.0	48.4		ug/L		97	54 - 125	7	15
Pentachlorophenol			100	98.7		ug/L		99	14 - 176	8	21
Phenanthrene			50.0	48.1		ug/L		96	54 - 120	6	16
Phenol			50.0	21.1		ug/L		42	5 - 120	8	36
Pyrene			50.0	49.4		ug/L		99	52 - 120	12	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*102*		*52 - 151*
2-Fluorobiphenyl	*84*		*44 - 120*
2-Fluorophenol	*50*		*17 - 120*
Nitrobenzene-d5	*81*		*15 - 314*
Phenol-d5	*36*		*8 - 424*
p-Terphenyl-d14	*101*		*22 - 125*

Method: 608.3 - Organochlorine Pesticides in Water

Lab Sample ID: MB 480-631649/1-A
Matrix: Water
Analysis Batch: 631753

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631649

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050	0.0092	ug/L		06/27/22 09:20	06/28/22 08:57	1
4,4'-DDE	ND		0.050	0.012	ug/L		06/27/22 09:20	06/28/22 08:57	1
4,4'-DDT	0.0220	J	0.050	0.011	ug/L		06/27/22 09:20	06/28/22 08:57	1
Aldrin	ND		0.050	0.0081	ug/L		06/27/22 09:20	06/28/22 08:57	1
alpha-BHC	ND		0.050	0.0077	ug/L		06/27/22 09:20	06/28/22 08:57	1
beta-BHC	ND		0.050	0.025	ug/L		06/27/22 09:20	06/28/22 08:57	1
Chlordane (technical)	ND		0.50	0.29	ug/L		06/27/22 09:20	06/28/22 08:57	1
delta-BHC	ND		0.050	0.010	ug/L		06/27/22 09:20	06/28/22 08:57	1
Dieldrin	ND		0.050	0.0098	ug/L		06/27/22 09:20	06/28/22 08:57	1
Endosulfan I	ND		0.050	0.011	ug/L		06/27/22 09:20	06/28/22 08:57	1
Endosulfan II	ND		0.050	0.012	ug/L		06/27/22 09:20	06/28/22 08:57	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		06/27/22 09:20	06/28/22 08:57	1
Endrin	ND		0.050	0.014	ug/L		06/27/22 09:20	06/28/22 08:57	1
Endrin aldehyde	ND		0.050	0.016	ug/L		06/27/22 09:20	06/28/22 08:57	1
gamma-BHC (Lindane)	ND		0.050	0.0080	ug/L		06/27/22 09:20	06/28/22 08:57	1
Heptachlor	ND		0.050	0.0085	ug/L		06/27/22 09:20	06/28/22 08:57	1
Heptachlor epoxide	ND		0.050	0.0074	ug/L		06/27/22 09:20	06/28/22 08:57	1
Toxaphene	ND		0.50	0.12	ug/L		06/27/22 09:20	06/28/22 08:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*31*	*p*	*23 - 120*	*06/27/22 09:20*	*06/28/22 08:57*	*1*
Tetrachloro-m-xylene	*60*		*44 - 120*	*06/27/22 09:20*	*06/28/22 08:57*	*1*

Lab Sample ID: LCS 480-631649/2-A
Matrix: Water
Analysis Batch: 631753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631649

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	0.500	0.462		ug/L		92	64 - 129
4,4'-DDE	0.500	0.431		ug/L		86	50 - 120
4,4'-DDT	0.500	0.526		ug/L		105	59 - 120
Aldrin	0.500	0.321		ug/L		64	40 - 125
alpha-BHC	0.500	0.417		ug/L		83	52 - 125
beta-BHC	0.500	0.477		ug/L		95	52 - 120
delta-BHC	0.500	0.477		ug/L		95	51 - 120
Dieldrin	0.500	0.486		ug/L		97	66 - 128
Endosulfan I	0.500	0.460		ug/L		92	57 - 120
Endosulfan II	0.500	0.440		ug/L		88	66 - 131
Endosulfan sulfate	0.500	0.518		ug/L		104	66 - 131
Endrin	0.500	0.491		ug/L		98	65 - 135
Endrin aldehyde	0.500	0.418		ug/L		84	61 - 134
gamma-BHC (Lindane)	0.500	0.433		ug/L		87	56 - 120
Heptachlor	0.500	0.458		ug/L		92	58 - 120
Heptachlor epoxide	0.500	0.543		ug/L		109	65 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*42*	*p*	*23 - 120*
Tetrachloro-m-xylene	*67*		*44 - 120*

Method: 608.3 - Organochlorine Pesticides in Water

Lab Sample ID: LCSD 480-631649/3-A
Matrix: Water
Analysis Batch: 631753

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 631649

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			0.500	0.474		ug/L		95	64 - 129	3	50
4,4'-DDE			0.500	0.442		ug/L		88	50 - 120	3	50
4,4'-DDT			0.500	0.534		ug/L		107	59 - 120	2	50
Aldrin			0.500	0.409		ug/L		82	40 - 125	24	50
alpha-BHC			0.500	0.418		ug/L		84	52 - 125	0	50
beta-BHC			0.500	0.495		ug/L		99	52 - 120	4	50
delta-BHC			0.500	0.467		ug/L		93	51 - 120	2	50
Dieldrin			0.500	0.488		ug/L		98	66 - 128	0	50
Endosulfan I			0.500	0.466		ug/L		93	57 - 120	1	50
Endosulfan II			0.500	0.446		ug/L		89	66 - 131	1	50
Endosulfan sulfate			0.500	0.485		ug/L		97	66 - 131	7	50
Endrin			0.500	0.509		ug/L		102	65 - 135	4	50
Endrin aldehyde			0.500	0.472		ug/L		94	61 - 134	12	50
gamma-BHC (Lindane)			0.500	0.441		ug/L		88	56 - 120	2	50
Heptachlor			0.500	0.472		ug/L		94	58 - 120	3	50
Heptachlor epoxide			0.500	0.514		ug/L		103	65 - 125	5	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*41*	*p*	*23 - 120*
Tetrachloro-m-xylene	*63*		*44 - 120*

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 480-631439/1-A
Matrix: Water
Analysis Batch: 631614

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631439

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.060	0.038	ug/L		06/24/22 08:27	06/26/22 17:47	1
PCB-1221	ND		0.060	0.038	ug/L		06/24/22 08:27	06/26/22 17:47	1
PCB-1232	ND		0.060	0.038	ug/L		06/24/22 08:27	06/26/22 17:47	1
PCB-1242	ND		0.060	0.038	ug/L		06/24/22 08:27	06/26/22 17:47	1
PCB-1248	ND		0.060	0.038	ug/L		06/24/22 08:27	06/26/22 17:47	1
PCB-1254	ND		0.060	0.031	ug/L		06/24/22 08:27	06/26/22 17:47	1
PCB-1260	ND		0.060	0.031	ug/L		06/24/22 08:27	06/26/22 17:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*43*		*36 - 121*	*06/24/22 08:27*	*06/26/22 17:47*	*1*
Tetrachloro-m-xylene	*68*		*42 - 135*	*06/24/22 08:27*	*06/26/22 17:47*	*1*

Lab Sample ID: LCS 480-631439/2-A
Matrix: Water
Analysis Batch: 631614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631439

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			1.00	0.923		ug/L		92	69 - 123		
PCB-1260			1.00	0.866		ug/L		87	69 - 120		

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: LCS 480-631439/2-A
Matrix: Water
Analysis Batch: 631614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631439

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	*49*		*36 - 121*
Tetrachloro-m-xylene	*70*		*42 - 135*

Lab Sample ID: LCSD 480-631439/3-A
Matrix: Water
Analysis Batch: 631614

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 631439

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			1.00	0.899		ug/L		90	69 - 123	3	30
PCB-1260			1.00	0.856		ug/L		86	69 - 120	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	*50*		*36 - 121*
Tetrachloro-m-xylene	*63*		*42 - 135*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-631564/1-A
Matrix: Water
Analysis Batch: 631798

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.0020	0.00070	mg/L		06/27/22 09:13	06/27/22 23:56	1
Cadmium	ND		0.0020	0.00050	mg/L		06/27/22 09:13	06/27/22 23:56	1
Chromium	0.00145	J	0.0040	0.0010	mg/L		06/27/22 09:13	06/27/22 23:56	1
Copper	ND		0.010	0.0016	mg/L		06/27/22 09:13	06/27/22 23:56	1
Lead	ND		0.010	0.0030	mg/L		06/27/22 09:13	06/27/22 23:56	1
Nickel	ND		0.010	0.0013	mg/L		06/27/22 09:13	06/27/22 23:56	1

Lab Sample ID: MB 480-631564/1-A
Matrix: Water
Analysis Batch: 632106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		06/27/22 09:13	06/29/22 15:38	1

Lab Sample ID: LCS 480-631564/2-A
Matrix: Water
Analysis Batch: 631798

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631564

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Barium			0.200	0.189		mg/L		94	85 - 115		
Cadmium			0.200	0.179		mg/L		89	85 - 115		
Chromium			0.200	0.182		mg/L		91	85 - 115		
Copper			0.200	0.182		mg/L		91	85 - 115		
Lead			0.200	0.185		mg/L		92	85 - 115		
Nickel			0.200	0.176		mg/L		88	85 - 115		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-631564/2-A
Matrix: Water
Analysis Batch: 632106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631564

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Zinc			0.200	0.195		mg/L		97	85 - 115		

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 480-631784/1-A
Matrix: Water
Analysis Batch: 631875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		06/28/22 11:27	06/28/22 14:26	1

Lab Sample ID: LCS 480-631784/2-A
Matrix: Water
Analysis Batch: 631875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631784

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00667	0.00670		mg/L		100	85 - 115		

Lab Sample ID: 480-199287-5 MS
Matrix: Water
Analysis Batch: 631875

Client Sample ID: EFF-062322
Prep Type: Total/NA
Prep Batch: 631784

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00667	0.00672		mg/L		101	70 - 130		

Lab Sample ID: 480-199287-5 MSD
Matrix: Water
Analysis Batch: 631875

Client Sample ID: EFF-062322
Prep Type: Total/NA
Prep Batch: 631784

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00667	0.00647		mg/L		97	70 - 130	4	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-631959/1
Matrix: Water
Analysis Batch: 631959

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L			06/29/22 09:26	1

Lab Sample ID: LCS 480-631959/2
Matrix: Water
Analysis Batch: 631959

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			561	547.2		mg/L		98	88 - 110		

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 480-199287-5 DU
Client Sample ID: EFF-062322
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 631959

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	48.0			47.20		mg/L				2	10

QC Association Summary

Client: AECOM
Job ID: 480-199287-1
Project/Site: Pfohl Brothers Landfill

GC/MS VOA

Analysis Batch: 631336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199287-5	EFF-062322	Total/NA	Water	624.1	
MB 480-631336/8	Method Blank	Total/NA	Water	624.1	
LCS 480-631336/6	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 631860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199287-5	EFF-062322	Total/NA	Water	625	
MB 480-631860/1-A	Method Blank	Total/NA	Water	625	
LCS 480-631860/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-631860/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 631941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199287-5	EFF-062322	Total/NA	Water	625.1	631860
MB 480-631860/1-A	Method Blank	Total/NA	Water	625.1	631860
LCS 480-631860/2-A	Lab Control Sample	Total/NA	Water	625.1	631860
LCSD 480-631860/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	631860

GC Semi VOA

Prep Batch: 631439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199287-5	EFF-062322	Total/NA	Water	3510C	
MB 480-631439/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-631439/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-631439/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 631614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199287-5	EFF-062322	Total/NA	Water	608.3	631439
MB 480-631439/1-A	Method Blank	Total/NA	Water	608.3	631439
LCS 480-631439/2-A	Lab Control Sample	Total/NA	Water	608.3	631439
LCSD 480-631439/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	631439

Prep Batch: 631649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199287-5	EFF-062322	Total/NA	Water	3510C	
MB 480-631649/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-631649/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-631649/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 631753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199287-5	EFF-062322	Total/NA	Water	608.3	631649
MB 480-631649/1-A	Method Blank	Total/NA	Water	608.3	631649
LCS 480-631649/2-A	Lab Control Sample	Total/NA	Water	608.3	631649
LCSD 480-631649/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	631649

QC Association Summary

Client: AECOM
Job ID: 480-199287-1
Project/Site: Pfohl Brothers Landfill

Metals

Prep Batch: 631564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199287-5	EFF-062322	Total/NA	Water	200.7	
MB 480-631564/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-631564/2-A	Lab Control Sample	Total/NA	Water	200.7	

Prep Batch: 631784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199287-5	EFF-062322	Total/NA	Water	245.1	
MB 480-631784/1-A	Method Blank	Total/NA	Water	245.1	
LCS 480-631784/2-A	Lab Control Sample	Total/NA	Water	245.1	
480-199287-5 MS	EFF-062322	Total/NA	Water	245.1	
480-199287-5 MSD	EFF-062322	Total/NA	Water	245.1	

Analysis Batch: 631798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199287-5	EFF-062322	Total/NA	Water	200.7 Rev 4.4	631564
MB 480-631564/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	631564
LCS 480-631564/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	631564

Analysis Batch: 631875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199287-5	EFF-062322	Total/NA	Water	245.1	631784
MB 480-631784/1-A	Method Blank	Total/NA	Water	245.1	631784
LCS 480-631784/2-A	Lab Control Sample	Total/NA	Water	245.1	631784
480-199287-5 MS	EFF-062322	Total/NA	Water	245.1	631784
480-199287-5 MSD	EFF-062322	Total/NA	Water	245.1	631784

Analysis Batch: 632106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199287-5	EFF-062322	Total/NA	Water	200.7 Rev 4.4	631564
MB 480-631564/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	631564
LCS 480-631564/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	631564

General Chemistry

Analysis Batch: 631959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-199287-5	EFF-062322	Total/NA	Water	SM 2540D	
MB 480-631959/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-631959/2	Lab Control Sample	Total/NA	Water	SM 2540D	
480-199287-5 DU	EFF-062322	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: AECOM
Job ID: 480-199287-1
Project/Site: Pfohl Brothers Landfill

Client Sample ID: EFF-062322
Lab Sample ID: 480-199287-5

Date Collected: 06/23/22 08:00
Matrix: Water
Date Received: 06/23/22 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	631336	06/23/22 21:22	ATG	TAL BUF
Total/NA	Prep	625			631860	06/28/22 15:11	CMC	TAL BUF
Total/NA	Analysis	625.1		1	631941	06/29/22 16:12	JMM	TAL BUF
Total/NA	Prep	3510C			631649	06/27/22 09:20	JMP	TAL BUF
Total/NA	Analysis	608.3		1	631753	06/28/22 09:56	MAN	TAL BUF
Total/NA	Prep	3510C			631439	06/24/22 08:27	MS	TAL BUF
Total/NA	Analysis	608.3		1	631614	06/26/22 20:41	W1T	TAL BUF
Total/NA	Prep	200.7			631564	06/27/22 09:13	NVK	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	631798	06/28/22 00:11	LMH	TAL BUF
Total/NA	Prep	200.7			631564	06/27/22 09:13	NVK	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	632106	06/29/22 16:05	BMB	TAL BUF
Total/NA	Prep	245.1			631784	06/28/22 11:27	VAK	TAL BUF
Total/NA	Analysis	245.1		1	631875	06/28/22 14:30	NVK	TAL BUF
Total/NA	Analysis	SM 2540D		1	631959	06/29/22 09:26	SAK	TAL BUF

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: AECOM
Job ID: 480-199287-1
Project/Site: Pfohl Brothers Landfill

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

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
624.1		Water	1,2-Dichloroethene, Total
625.1	625	Water	1,2-Dichlorobenzene
625.1	625	Water	1,3-Dichlorobenzene
625.1	625	Water	1,4-Dichlorobenzene

Method Summary

Client: AECOM
Job ID: 480-199287-1
Project/Site: Pfohl Brothers Landfill

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
625.1	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
608.3	Organochlorine Pesticides in Water	40CFR136A	TAL BUF
608.3	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
245.1	Mercury (CVAA)	EPA	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
200.7	Preparation, Total Metals	EPA	TAL BUF
245.1	Preparation, Mercury	EPA	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
625	Liquid-Liquid Extraction	40CFR136A	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: AECOM
Job ID: 480-199287-1
Project/Site: Pfohl Brothers Landfill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-199287-5	EFF-062322	Water	06/23/22 08:00	06/23/22 09:05

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Rob Murphy	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-175044-30395.1
Client Contact: Rob Murphy	Phone: 716-903-1346	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: AECOM	PWSID:			Job #:
Address: One John James Audubon Parkway Suite 210	Due Date Requested:			
City: Amherst	TAT Requested (days): STANDARD			
State, Zip: NY, 14228	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 111666 Line 3			
Email: rob.murphy@aecom.com	WO #: 60411174.11175616.00000			
Project Name: Pfohl Brothers Landfill	Project #: 48002609			
Site:	SSOW#:			

480-199287 Chain of Custody

K - EDTA
L - EDA
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)	200.7, 245.1	608.3_Pest_PREC - PPL Pesticides	608.3_PCB_PREC - PCBs	625.1_PREC - PPL Semivolatiles	2540D - TSS	624.1_PREC - PPL Volatiles	Total Number of container	Special Instructions/Note:
			Preservation Code:				D	N	N	N	N	N		
EFF-062222-1	6/22/22	0800	GRAB	Water				1	1	1		2	5	LAB TO COMPOSITE FOUR GRAB SAMPLES INTO ONE SAMPLE EFF-062322 AND ANALYZE.
EFF-062222-2	6/22/22	1600	GRAB	WATER				1	1	1		2	5	
EFF-062322-3	6/23/22	0000	GRAB	WATER				1	1	1		2	5	
EFF-062322-4	6/23/22	0800	GRAB	WATER				1	1	1		2	5	
EFF-062322	6/23/22	0800	COMP	WATER			1				1		2	24 HOUR COMPOSITE.

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: DROP OFF
Relinquished by: Rob Murphy	Date/Time: 6/23/22 0905	Company: AECOM	Received by: [signature]
Relinquished by:	Date/Time:	Company	Received by:
Relinquished by:	Date/Time:	Company	Received by:

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

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: AECOM

Job Number: 480-199287-1

Login Number: 199287

List Source: Eurofins Buffalo

List Number: 1

Creator: Wallace, Cameron

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	Yes: Received same day of collection; chilling process has begun
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	